

SOUTHCENTRAL ALASKA Federal Subsistence Regional Advisory Council



USFWS

Meeting Materials
March 10–11, 2010
Anchorage

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**SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL
March 10 – 11, 2010
Anchorage, Alaska
Dimond Center Hotel
700 East Dimond Boulevard**

DRAFT A G E N D A

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.

- 1. Call to Order**
- 2. Roll Call and Establish Quorum.....4**
- 3. Welcome and Introductions**
- 4. Election of Officers**
 - A. Chair
 - B. Vice Chair
 - C. Secretary
- 5. Review and Adopt Agenda.....1**
- 6. Review and Approve Minutes From October 14, 20095**
- 7. Chair’s Report**
- 8. Council Member’s Reports**
- 9. Administrative Business (*Donald Mike*)**
- 10. Public Testimony**
- 11. Wildlife Proposals for Council Review and Recommendation to the Federal Subsistence Board**

Presentation Procedure for Proposals

- 1) Introduction of proposal and analysis
- 2) Alaska Department of Fish and Game comments
- 3) Other Federal, State and Tribal agency comments
- 4) Interagency Staff Committee Comments
- 5) Subsistence Resource Commission comments
- 6) Fish and Game Advisory Committee comments
- 7) Summary of Written Public Comments
- 8) Public Testimony
- 9) Regional Council deliberation, recommendation, and justification

A. Statewide

1. **WP10-01** General Regulations. Definition of drawing permit 14
2. **WP10-02** General Regulations. Bear handicrafts (deferred WP08-05) 18
3. **WP10-03** General Regulations. Revise regulations on cultural/educational permits 19
4. **WP10-04** Lynx. Revise delegation of authority 25
5. **WP10-05** General Regulations. Clarify regulations on accumulation of limits 39

B. Southcentral Regional Proposals

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2. **WP10-28** Moose. Unit 13B, revise harvest limit and season 61
3. **WP10-29/30** Brown and black bear. Unit 11 remainder, revise customary & traditional use determination 73
4. **WP10-31** Moose and Caribou. Unit 13E, individual customary & traditional use determination 87
5. **WP10-32** Caribou. Unit 7, establish customary and traditional use determination, harvest limit and season. 95
6. **WP10-33** Moose. Unit 7, revise customary and traditional use determination 118
7. **WP10-34** Wolverine (trapping). Unit 11, special provision 127
8. **WP10-35** Moose. Unit 13E, revise season 137
9. **WP10-36/37/41** Wolf (trapping) Unit 13D and 14C, revise harvest limit and season 147
10. **WP10-38** Wolf. Units 11 & 12, revise season 158
11. **WP10-39** Dall Sheep. Units 11 & 12, harvest salvage, reporting and sealing 168
12. **WP10-40** Wolverine (trapping). Unit 14C, revise harvest limit and season 172

C. Crossover Proposals

1. **WP10-87** General Regulation. Units 25, 20, & 12, revise definition of furbearer to include black bear 178
2. **WP10-90** Caribou. Units 13B & C, revise customary and traditional use determination 196
3. **WP10-97/98/99/100** Wolf (trapping). Unit 12, revise season 205
4. **WP10-102** Caribou. Unit 12, revise harvest limit 217

| | |
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| 5. WP10-103 Caribou. Unit 12, revise season | 226 |
| 6. WP10-104 Caribou. Unit 12, establish harvest limit and season | 232 |
| 12. Call for Fisheries Proposals for 2011–2013 (<i>Proposal deadline is March 24, 2010</i>) | |
| 13. Review and Approve Draft 2009 Annual Report | |
| 14. Agency/Organization Reports | |
| A. Bureau of Land Management | |
| 1. Anchorage office | |
| B. Glennallen Field office | |
| a. Delta River Environmental Assessment (<i>Merben Cebrian</i>) | |
| C. Office of Subsistence Management | |
| D. Tribal and Nongovernmental Organizations | |
| 1. Native Village of Eyak | |
| E. U. S. Fish & Wildlife Service | |
| F. U. S. Forest Service | |
| G. Alaska Department of Fish and Game | |
| 1. Field offices | |
| H. National Park Service | |
| 1. Wrangell-St. Elias NP/P | |
| 2. Denali NP/P | |
| 15. Other Business | |
| A. Identify Council Topics for May 2010 Board Meeting | |
| 16. Future Meeting Dates and Locations | 239 |
| A. Fall 2010 | |
| B. Winter 2011 | |
| 17. Adjourn | |

Persons with disabilities: *Special accommodations for persons with disabilities may be arranged by contacting the Regional Coordinator at least 72 hours prior to the meeting. Hearing or speech impaired individuals may call the Federal Relay Service at 1-800-877-8339 or 1-907-786-3595 TTY.*

Teleconferencing is available upon request. You must call the Office of Subsistence Management, 1-800-478-1456, 786-3888 or 786-3676, at least 72 hours prior to the meeting to receive this service. Please notify the Regional Coordinator which agenda topic interests you and whether you wish to testify regarding it.

If you have a question regarding this agenda or need additional information, please contact Donald Mike, Regional Coordinator, toll free at 1-800-478-1456 ext. 3629 or 786-3888; or fax your comments at 907-786-3898.

REGION 2-Southcentral Alaska Subsistence Regional Advisory Council

| Seat | Term Expires | Member Name | City |
|-------------|---------------------|------------------------------------|--------------|
| 1 | 2010 | Robert Henrichs | Cordova |
| 2 | 2010 | Ricky Gease | Kenai |
| 3 | 2010 | Doug Blossom | Clam Gulch |
| 4 | 2010 | Greg Encelewski | Ninilchik |
| 5 | 2011 | Tricia Waggoner | Palmer |
| 6 | 2012 | Judith Caminer | Anchorage |
| 7 | 2011 | John C. Lamb II | Hiline Lake |
| 8 | 2011 | Gloria Stickwan,* Secretary | Tazlina |
| 9 | 2011 | Donald Kompkoff, Sr. | Valdez |
| 10 | 2010 | James Showalter | Sterling |
| 11 | 2012 | Ralph Lohse, Chair | Lakina River |
| 12 | 2012 | Tom Carpenter, Vice Chair | Cordova |
| 13 | 2012 | Fred H. Elvsaaas | Seldovia |

D R A F T

MINUTES

Southcentral Subsistence Regional Advisory Council

October 14, 2009

Cooper Landing Community Hall

Cooper Landing, Alaska

October 14, 2009

COUNCIL MEMBERS

Doug Blossom, Greg Encelewski, Tricia Waggoner, James Showalter, and Ralph Lohse, Chairman.

Teleconference RAC participants: Donald Kompkoff, Sr, Fred Elvsaaas

Absent: *Bill Stockwell, John C. Lamb, Gloria Stickwan, Robert Henrichs, Tom Carpenter*

Council Coordinator: Donald Mike

Native & Nongovernmental Organizations and Public

Native Village of Eyak: Bruce Cain, Keith van der Brock

PUBLIC: Fred West, James Givens, Jack Harris, Jerry Neis, Mr. Smith, Robert Gibson, Ben Romig

FEDERAL AGENCIES

U.S. Fish & Wildlife Service Office of Subsistence Management: Polly Wheeler, Helen Armstrong, Steve Fried, Cole Brown

Bureau of Indian Affairs: Pat Petrivelli

National Park Service: Molly McCormick, Dave Nelson

U. S. D. A. Forest Service: Steve Kessler, Chris Sakraida, Jeff Bryden, Milo Burcham, Kevin Laves, Steve Zemke, Wini Kessler, Cal Casipit

FS Washington office; Richard Sowa, Ann Zimmermann, Dave Schmidt,

U.S. Fish & Wildlife Service: Jeff Anderson, Doug Palmer

Bureau of Land Management: George Oviatt, Merben Cerbian

ALASKA DEPARTMENT OF FISH AND GAME

Mark Sommerville, Robert Begich

D R A F T

CALL TO ORDER Meeting called to order Chairman Lohse.

ROLL CALL Chairman Lohse requested the Coordinator call roll. Five Council members present, two participating via teleconference and five absent. One SCRAC seat vacant. Quorum established.

INTRODUCTIONS Introduction of Council members, staff, agency, tribal organizations and public.

**FISHERIES RESOURCE
MONITORING PROGRAM**

Chair Lohse sought consensus from the Council to take on the business of the 2010 monitoring plan. The council reached consensus. The reason, five Council members were present at the meeting. Seven is needed to establish a quorum. Two members participated via teleconference, seven members present, thus establishing a quorum to take action on the monitoring plan and adoption of the meeting agenda and approve the minutes. After the business is completed, the two teleconference participant had the option of signing off after the Council's deliberation and take action on the 2010 monitoring plan. The Council would then go into a work session after adjourning and hear agency reports from various agencies.

Mr. Steve Fried, OSM fisheries biologist, presented the Council the 2010 monitoring plan.

The Technical Review Committee recommended funding all four projects for the Southcentral region.

10-503. Copper River Chinook Salmon Assessment. The project would provide four annual estimates of Chinook salmon escapement into the Copper River by conducting mark and recapture experiments using four fish wheels.

10-552. Copper River Subsistence Salmon Harvest Validity. The project is a three year project that will examine the validity of annual subsistence salmon harvest estimates for the Upper Copper River.

10-502. Tanada Creek Salmon Assessment. A project that would provide four annual estimates of salmon abundance in Tanada Creek.

10-505. Long Lake Salmon Assessment. The project will provide four annual estimates of salmon abundance in Long Lake.

D R A F T

Ms. Waggoner **moved** to accept the four projects for recommended funding to the Federal Subsistence Board. Second called by Mr. Blossom. Mr. Showalter calls the question. Motion carries.

REVIEW & ADOPTION OF AGENDA Mr. Blossom **moved** for the adoption of the agenda, second by Mr. Encelewski with prior consensus to take up the 2010 resource monitoring plan. Agenda adopted as modified.

REVIEW & ADOPTION OF MINUTES Mr. Showalter **moved**, 2nd called by Ms. Waggoner, to adopt the March 10-11, 2009 meeting minutes. Mr. Encelewski called for the questions to adopt the minutes. Motion carries.

CHAIRS REPORT Chairman Lohse summarized the Council's 2008 Annual Report response from the Federal Subsistence Board; page eight of the RAC meeting book.

ADMINISTRATIVE BUSINESS Mr. Mike informed the Council that they have a folder of various reports and agency reports provided to them in a separate folder of any materials that did not make the meeting book prior to the publication of the Council book.

Annual Report The Council provided their topics for its 2009 annual report.
1) Federal Subsistence Management Program meeting window, conflicting with rural residents fall season harvest, 2) Pillar for Sustainability for rural economy on Federal Lands (encourage the FSB that they should encourage and make every effort not to put undue burden on rural subsistence users in the use of natural resources that are available that could be used for economic growth),
3) Future fish and wildlife proposals that include use of furbearers, encourage local industry, use of natural resources including plants, animal parts, and wood and finally the need for natural resource inventory,
4) Support for the Russian River Subsistence Fishery and,
5) Continue to support the Fisheries Resource Monitoring Program.

Agency Reports The Council listened to reports from various Federal and State agencies.

Location/Time Of Next meeting The Council selected its winter meeting date of March 10-11, 2010 in Anchorage. The fall meeting will be October 13-14, 2010 in Cordova.

Adjournment Mr. Elvsaa moved to adjourn the Southcentral RAC meeting. Mr. Encelewski calls for the second. Motion carries.

D R A F T

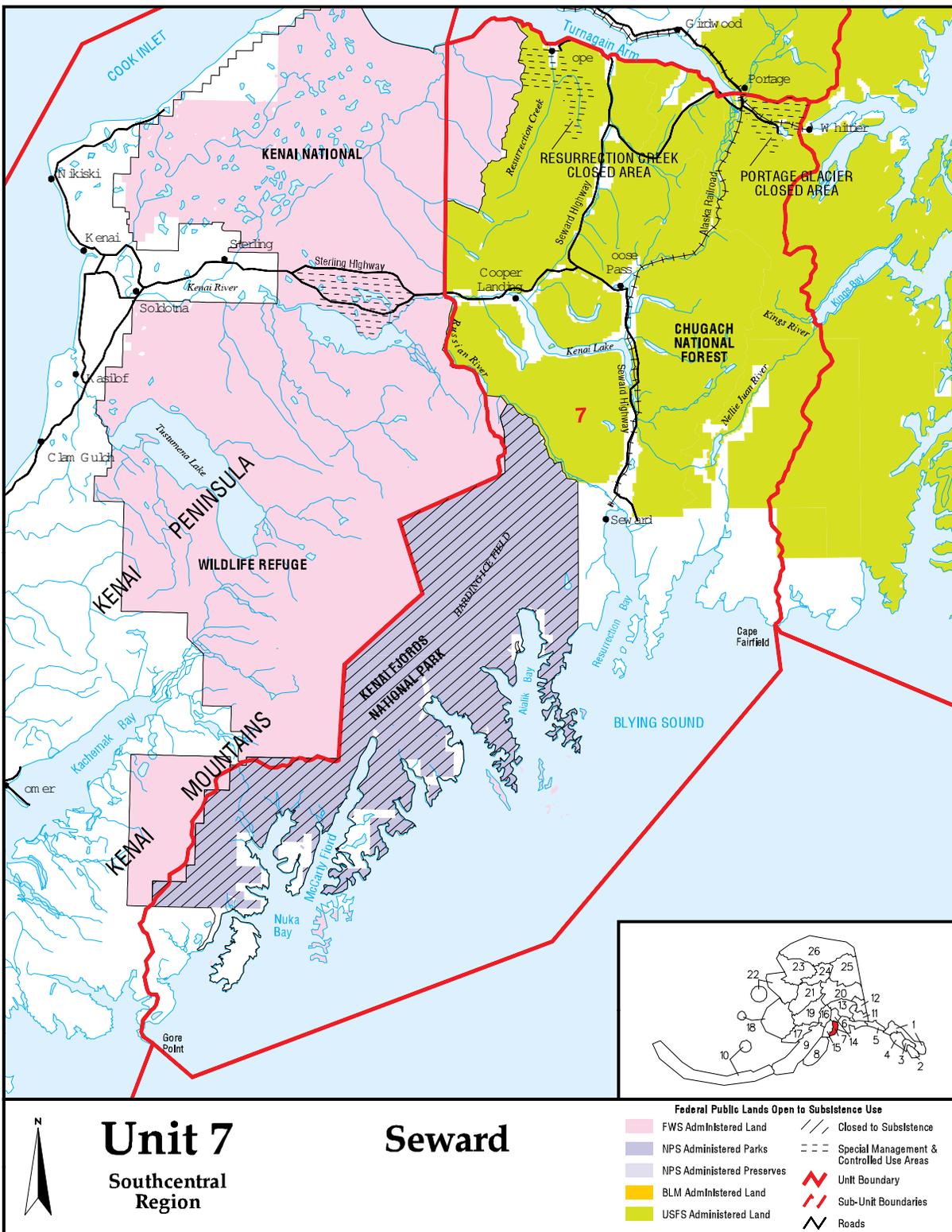
"I hereby certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.

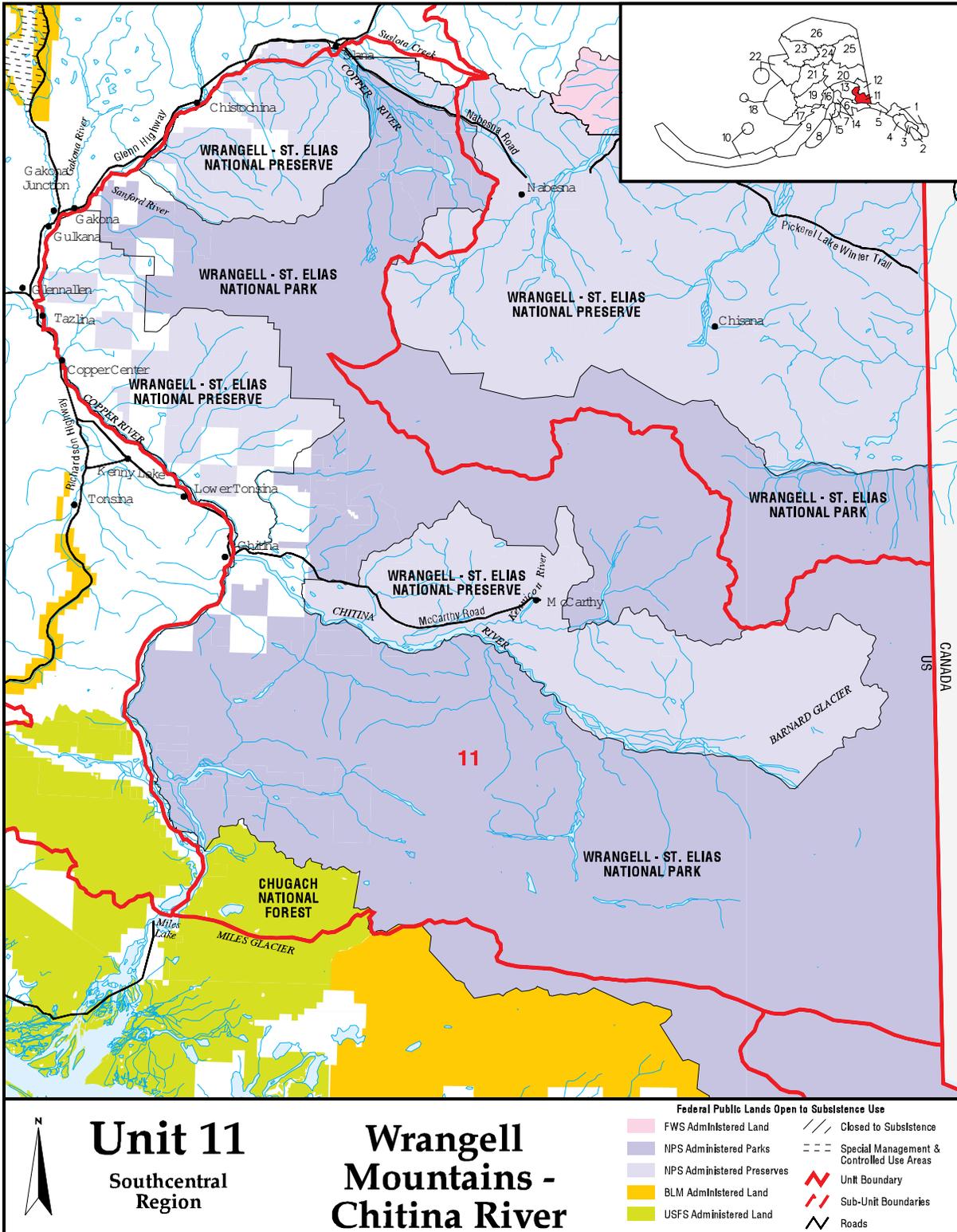
Donald Mike, DFO
USFWS Office of Subsistence Management

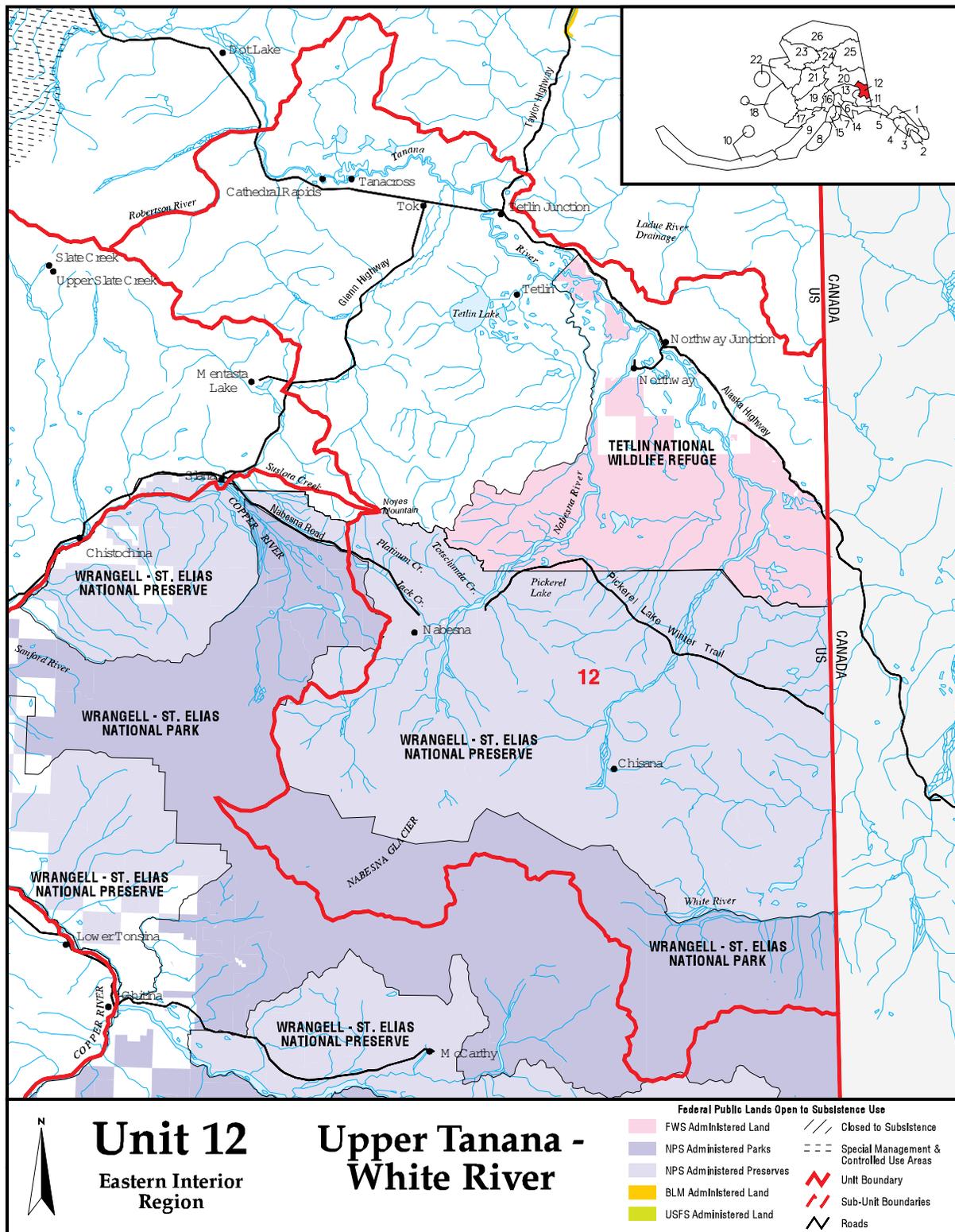
Ralph Lohse, Chair
Southcentral Subsistence Regional Advisory Council

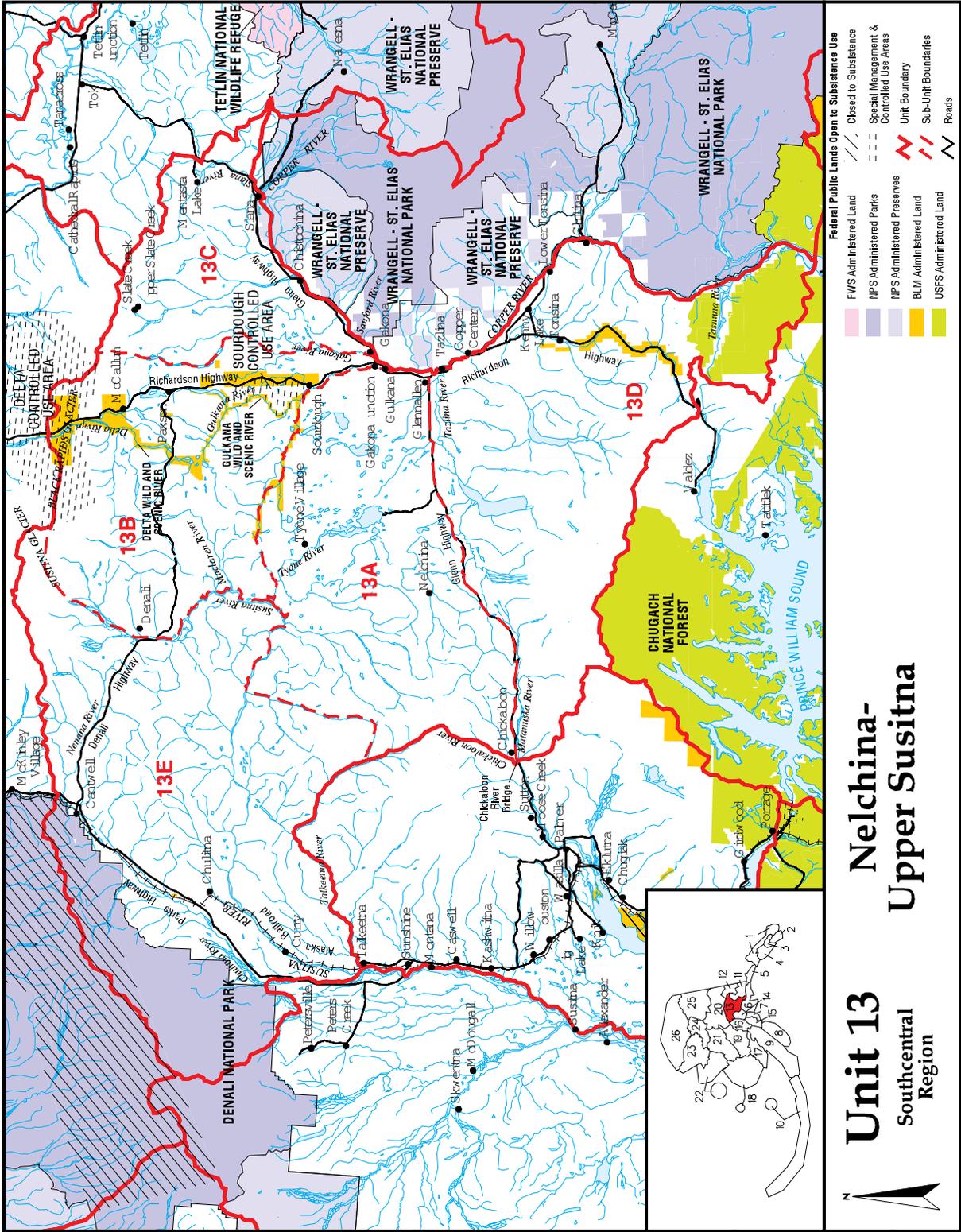
These minutes will be formally considered by the Southcentral Subsistence Regional Advisory Council at its next meeting, and any corrections or notations will be incorporated in the minutes of that meeting."

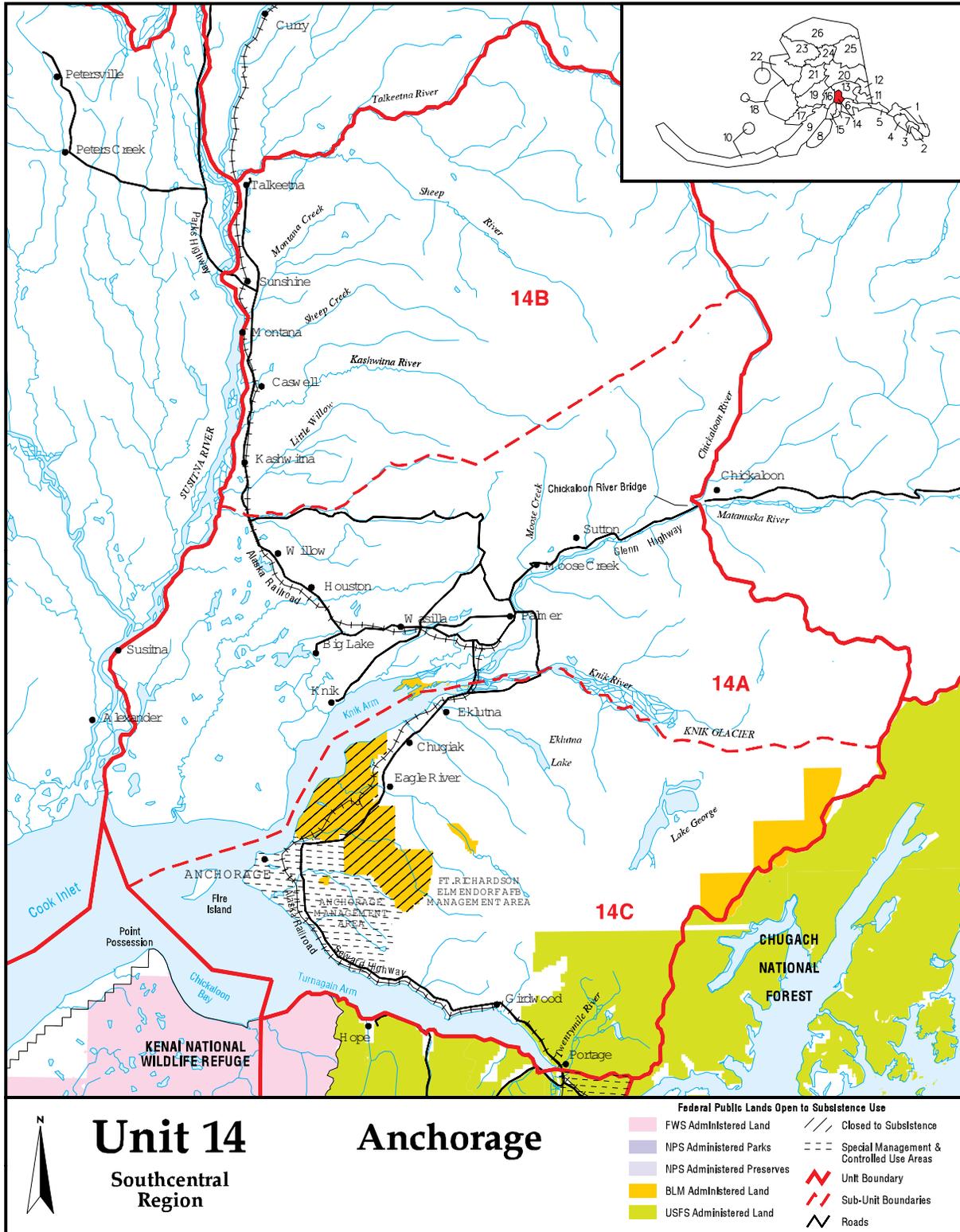
For a more detailed report of this meeting, copies of the transcript and meeting handouts are available upon request. Call Donald Mike at 1-800-478-1456 or 786-3629, email donald_mike@fws.gov











| WP10-01 Executive Summary | |
|--|--|
| General Description | Proposal WP10-01 requests the addition of a definition for “drawing permit” to the Federal subsistence management regulations. <i>Submitted by the USFWS, Office of Subsistence Management</i> |
| Proposed Regulation | <i>Statewide-General Regulations</i> § __.25(a) Definitions <i>Drawing permit—a permit issued to a limited number of Federally qualified subsistence users selected by means of a lottery held for all Federally qualified subsistence users submitting valid applications for such permits and who agree to abide by the conditions specified for each hunt. Drawing permits are issued based on priorities determined by 36 CFR 242.17 and 50 CFR 100.17.</i> |
| OSM Preliminary Conclusion | Support Proposal WP10-01 with modification to simplify and clarify the definition. The modified regulation would read: <i>Statewide-General Regulations</i> § __.25(a) Definitions <i>Drawing permit—a permit issued to a limited number of Federally qualified subsistence users selected by means of a random drawing.</i> |
| 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 | Support |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

**DRAFT STAFF ANALYSIS
WP10-01**

ISSUES

Proposal WP10-01, submitted by the USFWS, Office of Subsistence Management, requests the addition of a definition for “drawing permit” to the Federal subsistence management regulations.

DISCUSSION

Existing Federal subsistence management regulations do not include a definition for “drawing permit” (§§ __.4 and __.25(a)). However, because this term is used in the hunting regulations (§ __.26(n) (19)), a definition should be provided.

Existing Federal Regulation

Statewide-General Regulations

§ __.25(a) Definitions—No existing definition

Proposed Federal Regulation

Statewide-General Regulations

§ __.25(a) Definitions

Drawing permit—a permit issued to a limited number of Federally qualified subsistence users selected by means of a lottery held for all Federally qualified subsistence users submitting valid applications for such permits and who agree to abide by the conditions specified for each hunt. Drawing permits are issued based on priorities determined by 36 CFR 242.17 and 50 CFR 100.17.

Existing State Regulation

Definitions

Drawing permit—a permit issued to a limited number of people selected by means of a lottery held for all people submitting valid applications for such permits and who agree to abide by the conditions specified for each hunt.

Extent of Federal Public Lands/Waters

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% U.S. Fish and Wildlife Service, and 6% U.S. Department of Agriculture, U.S. Forest Service lands.

Effects of the Proposal

The addition of this definition does not affect fish and wildlife populations, subsistence uses or other uses (i.e., sport/recreational or commercial). The Federal Subsistence Management Program has used drawings as one way to distribute permits among residents of a community that are similarly situated relative to

customary and traditional uses of those wildlife populations. Current hunting regulations use the phrase “drawing permit” to describe the permit for the Unit 19A moose hunt, and there have been other situations where drawings have been used to distribute registration permits among qualified applicants. Proposal WP10-09, submitted by the Southeast Alaska Subsistence Regional Advisory Council, requests a drawing permit hunt. The addition of a definition for “drawing permit” to the Federal regulations would help provide clarity to regulations.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-01 **with modification** to simplify and clarify the definition.

The modified regulation would read:

Statewide-General Regulations

§ __.25(a) Definitions

Drawing permit—a permit issued to a limited number of Federally qualified subsistence users selected by means of a random drawing.

Justification

The definition clarifies a term that is used in the Federal subsistence hunting regulations and does not affect fish and wildlife populations, subsistence uses or other uses. The modified wording simplifies the definition and makes it clear that drawing permits are based on a “random” drawing for all similarly situated Federally qualified subsistence users.

STATUS OF WP10-02 (DEFERRED WP08-05)

Proposal WP10-02 (deferred proposal WP08-05), submitted by the Alaska Department of Fish and Game, requested clarification of the existing Federal Subsistence management regulation governing the use of brown bear claws in handicrafts for sale. The proposal specifically 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 Alaska Department of Fish and Game, pending formation of a workgroup to address the issue of developing a method of tracking brown bear claws made into handicrafts for sale. The Board voted unanimously to defer the proposal “to allow a work group to address this issue of sale and tracking, specifically whether or not it’s even feasible” (FSB 2008:117). 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).

An initial scoping meeting between Federal and State staff was held in January 2009; at that meeting a draft charge was developed¹. A briefing was provided to all Councils during the Winter 2009 meeting cycle on the status of the workgroup, and Councils selected representatives to participate in the workgroup. The workgroup, including representatives from nine Councils, and Federal and State staff met in June 2009. At that meeting, participants from the Councils posed a number of questions directed at whether or not bear claw tracking is a problem for subsistence users, and if regulations needed to be changed. These questions prompted Federal and State staff to conduct further research, and to meet as agency staff to compare notes and to follow up on research questions, which they did twice during summer 2009. The work group attempted to meet again during the summer of 2009, but this was not possible. In the interim, another briefing on the status of the workgroup was provided to the Councils at the Fall 2009 meetings.

FUTURE DIRECTION

The workgroup, including Council members, will meet during spring/summer 2010 to address the questions raised at its first meeting, and to begin working towards resolution of the issues. This will provide ample time for the workgroups’ findings to be presented to each Council for their recommendations during the Fall 2010 meeting cycle, and for a full report to be provided to the Federal Subsistence Board for action at its January 2011 meeting. A report will also be provided to the Alaska Board of Game at an appropriate meeting. Proposal 10-02 (WP08-05) will be deferred until that time.

LITERATURE CITED

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

¹ Draft charge for workgroup:

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.

| WP10-03 Executive Summary | |
|--|---|
| General Description | Proposal WP10-03 requests the addition of a general provision in Federal subsistence management regulations to allow the harvest of fish and wildlife by participants in a cultural or educational program. <i>Submitted by the Office of Subsistence Management</i> |
| Proposed Regulation | <i>See the analysis for the proposed regulation language.</i> |
| OSM Preliminary Conclusion | Support Proposal WP10-03 with modification to simplify the proposed regulation. |
| 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 | Support Proposal WP10-03 with Modification to simplify the proposed regulation. |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS WP10-03

ISSUES

Proposal WP10-03, submitted by the Office of Subsistence Management, requests the addition of a general provision in Federal subsistence management regulations to allow the harvest of fish and wildlife by participants in a cultural or educational program.

DISCUSSION

This proposal is a housekeeping measure intended to provide clarity in the guidelines for issuing permits for the harvest of fish and wildlife by cultural and educational programs. Doing so will help to inform the public, fish and wildlife managers, Office of Subsistence Management staff, members of the Interagency Staff Committee, and members of the Federal Subsistence Board (Board) of the guidelines currently in use by Office of Subsistence Management staff with regard to permits to harvest wildlife and fish for cultural and educational programs. Since the Federal program began in 1990, the process for issuing permits has gone through a number of changes. Because some of these changes have not been well documented, there is some confusion over the process. The intent of this regulation then is to provide clarity in Federal subsistence management regulations.

Currently, there is no specific provision allowing for the harvest of wildlife for cultural and educational programs although there is a general allowance that provides for such a practice. A specific provision allows for the harvest of fish for a cultural and educational program.

Most requests speaking to the allowance of fish or wildlife harvests on behalf of a cultural or educational program are on behalf of culture camps sponsored by Native nonprofit organizations. Requests for permits also have been received from a substance abuse rehabilitation program and for college courses. The permits are typically requested both to teach cultural and educational activities associated with harvest, and to provide food for participants in the cultural and educational program. Once a program has been approved for a permit, follow-up requests (referred to as repeat requests in the regulation), may be made annually for up to five years by the same cultural or educational program to harvest the same animal species and amount.

Existing Federal Regulation

Program structure

§____.10(d)

(5) The Board may implement one or more of the following harvest and harvest reporting or permit systems:

(iii) The fish and wildlife is taken by individuals or community representatives permitted (via a Federal Subsistence Registration Permit) a one-time or annual harvest for special purposes including ceremonies and potlatches.

General regulations

No existing regulation

Fish regulations**§____.27(e)**

(2) The U.S. Fish and Wildlife Service Office of Subsistence Management may issue a permit to harvest fish for a qualifying cultural/educational program to an organization that has been granted a Federal subsistence permit for a similar event within the previous 5 years. A qualifying program must have instructors, enrolled students, minimum attendance requirements, and standards for successful completion of the course. Applications must be submitted to the Office of Subsistence Management 60 days prior to the earliest desired date of harvest. Permits will be issued for no more than 25 fish per culture/education camp. Appeal of a rejected request can be made to the Federal Subsistence Board. Application for an initial permit for a qualifying cultural/educational program, for a permit when the circumstances have changed significantly, when no permit has been issued within the previous 5 years, or when there is a request for harvest in excess of that provided in this paragraph (e)(2), will be considered by the Federal Subsistence Board.

Proposed Federal Regulation**Program structure****§____.10(d)**

(5) The Board may implement one or more of the following harvest and harvest reporting or permit systems:

(iii) The fish and wildlife is taken by individuals or community representatives permitted (via a Federal Subsistence Registration Permit) a one-time or annual harvest for special purposes including ceremonies and potlatches.

General regulations**§____.25(g) Cultural/educational program permits**

(1) A qualifying program must have instructors, enrolled students, minimum attendance requirements, and standards for successful completion of the course. Applications must be submitted to the Federal Subsistence Board through the Office of Subsistence Management 60 days prior to the earliest desired date of harvest. Generally permits will be issued for no more than one large mammal per cultural/educational program, permits will be issued for no more than 25 fish per cultural/educational program, and permits for the harvest of shellfish will be addressed on a case by case basis. Any animals harvested will count against any established Federal harvest quota for the area in which harvested.

(2) Application for an initial permit for a qualifying cultural/educational program, for a permit when the circumstances have changed significantly, when no permit has been issued within the previous 5 years, or when there is a request for harvest in excess of that provided in paragraph

(g)(1), will be considered by the Federal Subsistence Board. Appeal of a rejected request can be made to the Federal Subsistence Board.

(3) A permit to harvest fish, wildlife, or shellfish for a qualifying cultural/educational program which has been granted a Federal subsistence permit for a similar event within the previous 5 years may be issued by the Federal in-season manager (for fisheries) or the Federal local land manager (for wildlife). Requests for follow-up permits must be submitted to the in-season or local land manager 60 days prior to the earliest desired date of harvest.

(4) Federal in-season and local land managers will report the re-issue of any cultural/educational program permits and the harvest results to the U.S. Fish and Wildlife Service, Office of Subsistence Management.

Fish regulations

§ ____ .27(e)

(2) The U.S. Fish and Wildlife Service Office of Subsistence Management may issue a permit to harvest fish for a qualifying cultural/educational program to an organization that has been granted a Federal subsistence permit for a similar event within the previous 5 years. A qualifying program must have instructors, enrolled students, minimum attendance requirements, and standards for successful completion of the course. Applications must be submitted to the Office of Subsistence Management 60 days prior to the earliest desired date of harvest. Permits will be issued for no more than 25 fish per culture/education camp. Appeal of a rejected request can be made to the Federal Subsistence Board. Application for an initial permit for a qualifying cultural/educational program, for a permit when the circumstances have changed significantly, when no permit has been issued within the previous 5 years, or when there is a request for harvest in excess of that provided in this paragraph (e)(2), will be considered by the Federal Subsistence Board.

State Regulations

5 AAC 92.034 Permit to take game for cultural purposes

The commissioner may issue a permit for the taking of game for the teaching and preservation of historic or traditional Alaskan cultural practices, knowledge, and values, only under the terms of a permit issued by the department upon application. A permit may not be issued if the taking of the game can be reasonably accommodated under existing regulations. For purposes of this section, "game" includes (1) deer; (2) moose; (3) caribou; (4) black bear; (5) mountain goat; (6) small game; (7) furbearers; and (8) any migratory bird for which a federal permit has been issued.

Regulatory History

At the inception of the Federal Subsistence Management Program, all requests for permits to allow harvests for special purposes between regulatory cycles were treated as special actions that went directly to the Board. In 2000, the Board adopted a general provision in Federal regulations that delegated authority to Office of Subsistence Management to issue special harvest permits for repeated requests from

cultural and educational camp operators (§____.25(c)(4)¹; 66 FR 10148, February 13, 2001). Thus, the initial request went to the Board and any subsequent requests to the Office of Subsistence Management. This regulation included provisions for issuing permits to harvest up to 25 fish and one species of wildlife (deer, moose, caribou, black bear, or mountain goat only). These species were included in the regulation because permits had previously been distributed for these species. At the time of its adoption, the Board expressed the desire to evaluate the effectiveness of the regulation following its implementation (FWS 2004).

Concurrently, in 2000 the Board also adopted regulations to manage fisheries occurring in Federal public waters. As part of this activity, the Board adopted a regulation addressing the subsistence take of fish on behalf of cultural and educational programs (§____.27(e)(2); 66 FR 33745, June 25, 2001). The regulation adopted by the Board required that initial requests are considered by the Board and repeat requests are considered by Office of Subsistence Management. The Board gave the Office of Subsistence Management the authority to issue repeat permits for the harvest of up to 25 fish per program. It should be noted that this regulation was adopted even though a similar regulation (described in the previous paragraph) already existed in general provisions of Federal regulations, which was probably an oversight.

In November 2003 the Board rescinded the general provisions regulation that delegated authority to the Office of Subsistence Management to issue cultural and educational permits (§____.25(g) [§____.25(c)(4)]; 69 FR 40177, July 1, 2004). Instead of a regulation, the Board established guidelines for issuing permits for the harvest fish and wildlife for cultural and educational programs. Additionally, the Board delegated the authority to issue repeat permits to field managers.

When a permit to harvest wildlife by a cultural or educational program is issued, at the same time a letter containing guidelines for delegation is completed by the analyst at the Office of Subsistence Management and sent to the Federal field manager by the policy coordinator at the Office of Subsistence Management. The guidelines require that the field manager become familiar with the management history of the species and with the State and Federal regulations and management plan, and be up-to-date on population and harvest status information. Also, the guidelines direct the field manager to consult with the local ADF&G fish and wildlife managers.

Effects of the Proposal

If this proposal is adopted, the provision in fish regulations for issuing cultural and educational permits should be rescinded. The description of how to apply for a permit to harvest fish or wildlife as part of a cultural or educational program that is in the Federal subsistence regulation booklets published for the public will flow directly from the new regulation requested in this proposal.

If this proposal is not adopted, there will continue to be confusion among the public, fish and wildlife managers, Office of Subsistence Management staff, members of the Interagency Staff Committee, and members of the Federal Subsistence Board concerning the issuing of these permits.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-03 with modification to simplify the proposed regulation.

¹ The regulation located at §____.25(c)(4) in Federal regulations was later moved to §____.25(g) during a reorganization of the Federal regulations (66 FR 33745–33746, June 25, 2001).

The modified regulation should read:

General regulations

§____.25(g) Cultural/educational program permits

(1) A qualifying program must have instructors, enrolled students, minimum attendance requirements, and standards for successful completion of the course. Applications must be submitted to the Federal Subsistence Board through the Office of Subsistence Management and should be submitted 60 days prior to the earliest desired date of harvest. Harvests must be reported and any animals harvested will count against any established Federal harvest quota for the area in which it is harvested.

(2) Requests for follow-up permits must be submitted to the in-season or local manager and should be submitted 60 days prior to the earliest desired date of harvest.

Justification

The harvest of fish and wildlife by participants in cultural and educational programs is generally allowed in the Federal Subsistence Management Program regulations. Proposal WP10-03 will further clarify for fish and wildlife managers, Office of Subsistence Management staff, members of the Interagency Staff Committee, and members of the Federal Subsistence Board the cultural and educational permit regulations.

LITERATURE CITED

FWS. 2004. Staff analysis for Proposal WP04-26. Pages 178–188 in Federal Subsistence Board Meeting Materials May 18–21, 2004. Office of Subsistence Management, FWS. Anchorage, AK. 622 pages.

| WP10-04 Executive Summary | |
|--|--|
| General Description | This proposal would remove Units 6, 12, 20A, 20B, 20C east of the Teklanika River, 20D and 20E from the areas for which the Assistant Regional Director for Subsistence Management has the delegated authority to open, close or adjust Federal subsistence lynx seasons and to set harvest and possession limits. <i>Submitted by the Office of Subsistence Management</i> |
| Proposed Regulation | § __.26 (f)(3) <i>The Assistant Regional Director for Subsistence Management, FWS, is authorized to open, close, or adjust Federal subsistence lynx seasons and to set harvest and possession limits for lynx in Units 6, 7, 11, 12, 13, 14, 15, and 16, 20A, 20B, 20C east of the Teklanika River, 20D, and 20E, with a maximum season of November 1–February 28. This delegation may be exercised only when it is necessary to conserve lynx populations or to continue subsistence uses, only within guidelines listed within the ADF&G Lynx Harvest Management Strategy, and only after staff analysis of the potential action, consultation with the appropriate Regional Council Chairs, and Interagency Staff Committee concurrence.</i> |
| OSM Preliminary Conclusion | Support proposal WP10-04 with modification to delete the regulatory language found in § __.26 (f)(3), and delegate the authority to open, close, or adjust Federal lynx seasons and to set harvest and possession limits for lynx via a delegation of authority letter only. |
| 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 | |

continued on next page

| WP10-04 Executive Summary (continued) | |
|---|---|
| Eastern Interior Regional Council Recommendation | |
| North Slope Regional Council Recommendation | Support proposal WP10-04 with modification to delete the regulatory language found in §__.26 (f)(3), and delegate the authority to open, close, or adjust Federal lynx seasons and to set harvest and possession limits for lynx via a delegation of authority letter only. |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS WP10-04

ISSUE

This proposal, submitted by the Office of Subsistence Management, would remove Units 6, 12, 20A, 20B, 20C east of the Teklanika River, 20D and 20E from the areas for which the Assistant Regional Director for Subsistence Management has the delegated authority to open, close or adjust Federal subsistence lynx seasons and to set harvest and possession limits.

DISCUSSION

Lynx trapping seasons are adjusted annually based on recommendations determined using Alaska Department of Fish and Game (ADF&G) Tracking Harvest Strategy for managing lynx (FSB 2001). The Alaska Board of Game removed Units 6, 12, 20A, 20B, 20C east of the Teklanika River, 20D and 20E from the list of units that are managed using the lynx harvest strategy. Based on this action these units should also be eliminated from regulation.

Existing Federal Regulation

§__.26 (f)(3)

The Assistant Regional Director for Subsistence Management, FWS, is authorized to open, close, or adjust Federal subsistence lynx seasons and to set harvest and possession limits for lynx in Units 6, 7, 11, 12, 13, 14, 15, 16, 20A, 20B, 20C east of the Teklanika River, 20D, and 20E, with a maximum season of November 1–February 28. This delegation may be exercised only when it is necessary to conserve lynx populations or to continue subsistence uses, only within guidelines listed within the ADF&G Lynx Harvest Management Strategy, and only after staff analysis of the potential action, consultation with the appropriate Regional Council Chairs, and Interagency Staff Committee concurrence.

Proposed Federal Regulation

§__.26 (f)(3)

The Assistant Regional Director for Subsistence Management, FWS, is authorized to open, close, or adjust Federal subsistence lynx seasons and to set harvest and possession limits for lynx in Units ~~6, 7, 11, 12, 13, 14, 15, and 16, 20A, 20B, 20C east of the Teklanika River, 20D, and 20E,~~ with a maximum season of November 1–February 28. This delegation may be exercised only when it is necessary to conserve lynx populations or to continue subsistence uses, only within guidelines listed within the ADF&G Lynx Harvest Management Strategy, and only after staff analysis of the potential action, consultation with the appropriate Regional Council Chairs, and Interagency Staff Committee concurrence.

Regulatory History

In 1987, ADF&G adopted a Tracking Harvest Strategy for managing lynx (ADF&G 1987). This strategy calls for shortening or closing trapping seasons when lynx numbers are low, and lengthening or opening seasons when lynx are abundant. In the spring of 1992, the Alaska Board of Game adopted

maximum possible seasons for a number of management units within the State. Authority to make season adjustments within seasonal windows was delegated to ADF&G by the Alaska Board of Game. The decision to adjust the season is based upon the reported number of lynx harvested and the percentage of kittens within the total harvest.

The Federal Subsistence Board (Board) endorsed the State's strategy for setting seasons on lynx and has regularly made annual adjustments to the Federal seasons to align with the State seasons. In 2001 the Federal Subsistence Board (FSB 2001) added a statewide regulatory provision and issued a Delegation of Authority Letter (**Appendix I**) so that the Office of Subsistence Management could adjust lynx trapping regulations through the use of the ADF&G tracking harvest strategy. This delegated authority requires coordination with ADF&G, consultation with the appropriate Federal land management agencies, and development of a staff analysis to evaluate the effects of the changes to the season and harvest limit and Interagency Staff Committee concurrence.

In March 2008, the Alaska Board of Game eliminated the lynx tracking strategy in the interior game management units and established permanent seasons for Unit 20. Unit 12 was previously removed from the tracking strategy and in March 2009 the Alaska Board of Game eliminated the tracking strategy for Unit 6.

Effects of the Proposal

When the Board first delegated its authority to the Assistant Regional Director for Subsistence Management, Units 6, 7, 11, 12, 13, 14, 15, 16, 20A, 20B, 20C east of the Teklanika River, 20D, and 20E were managed by the State using the lynx strategy. Over time, however, the State has removed a number of units from its lynx tracking strategy. If this proposal is adopted it would align Federal and State regulations regarding lynx management.

There should be no impacts on wildlife populations as season and harvest limits can still be changed through the normal regulatory cycle or through special action if needed. There will be no adverse impacts to subsistence users as season and harvest limits may still be changed. This proposed change only addresses the authority delegated to the Assistant Regional Director for the Office of Subsistence Management.

OSM PRELIMINARY CONCLUSION

Support proposal WP10-04 **with modification** to delete the regulatory language found in § __.26 (f)(3), and delegate the authority to open, close, or adjust Federal lynx seasons and to set harvest and possession limits for lynx via a delegation of authority letter only (**Appendix II**).

The regulation would be deleted:

§ __.26 (f)(3) [*Reserved*]

The Assistant Regional Director for Subsistence Management, FWS, is authorized to open, close, or adjust Federal subsistence lynx seasons and to set harvest and possession limits for lynx in Units 6, 7, 11, 12, 13, 14, 15, 16, 20A, 20B, 20C east of the Teklanika River, 20D, and 20E, with a maximum season of November 1–February 28. This delegation may be exercised only when it is necessary to conserve lynx populations or to continue subsistence uses, only within guidelines listed within the ADF&G Lynx Harvest Management Strategy, and only after staff analysis of the potential action, consultation with the appropriate Regional Council Chairs, and Interagency Staff Committee concurrence.

Justification

There should be no impacts on wildlife populations as season and harvest limits can still be changed via the normal regulatory cycle or via special action if needed. There will be no impacts to subsistence users as season and harvest limits may still be changed. This proposed change is only addressing the authority delegated to the Assistant Regional Director for the Office of Subsistence Management. The current delegation is already done through a letter and the regulatory language in §__.26 (f)(3) is redundant and not needed. The draft letter found in **Appendix II** would update the delegation of authority letter making it more consistent with other delegation letters issued throughout the state by the Board.

LITERATURE CITED

ADF&G, Division of Wildlife Conservation. 1987. Report to the Board of Game on lynx management. 30 pages.

ADF&G, Division of Wildlife Conservation. 2009. Recommendations for the 2008–2009 lynx trapping seasons: Interior Alaska Tracking Harvest Strategy. 2 pages.

FSB. 2001. Transcripts of the Federal Subsistence Board proceedings, May 9, 2001. Anchorage, AK.



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

Federal Subsistence Board

3601 C Street, Suite 1030
Anchorage, Alaska 99503-6199



FOREST SERVICE

JUN 15 2001

FWS/OSM/C:/LynxDelegation

Mr. Thomas H. Boyd
Assistant Regional Director, Subsistence Management
U.S. Fish and Wildlife Service
3601 C Street, Suite 1030
Anchorage, Alaska 99503

Dear Mr. Boyd:

This letter delegates regulatory authority from the Federal Subsistence Board to you as Project Leader of the Office of Subsistence Management to issue special actions when necessary to assure the conservation of healthy lynx populations and to provide for subsistence uses of lynx, consistent with the Alaska Department of Fish and Game Lynx Harvest Management Strategy, on Federal lands subject to ANILCA Title VIII.

Overview

It is the intent of the Federal Subsistence Board that lynx management by Federal officials be coordinated with the Alaska Department of Fish and Game and involve Regional Advisory Council representatives to conserve healthy lynx populations while providing for subsistence uses. Federal managers are expected to cooperate with State managers and minimize disruption to resource users and existing agency programs, as agreed to under the Interim Memorandum of Agreement for Coordinated Fisheries and Wildlife Management for Subsistence Uses on Federal Public lands in Alaska.

DELEGATION OF AUTHORITY

1. Delegation: The Project Leader of the Office of Subsistence Management is hereby delegated authority to approve special actions affecting lynx on Federal lands as outlined under **2. Scope of Delegation.**

2. Scope of Delegation: The regulatory authority hereby delegated is limited to authority to open, close, or adjust Federal subsistence lynx seasons and to set harvest and possession limits for lynx. This delegation may be exercised only when it is necessary to conserve lynx populations or to continue subsistence uses, only within guidelines listed within the Lynx Harvest Management Strategy, and only after staff analysis of the potential action and Staff Committee concurrence.

Mr. Thomas H. Boyd

2

All other proposed changes to codified regulations, such as customary and traditional use determinations or adjustments to method or means of take, shall be directed to the Federal Subsistence Board.

The Federal lands subject to this delegated authority are those described in the Subsistence Management Regulations for Public Lands in Alaska. You will coordinate your decisions with all affected Federal land managers and the Alaska Department of Fish and Game.

3. Effective Period: This delegation of authority is effective from the date of this letter, and continues until revoked by the Federal Subsistence Board.

4. Guidelines for Delegation: You will review special action requests or situations that may require a special action and all supporting information to determine (1) if the request/situation falls within the scope of delegation, (2) if the action would be consistent with the conservation of healthy lynx populations, and (3) what the consequences of taking an action may be on potentially affected subsistence users and non-subsistence users. You will consider the management history of lynx in the affected region, current State and Federal lynx regulations and management plans, and lynx population and harvest status information. Requests not within your delegated authority will be forwarded to the Federal Subsistence Board for consideration. You will keep a record of all special action requests and their disposition.

You will immediately notify the Federal Subsistence Board and notify/consult with appropriate ADF&G managers, Regional Advisory Council members, and other affected Federal conservation unit managers concerning special actions being considered. You will issue timely decisions. Users, affected State and Federal managers, law enforcement personnel, and Regional Advisory Council representatives will be notified before the effective date/time of decisions.

5. Support Services: Administrative support for management activities will be provided by the Office of Subsistence Management, U.S. Fish and Wildlife Service, Department of the Interior.

6. Authority: This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6).

This delegation of authority will assure conservation of lynx populations through sound management decisions in cooperation with State managers, thereby providing for the long-term needs of the subsistence user.

Sincerely,



Mitch Demientieff, Chair
Federal Subsistence Board

Attachment: Tracking Harvest Strategy for Lynx

cc: Members of the Federal Subsistence Board

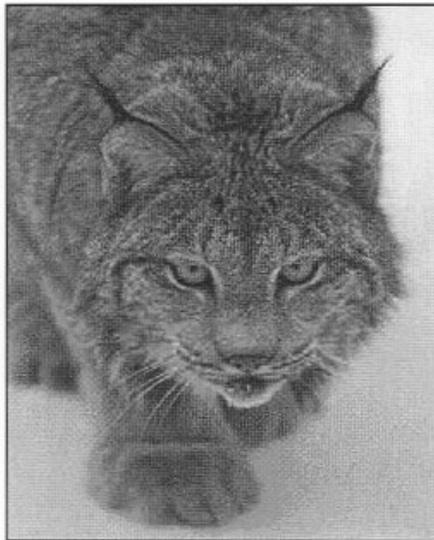
Mr. Stanley Pruszanski, Assistant Regional Director - Law Enforcement

Mr. Walter Soroka, Deputy Assistant Regional Director - Law Enforcement

Mr. Frank Rue, Commissioner, Alaska Department of Fish and Game

Tracking Harvest Strategy for Lynx

by Howard Golden
Furbearer Biologist, Southcentral Region

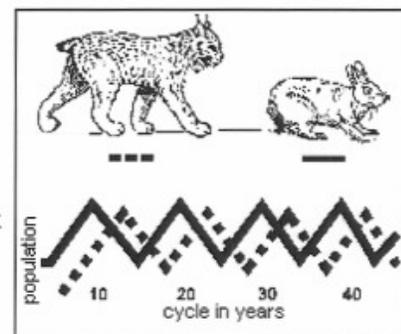


Lynx (*Lynx canadensis*) populations in Alaska and much of Canada fluctuate greatly over a 9-11-year period, responding mainly to the abundance of snowshoe hares (*Lepus americanus*). Lynx population trends are closely tied with those of snowshoe hares even when other prey is available. Lynx respond directly to changes in hare abundance through the number of kittens that are produced and the survival of kittens and adults. This response by lynx follows the hare population cycles, which are remarkably synchronous in northern latitudes.

Managers of lynx harvest in these areas must be able to respond with appropriate harvest regulations to ensure sustainable harvests are maintained. A tracking harvest strategy is one method for managing the harvest of populations in a fluctuating environment. Under a tracking harvest strategy, harvest is increased while a population is growing and is decreased during a population decline. In 1987, the Alaska Department of Fish and Game (ADF&G) and the Board of Game (BOG), which authorizes seasons and bag limits in Alaska, adopted a tracking harvest strategy to allow the dynamic management of lynx based on the ability of populations to support harvest. This was in response to concerns by lynx managers that high lynx-pelt prices would encourage excessive harvest during the declining phase of the lynx cycle.

The tracking harvest strategy applies to the road-connected areas of Interior and Southcentral Alaska that have high trapper use. Several criteria are used to determine if lynx seasons should be changed, including:

1. Percent kittens in the harvest
2. Evidence of increasing or decreasing populations of both lynx and hares
3. Period of pelt primeness
4. Potential negative effects of early seasons' orphaning kittens too young to survive
5. Possible effects of late seasons on higher harvests due to increased movement and greater vulnerability of lynx

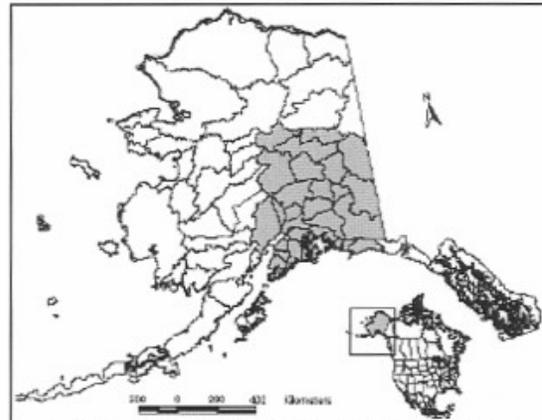


The tracking harvest strategy for lynx was implemented in 1988. The strategy resulted in season closures in some units when lynx populations seemed to be at low levels but later allowed seasons in those units to reopen once lynx populations began to increase. The tracking harvest strategy became difficult to use because of the need to issue emergency orders to change seasons outside the usual regulatory schedule established by the BOG. This problem was resolved in 1992 when the BOG authorized ADF&G to

change season lengths within the broad seasons of 1 November-28 February in Interior game management units and 10 November-28 February in Southcentral units. ADF&G is not authorized to modify bag limits under this plan because that is a BOG allocation prerogative. There is a no-limit bag for lynx trapping throughout most of the state.

Every spring ADF&G biologists analyze data collected over winter during the trapping season to determine the most appropriate lynx seasons for the next winter. Biologists use a variety of tools to make their decisions. These tools include:

1. Track counts in snow to monitor the relative abundance of lynx and snowshoe hares
2. Pelt measurements to estimate the proportion of kittens in the harvest
3. Biological measurements from lynx carcasses purchased from trappers
4. Harvest data to determine where and how many lynx were trapped
5. Reports from trappers to get their on-the-ground observations
6. Other things like weather and snow conditions and pelt prices



Tracking harvest strategy area (shaded) and Game Management Unit boundaries in Alaska.

The new seasons may be long during the high years in a population cycle, closed during a low period, or somewhere in between during the middle years.

LynxTrak: A Tool for Lynx Harvest Managers



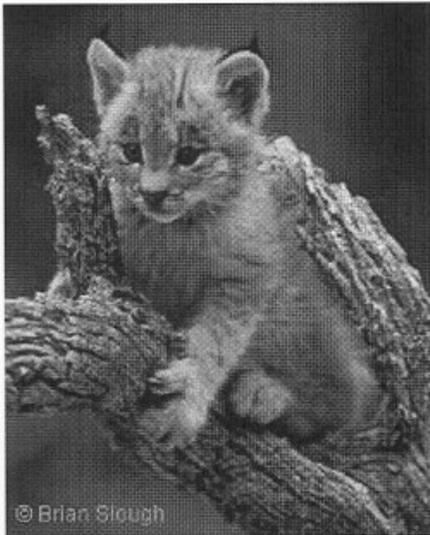
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Division Webmaster: <mailto:%20wcweb@fishgame.state.ak.us>
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Last Modified 08/10/2001 14:02:00

LynxTrak: A Tool for Lynx Harvest Managers

by Howard Golden
Furbearer Biologist, Southcentral Region

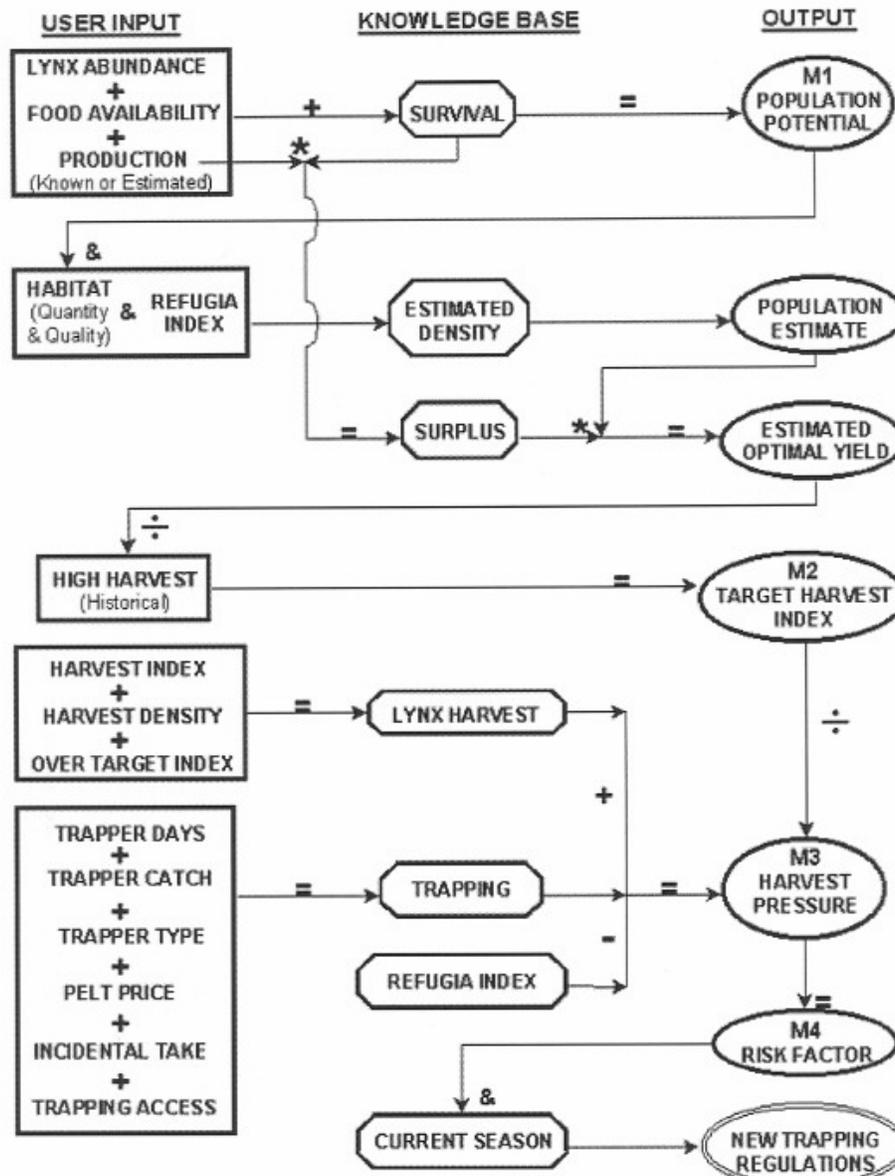


© Brian Slough

To aid lynx managers achieve sustainable harvest objectives under the tracking harvest strategy, I developed a rule-based model, called **LynxTrak**, as a decision-making tool. The advantage of the rule-based model is that it provides a documented, logical structure to the decision-making process that is both intuitive and experiential. Such models can process quantitative data but are most useful when coping with qualitative information to reach decisions. Rule-based models build on what is known using available literature, in-house databases, and the collective knowledge of experts. These types of models have become known as knowledge-based systems or expert systems. Expert systems are now widely used to address many situations in natural resource management, such as management of rangelands and lake systems, prescribed burning, and population modeling. The knowledge base for **LynxTrak** incorporates material from pertinent literature, lynx researchers, managers, and trappers in Alaska and Canada, and from Alaskan

lynx harvest data gathered through pelt sealing.

Expert systems are used with a computer program shell to incorporate the user's experience and available information into a decision tree, which is the foundation of the rule-based model. Designers of a model first establish all potential decisions or goals that could reasonably be made regarding a particular situation. Next, questions using qualitative variables are formulated about the specific conditions or situations that may exist. Finally, a set of rules is devised as if-then scenarios that direct the user toward an informed, logical, and consistent decision. This modeling approach can provide the user with a protocol that, because it is fully documented, ensures accountability. Lynx harvest managers in southcentral Alaska have been using the model for the last few years.



Summary flow diagram of LynxTrak depicted as user input, knowledge base, and output through the 4 modules: population potential (M1), target harvest index (M2), harvest pressure (M3), and risk factor (M4). The user input (rectangles) is the response given to questions (or occasionally variables) which LynxTrak asks as questions. The responses are then used to calculate numerical variables that become the knowledge base (octagons). The output (ovals) consists of the knowledge base variables used in combination to calculate other numerical variables and, finally, the goal of new trapping regulations.

LynxTrak is available in a runtime version that may be downloaded from this web site. The user guide ([PDF version](#) – 33K) for the model should be printed to aid installation and running the model. The model is in a [self-extracting zip file](#) (668K) that includes all the files needed to run **LynxTrak**.

Full documentation and technical support for **LynxTrak** is available from Howard Golden (mailto:20howard_golden@fishgame.state.ak.us).



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Contact: Howard Golden (mailto:%20howard_golden@fishgame.state.ak.us)

Division Webmaster: <mailto:%20wcweb@fishgame.state.ak.us>

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Last Modified 08/10/2001 14:02:14

Mr. Peter J. Probasco
Assistant Regional Director, Subsistence Management
U.S. Fish and Wildlife Service
1011 East Tudor Road
Anchorage, Alaska 99503

Dear Mr. Probasco:

This letter delegates regulatory authority from the Federal Subsistence Board to you as Project Leader of the Office of Subsistence Management to take action when necessary to assure the conservation of healthy lynx populations and to provide for subsistence uses of lynx, consistent with the Alaska Department of Fish and Game Lynx Harvest Management Strategy, on Federal lands subject to ANILCA Title VIII. This supersedes and replaces the original delegation letter dated June 15, 2001.

Overview

It is the intent of the Federal Subsistence Board that lynx management by Federal officials be coordinated with the Alaska Department of Fish and Game and involve Regional Advisory Council representatives to conserve healthy populations while providing for subsistence uses. Federal managers are expected to cooperate with State managers and minimize disruption to resource users and existing agency programs, as agreed to under the Memorandum of Understanding for Coordinated Fisheries and Wildlife Management for Subsistence Uses on Federal Public lands in Alaska (December 18, 2008).

DELEGATION OF AUTHORITY

1. Delegation: The Project Leader of the Office of Subsistence Management is hereby delegated authority to issue special action regulations affecting lynx on Federal lands as outlined under **2. Scope of Delegation.**

2. Scope of Delegation: The regulatory authority hereby delegated is limited to authority to open, close or adjust Federal subsistence lynx seasons and to set harvest and possession limits for lynx. This delegation may be exercised only when it is necessary to conserve lynx populations or to continue subsistence uses, only within guidelines listed within the Lynx Harvest Management Strategy.

All other proposed changes to codified regulations, such as customary and traditional use determinations or adjustments to method or means of take, shall be directed to the Federal Subsistence Board.

The Federal lands subject to this delegated authority are those described in the Subsistence Management Regulations for Public Lands in Alaska. You will coordinate your decisions with all affected Federal land managers and the Alaska Department of Fish and Game.

3. Effective Period: This delegation of authority is effective from the date of this letter, and continues until revoked by the Federal Subsistence Board.

4. Guidelines for Delegation: You will become familiar with the management history of lynx in the region, with the current State and Federal regulations and management plans, and be up-to-date on population and harvest status information. You will review situations that may require action and all supporting information to determine (1) if the request/situation falls within the scope of authority, (2) if significant conservation problems or subsistence harvest concerns are indicated, and (3) what the consequences of taking an action may be on potentially affected subsistence users and non-subsistence users. Requests not within your delegated authority will be forwarded to the Federal Subsistence Board for consideration. You will keep a record of all special action requests and their disposition.

You will immediately notify the Federal Subsistence Board and notify/consult with local ADF&G managers, Regional Advisory Council members, and other affected Federal conservation unit managers concerning actions being considered. You will issue timely decisions. Users, affected State and Federal managers, law enforcement personnel, and Regional Advisory Council representatives will be notified before the effective date/time of decisions.

5. Support Services: Administrative support for management activities will be provided by the Office of Subsistence Management, U.S. Fish & Wildlife Service, Department of the Interior.

6. Authority: This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6).

This delegation of authority will assure conservation of lynx populations through sound management decisions in cooperation with State managers, thereby providing for the long-term needs of the subsistence user.

Sincerely,

Michael R. Fleagle, Chair
Federal Subsistence Board

cc:

Members of the Federal Subsistence Board
Interagency Staff Committee
Tina Cunning, ADF&G

| WP10-05 Executive Summary | |
|--|--|
| General Description | Proposal WP10-05 seeks to update, clarify, and simplify the regulations regarding accumulation of harvest limits for both fish and wildlife. <i>Submitted by the Office of Subsistence Management</i> |
| Proposed Regulation | <p>§ __.25(c) <i>Harvest Limits.</i></p> <p>(1) <i>Harvest limits authorized by this section and harvest limits established in State regulations may not be accumulated, unless specified otherwise in §§ __.26 or __.27 or __.28.</i></p> <p>(2) ****</p> <p>(3) <i>A harvest limit may applies apply to the number of fish, wildlife, or shellfish that can be taken daily, seasonally and/or during a regulatory year or held in possession.; however, harvest limits for grouse (in some Units), ptarmigan, and caribou (in some Units), are regulated by the number that may be taken per day. Harvest limits of, grouse, and ptarmigan are also regulated and the number that can be held in possession.</i></p> |
| 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 | |
| Northwest Arctic Regional Council Recommendation | |
| Eastern Interior Regional Council Recommendation | |
| North Slope Regional Council Recommendation | Support |

continued on next page

| WP10-05 Executive Summary (continued) | |
|--|-------------|
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS WP10-05

ISSUES

Proposal WP10-05, submitted by the Office of Subsistence Management, seeks to update, clarify, and simplify the regulations regarding accumulation of harvest limits for both fish and wildlife.

DISCUSSION

A prohibition against accumulating Federal and State harvest limits has been included in the statewide general Federal subsistence regulations since 1990 (§__.25(c)(1)). Wording in Section __.25(c)(3) dates back to 1994; this section identifies the species for which harvest limits apply. There is a need to update both Sections __.25(c)(1) and (3). While the Board has addressed a number of area specific proposals concerning the accumulation of harvest limits over the years, these two sections of the general regulations have not been updated to reflect changes to the unit and area specific regulations; the current proposal addresses those inconsistencies.

Existing Federal Regulations

Statewide – Subsistence taking of fish, wildlife, and shellfish: general regulations

§__.25(c) *Harvest Limits.*

(1) *Harvest limits authorized by this section and harvest limits established in State regulations may not be accumulated.*

(2)****

(3) *A harvest limit applies to the number of fish, wildlife, or shellfish that can be taken during a regulatory year; however, harvest limits for grouse, ptarmigan, and caribou (in some Units) are regulated by the number that may be taken per day. Harvest limits of grouse and ptarmigan are also regulated by the number that can be held in possession.*

Proposed Federal Regulations

Statewide – Subsistence taking of fish, wildlife, and shellfish: general regulations

§__.25(c) *Harvest Limits.*

(1) *Harvest limits authorized by this section and harvest limits established in State regulations may not be accumulated, **unless specified otherwise in §§__.26 or __.27 or __.28.***

(2)****

(3) *A harvest limit **may applies apply** to the number of fish, wildlife, or shellfish that can be taken **daily, seasonally and/or** during a regulatory year **or held in possession.** ~~; however, harvest limits for grouse (in some Units), ptarmigan, and caribou (in some Units), are regulated by the number~~*

that may be taken per day. Harvest limits of, grouse, and ptarmigan are also regulated and the number that can be held in possession.

Existing State Regulations

In State hunting regulations a harvest (bag) limit applies to a regulatory year unless otherwise specified, and includes animals taken for any purpose, including for subsistence. State hunting regulations provide daily limits for wolves (all or part of Units 9, 10, 13, 17 and 19); caribou (all or part of Units 21, 22, 23, 24 and 26); coyote (Units 6–17, 19 and 20); grouse (1–7, 9, 11–26); hare (all or part of Units 1–5 and 14) and ptarmigan (Units 1–26).

State regulations do not prohibit the accumulation of harvest limits taken in State sport, personal use, and subsistence fisheries across most of Alaska (Kotzebue, Norton Sound-Port Clarence, Yukon-Northern, Kuskokwim, Bristol Bay, Aleutian Islands, Alaska Peninsula, Chignik, Kodiak, Cook Inlet and Prince William Sound areas). In the Southeast Area, the State prohibits fishers from possessing salmon taken in the sport fishery on the same day as salmon taken in either subsistence or personal use fisheries (5 AAC 01.745(b); 5 AAC 77.682(e)). In the Yakutat Area, the State prohibits possession of personal use-taken and sport-taken salmon on the same day (5 AAC 77.628(f)).

In State subsistence fish regulations, ten areas (Norton Sound-Port Clarence, Yukon-Northern, Bristol Bay, Aleutian Islands, Alaska Peninsula, Chignik, Kodiak, Cook Inlet, Prince William Sound and Southeast (5 AAC 01)) have annual harvest limits for some species of freshwater fish. The annual subsistence harvest limits specified in the Aleutian Islands, Chignik and Kodiak areas are the same as those in Federal subsistence regulations and the subsistence fisheries in these three areas are administered using State permits. There is no State subsistence daily, possession or annual harvest limit regulations for freshwater fisheries in two areas (Kotzebue and Yakutat). Only one area (Southeast Alaska) has a specific State subsistence regulatory daily and possession limit (for one species at one location; 5 AAC 01.760). Most State sport fish harvest regulations are based on daily and possession limits (5 AAC 47-75).

Extent of Federal Public Lands and Waters

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% U.S. Fish and Wildlife Service, and 6% U.S. Department of Agriculture, U.S. Forest Service lands.

Regulatory History

Accumulating Federal and State harvest limits

The current wording in Section __.25(c)(1) that addresses the prohibition against accumulating Federal and State harvest limits dates back to 1990. Based on requests from subsistence users, ADF&G, and the review and recommendations of the Southcentral Alaska and Southeast Alaska Subsistence Regional Advisory Councils, the Federal Subsistence Board (Board) supported several exemptions to and clarification of the general prohibition against accumulation of harvest limits in Section __.25(c)(1).

In 2004, the Board authorized accumulation of subsistence harvest limits for salmon in the Copper River drainage upstream from Haley Creek with harvest limits for salmon authorized under State of Alaska sport fishing regulations (27(i)(11)(B)). In 2005, the Board also authorized the accumulation of Federal subsistence fish annual harvest limits with State sport fishing limits for the Southeast Alaska area (27(i)(13)(vii)).

In 2006, the Board allowed accumulation of Federal subsistence fishing harvest limits with State of Alaska sport fishing harvest limits within the Chugach National Forest and in the Copper River drainage downstream from Haley Creek provided that the accumulation of fishing harvest limits would not occur in the same day (27(i)(11)(A)).

In 2009, the Board clarified regulations by stipulating that a subsistence fisher may not accumulate Federal subsistence harvest limits authorized for Southeast Alaska Area with any harvest limits authorized under any State of Alaska fishery with the following exceptions: annual and seasonal Federal subsistence harvest limits may be accumulated with State sport fishing harvest limits provided that accumulation of harvest limits does not occur during the same day (27(i)(13)(vii)). That year, the Board further clarified that fishers may not possess subsistence taken and sport taken fish of a given species on the same day in the Yakutat (27(i)(12)(viii)) and Southeast Alaska (27(i)(13)(xi)) Areas.

Current Federal subsistence management regulations that address applicability for subsistence take of wildlife (§__26) provide the following clarification concerning accumulation of harvest limits (§__26(e)(1)):

Except as specified in paragraphs (e)(2) or (f)(1) of this section, or as otherwise provided, you may not take a species of wildlife in any unit, or portion of a unit, if your total take of that species already obtained anywhere in the State under Federal and State regulations equals or exceeds the harvest limit in that unit.

Sections __26(e)(2) and (f)(1) address established community harvest limit allowances and an allowance for accumulating hunting and trapping harvest limits.

The regulations that address applicability for subsistence taking of fish (§__27) provides the following clarification concerning accumulation of harvest limits:

(§__27(a)(2)) The harvest limit specified in this section for a subsistence season for a species and the State harvest limit set for a State season for the same species are not cumulative, except as modified by regulations in §__27(i). This means that if you have taken the harvest limit for a particular species under a subsistence season specified in this section, you may not, after that, take any additional fish of that species under any other harvest limit specified for a State season.

The regulations that address applicability for subsistence taking of shellfish (§__28) provides the following clarification concerning accumulation of harvest limits:

(§__28(d)(1)) The harvest limit specified in this section for a subsistence season for a species and the State harvest limit set for a State season for the same species are not cumulative. This means that if you have taken the harvest limit for a particular species under a subsistence season specified in this section, you may not, after that, take any additional shellfish of that species under any other harvest limit specified for a State season.

Application of harvest limits

The current wording in Section __25(c)(3) dates back to 1994 and specifies that harvest limits apply to “regulatory year”, with the exception of ptarmigan, and in some units for grouse and caribou.

Current Federal hunting regulations (§__26) include daily limits for beaver (Unit 9 and 17), caribou (all or part of Units 21–24 and 26); hare (all or part of Units 1–5 and 14); and wolf (part of Unit 19). There

are daily and possession limits for grouse (all or part of Units 1–7, 9 and 11–25); ptarmigan (Units 1–26); and beaver (all or part of Units 7, 11, 13 and 25).

When Federal subsistence management regulations for fish (§ __.27) were first implemented on October 1, 1999, there were no specified daily or possession limits for fish in Federal regulations except on the Kenai Peninsula. Since that time, the Federal Subsistence Board has established daily and/or possession limits for specific fish species and locations in 5 of 13 fishery management areas. Federal regulatory provisions for daily harvest and/or possession limits for specific species of fish were first established in the Southeast Area in 2001, the Yukon-Northern and Cook Inlet areas in 2002, the Bristol Bay Area in 2003, and the Yakutat Area in 2006.

Current Federal subsistence management regulations include daily and/or possession limits for sockeye and coho salmon, steelhead trout, brook trout, grayling, Dolly Varden, cutthroat trout, and rainbow trout in all or parts of the Southeast Area. Yakutat Area regulations include a daily harvest and possession limit for Dolly Varden and address a daily limit for steelhead trout.

In parts of the Cook Inlet Area there are specific daily harvest and possession limits in Federal regulations for Chinook, sockeye, coho and pink salmon; Dolly Varden/Arctic char; lake trout and rainbow/steelhead trout. In other parts of the Cook Inlet Area, Federal subsistence regulations specify that the daily harvest and possession limits for fish are the same as those in Alaska sport fishing regulations. In a November 24, 2008 letter to OSM, Federal Subsistence Board Chairman Fleagle clarified that the Board's intent was that Federal subsistence and State sport harvest limit for fish not be accumulated for the Kasilof and Kenai river drainages and vicinity.

Federal subsistence management regulations also specify daily and possession limits for rainbow trout in the Bristol Bay Area and daily and possession limits for grayling in a part of the Yukon-Northern Area. There are no Federal daily or possession limits for fish in the Kotzebue, Norton Sound-Port Clarence, Kuskokwim, Aleutian Islands, Alaska Peninsula, Chignik, Kodiak, or Prince William Sound areas. Federal subsistence management regulations specify annual harvest limits for fish species and locations in seven areas (Aleutian Islands, Alaska Peninsula, Chignik, Kodiak, Cook Inlet, Prince William Sound, and Southeast). There are no daily, possession or annual limits for fish under Federal subsistence management regulations in three areas (Kotzebue, Norton Sound-Port Clarence, and Kuskokwim).

Shellfish regulations (§ __.28) include daily and possession limits as well. There are daily limits for shellfish in Bering Sea Area. There are daily and/or possession limits for shellfish in the Cook Inlet, Kodiak, and Alaska Peninsula-Aleutian Islands Areas.

Effects of the Proposal

Proposal WP10-05 does not affect fish and wildlife populations, subsistence uses or other uses (i.e., sport/recreational or commercial). Rather, the proposal seeks to update, clarify, and simplify Sections __.25(c) (1) and (3), all of which reference accumulation of harvest limits. Section __.25(c)(1) dates back to 1990 and Section __.25(c)(3) dates back to 1994. The proposed wording changes retain the general prohibition of accumulation of Federal and State harvest limits, and points to unit and area specific regulations for details and exceptions. Unit and area specific regulations currently provide daily, daily and possession, or possession limits for ptarmigan, grouse, caribou, wolf, hare, beaver, fish and shellfish. This proposal does not change any unit or area specific Federal subsistence regulations concerning accumulation of harvest limits or the timeframe (daily, seasonal or regulatory year) for harvest limits.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-05.

Justification

The general regulations concerning accumulation of harvest limits need to be updated to reflect Board action over the years. The Board has addressed a number of proposals concerning accumulation of harvest limits; the approved exceptions are reflected within the Federal hunting and trapping (§__.26), fishing (§__.27), and shellfish (§__.28) regulations. The changes to the general regulations proposed herein recognize all of the previously approved exceptions. This proposal does not affect fish and wildlife populations, subsistence users or other users. Given the number of species, areas and units affected, and the changes that may occur in the future, it is appropriate to use more general wording in these general regulations.

| WP10-27 Executive Summary | |
|---|--|
| General Description | Proposal WP10-27 requests that the harvest limit of 2 caribou in Units 13A and 13B and the harvest limit of 2 bulls in Unit 13 remainder be changed to 1 caribou for all of Unit 13. In addition, the proponent requests that the authority delegated to the Glennallen Field Office Manager of the Bureau of Land Management (BLM) to announce the sex of the animals to be harvested be rescinded. <i>Submitted by the Paxson Fish and Game Advisory Committee</i> |
| Proposed Regulation | <p>Unit 13—Caribou</p> <p>Units 13 13A and 13B—2 1 caribou by Aug. 10–Sept. 30 Federal registration permit only. The sex of Oct. 21–Mar. 31 animals that may be taken will be announced by the Glennallen Field Office Manager of the Bureau of Land Management in consultation with the Alaska Department of Fish and Game area biologist and Chairs of the Eastern Interior Alaska Regional Advisory Council and the Southcentral Alaska Regional Advisory Council.</p> <p>Unit 13 remainder—2 bulls by Federal Aug. 10–Sept. 30 registration permit only. Oct. 21–Mar. 31</p> <p><i>Hunting within the Trans-Alaska Oil Pipeline right-of-way is prohibited. The right-of-way is identified as the area occupied by the pipeline (buried or above ground) and the cleared area 25 feet on either side of the pipeline.</i></p> |
| OSM Preliminary Conclusion | Oppose |
| Southeast Regional Council Recommendation | |
| Eastern Interior Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | Support |
| Written Public Comments | |

DRAFT STAFF ANALYSIS WP10-27

ISSUES

Proposal WP10-27, submitted by the Paxson Fish and Game Advisory Committee, requests that the harvest limit of 2 caribou in Units 13A and 13B and the harvest limit of 2 bulls in Unit 13 remainder be changed to 1 caribou for all of Unit 13. In addition, the proponent requests that the authority delegated to the Glennallen Field Office Manager of the Bureau of Land Management (BLM) to announce the sex of the animals to be harvested be rescinded.

DISCUSSION

The proponent requests that the harvest quota be reduced due to concern that more lands will be open for hunting once Federal-State land conveyances are completed. The proponent is concerned that once lands are conveyed, more lands will be open to subsistence harvests, which will create the potential for harvest beyond sustainable levels. The proponent also states that the proposed change would keep the harvest at conservative levels, while still allowing most households to participate in a hunt.

Existing Federal Regulations

Unit 13—Caribou

Units 13A and 13B—2 caribou by Federal registration permit only. The sex of animals that may be taken will be announced by the Glennallen Field Office Manager of the Bureau of Land Management in consultation with the Alaska Department of Fish and Game area biologist and Chairs of the Eastern Interior Alaska Regional Advisory Council and the Southcentral Alaska Regional Advisory Council.

Aug. 10–Sept. 30

Oct. 21–Mar. 31

Unit 13 remainder—2 bulls by Federal registration permit only.

Aug. 10–Sept. 30

Oct. 21–Mar. 31

Hunting within the Trans-Alaska Oil Pipeline right-of-way is prohibited. The right-of-way is identified as the area occupied by the pipeline (buried or above ground) and the cleared area 25 feet on either side of the pipeline.

Proposed Federal Regulations

Unit 13—Caribou

Units 13 13A and 13B—2 1 caribou by Federal registration permit only. The sex of animals that may be taken will be announced by the Glennallen Field Office Manager of the Bureau of Land Management in consultation with the Alaska Department of Fish and Game area biologist and Chairs of the Eastern Interior Alaska Regional Advisory Council and the Southcentral Alaska Regional Advisory Council.

Aug. 10–Sept. 30

Oct. 21–Mar. 31

*Unit 13 remainder—2 bulls by Federal registration permit only. Aug. 10–Sept. 30
Oct. 21–Mar. 31*

Hunting within the Trans-Alaska Oil Pipeline right-of-way is prohibited. The right-of-way is identified as the area occupied by the pipeline (buried or above ground) and the cleared area 25 feet on either side of the pipeline.

Existing State Regulation

Unit 13—Caribou

*Unit 13 residents—1 caribou by registration permit every 4 regulatory years. Aug. 10–Sept. 20
Oct. 21–Mar. 31*

*OR Aug. 10–Sept. 20
Oct. 21–Mar. 31*

1 caribou by community permit

Extent of Federal Public Lands

At present, Federal public lands comprise approximately 10% of Unit 13 and consist of 2% Bureau of Land Management (BLM), 6% Denali National Park and Wrangell-St. Elias National Preserve, and 2% Chugach National Forest lands. Specifically within Units 13A and 13B, Federal public lands include BLM managed lands and comprise approximately 8% of Unit 13B and 1% of Unit 13A. (See **Unit 13 Map**).

The land selections from the State of Alaska have not been finalized; therefore an accurate estimation of potential conveyed lands is premature.

Customary and Traditional Use Determinations

| UNIT(S) | CUSTOMARY AND TRADITIONAL DETERMINATION FOR CARIBOU |
|-------------------|--|
| Units 13A and 13D | Rural residents of Units 11, 12 (along the Nabesna Road), 13, and the residents of Chickaloon. |
| Unit 13B | Rural residents of Units 11, 12 (along the Nabesna Road), 13, residents of Unit 20D except Fort Greely, and the residents of Chickaloon. |
| Unit 13C | Rural residents of Units 11, 12 (along the Nabesna Road), 13, Chickaloon, Dot Lake and Healy Lake. |
| Unit 13E | Rural residents of Units 11, 12 (along the Nabesna Road), 13, Chickaloon, McKinley Village, and the area along the Parks Highway between mileposts 216 and 239 (except no subsistence for residents of Denali National Park headquarters). |

Regulatory History

The Nelchina Caribou Herd (NCH) is an important resource for many rural and non-rural users due to its proximity to Anchorage and Fairbanks and its distribution within Units 11, 12, 13, and 20 E (Tobey

2003). A State Tier II system for NCH harvest was established in 1990 for Unit 13. A State Tier I permit was added for the 1996/97 and 1997/98 seasons to allow any Alaskan resident to harvest cows or young bulls, in order to reduce the herd to the management objective. In 1998, the Tier I hunt was closed, as the herd was brought within management objectives by increased harvest and lower calf recruitment. The two Federal registration hunts (RC513 & RC514) in Unit 13 are for residents of Units 11, 13, and residents along the Nabesna Road in Unit 12 and Delta Junction in Unit 20. Since 1998, a Federal registration hunt (RC412) has been opened to residents of Unit 12, Dot Lake, Healy Lake and Mentasta between November and April when the NCH migrate through the Tetlin National Wildlife Refuge.

In 2001, the Federal Subsistence Board (Board) adopted Proposal WP01-07 which changed the harvest limit of 2 caribou to 2 bulls by Federal registration permit only for all of Unit 13.

In 2002, Proposal WP02-16 was deferred until the 2003 regulatory year when it was adopted by the Board (as WP03-14). It changed the harvest limit for Unit 13A and 13B back to 2 caribou from 2 bulls, with the harvest of bulls only during the August 10 – September 30 season. During the winter season (October 21 – March 31) the Glennallen Field Office Manager of the Bureau of Land Management was delegated the authority to determine the sex of the animals taken in consultation with the Alaska Department of Fish and Game area biologist and Chairs of the Eastern Interior Regional Advisory Council and the Southcentral Regional Advisory Council. For the remainder of Unit 13, the harvest limit remained 2 bulls for the August 10 – September 30 and October 21 – March 31 season.

On October 20, 2003 the State closed the fall caribou season and also closed the winter season by Emergency Order based on conservation concerns for the caribou herd (Tobey 2005).

In 2005, WP05-08 was adopted by the Board for Unit 13A and 13B to allow the sex of the harvested animals to be determined by the Glennallen Field Office Manager of the Bureau of Land Management in consultation with the Alaska Department of Fish and Game area biologist and Chairs of the Eastern Interior Regional Advisory Council and the Southcentral Regional Advisory Council. This was in effect for the entire season (August 10 – September 30 and October 21 – March 31), not just the winter season.

Emergency Order 02-01-07 closed the remainder of the 2006–2007 State harvest season for the Nelchina Caribou Herd on February 4, 2007 due to high state hunter success in the State Tier II hunt. Likewise, Emergency Order 02-08-07 closed the 2007–2008 Tier II subsistence harvest (TC566) on September 20, 2007 and was scheduled to re-open on October 21, 2007. However concerns that the unreported harvest of the State and Federal subsistence hunts would put the harvest over 1000 bulls and 500 cows resulted in a closure of the remainder of the season as a precaution.

For the 2009–2010 the State Nelchina caribou Tier II subsistence hunt was eliminated. Two hunts were added: a Tier I hunt (Alaskans only) and a Community harvest hunt for residents of Gulkana, Cantwell, Chistochina, Gakona, Mentasta, Tazlina, Chitina, and Copper Center. The harvest limit for each is one caribou (sex to be announced annually) with season dates of August 10 – September 20 and October 21 – March 31 with a harvest limit of 300 caribou. All other Alaskan hunters may obtain a permit and participate in a Tier I (resident only) hunt. A Federally qualified subsistence user could opt into the community harvest system or a State registration permit to harvest one caribou and then get a Federal permit to harvest another caribou since the Federal limit is two.

Management Direction

Current ADF&G management objectives for the NCH are to: maintain a fall population of 35,000 – 40,000 caribou with a minimum of 40 bulls:100 cows and 40 calves:100 cows. In addition, the management objectives include providing the potential to harvest 3,000 – 6,000 caribou.

Biological Background

From 2001 to 2007, the fall population estimates for the NCH have remained relatively stable with the estimated herd size being between 30,000–39,000 animals (**Table 1**). In June 2007, a post-calving census estimated the NCH to be approximately 32,569 caribou (ADF&G 2008) and in June 2009, the census showed approximately 33,146 caribou (ADF&G 2009a).

Radio-collared cows captured initially as 4 month old calves have been monitored to assess age of first reproduction for the NCH since 1992 and have shown that no 2-year old cows in the NCH have produced calves. The limiting factor in calf production of 3-year old cows has been the quality and availability of forage (Cameron et al. 1991, Crete and Huot 1993). In years of good forage, up to 64% of the 3-year old cows (7 of 11 in 2002) have had calves (Tobey and Kelleyhouse 2007). However, in years following a drought or deep snow conditions, 3 year old cows generally do not have calves during that year (Tobey and Kelleyhouse 2007). Poor forage quality in the summer can cause cow caribou to skip a breeding season to regain body condition due to being nutritionally stressed (Cameron et al. 1991, Crete and Huot 1993). The resulting decrease in body condition in female caribou can have a negative effect on productivity by causing lower weight gain or survival in calves (Griffith et al 2002, Whitten et al. 1992, Cameron et al. 1993). In October 2000, the calf recruitment had declined to 20 calves per 100 cows which is the lowest recruitment rate for the herd since the late 1940s. Low calf production was attributed to a decline in physical condition of the cows, which resulted in a delay in age of first reproduction (from 2 or 3, to 4 years of age) and the subsequent reproductive pause in many adult cows due to poor nutrition (Tobey and Kelleyhouse 2007). However, historically the productivity for the NCH has been high with an average of 52 calves:100 cows (1985–1996) and is determined by June and October surveys by ADF&G. More recent (2007–2009) productivity measures show an average of 34 calves:100 cows which is below the management goal of 40 calves:100 cows. In October 2007, sex and age composition survey estimated ratios of 35 calves:100 cows and 34 bulls:100 cows (ADF&G 2008) and the fall survey in 2008 showed 40 calves:100 cows and 39 bulls:100 cows (ADF&G 2009a). During the most recent fall survey in 2009, 29 calves:100 cows and 42 bulls:100 cows were observed (Schwanke 2009, pers. comm.)

The bull:cow ratio has been below the management objective of 40 bulls:100 cows since 1998 and has been an average of 32 bulls:100 cows since 2001 with the lowest ratio of 23 bulls:100 cows in 2006–2007 (**Table 1**). Hunters harvested primarily bulls in Tier II, drawing, and subsistence registration hunts despite the hunt being open for either sex (**Table 2 and Figure 1**). There was an overall reduction in bull harvest from 2001 to 2004 (**Table 2 and Figure 1**) which may allow the large bull category to rebound despite an increase of bull harvest again in the 2005–2006 regulatory year. Higher numbers of adult bulls in the population are important as it helps maintain synchrony in parturition. Holand et al. (2003) showed skewed sex ratio and increased young male age structure of reindeer could result in fewer adult females conceiving during the first estrous cycle due to their hesitation to mate with young bulls. Maintaining synchrony in parturition also provides increased survival chances for calves since parturition is typically timed with the start of plant growth (Bergerud 2000). Late-born offspring have been shown to have lower body mass than caribou offspring produced earlier in the season (Holand et al. 2003) which can lead to lower juvenile survival rates due to density dependent factors of winter food limitation (Skogland 1985) and deep snows (Bergerud 2000). However, a high bull:cow ratio is not the only factor to consider in maintaining a healthy, sustainable population.

Table 1. Nelchina caribou fall composition counts and estimated herd size, regulatory years 2001 – 2009

| Regulatory Year | Total bulls: 100 cows | Calves:100 | Calves (%) | Cows (%) | Total bulls (%) | Composition Sample size | Total Adults | Estimate of herd size | Postcalving ^a count |
|-----------------|-----------------------|-----------------|------------|----------|-----------------|-------------------------|--------------|-----------------------|--------------------------------|
| 2001-2002 | 37 | 40 | 22 | 57 | 21 | 3949 | 26,159 | 33,745 | 35,106 |
| 2002-2003 | 31 | 48 | 27 | 56 | 17 | 1710 | 25,161 | 34,380 | 35,939 |
| 2003-2004 | 31 | 35 | 21 | 60 | 19 | 3140 | 23,786 | 30,141 | 31,114 |
| 2004-2005 | 31 | 45 | 26 | 57 | 17 | 1640 | 27,299 | 36,677 | 38,961 |
| 2005-2006 | 36 | 41 | 23 | 57 | 20 | 3263 | 28,133 | 36,428 | 36,993 |
| 2006-2007 | 24 ^b | 48 ^b | 25 | 61 | 14 | 3300 | NA | N/A | N/A |
| 2007-2008 | 34 | 35 | 21 | 59 | 20 | 3027 | 2395 | 32,569 | 33,744 |
| 2008-2009 | 39 | 40 | 22 | 56 | 22 | 3378 | 2627 | N/A | N/A |
| 2009-2010 | 42 | 29 | 17 | 58 | 25 | 3076 | 2553 | 33,835 | 33,146 |

^a Spring census

(Tobey and Kelleyhouse 2007, ADF&G 2008, Becky Schwanke, pers. comm.)

Table 2. Nelchina caribou harvest data by permit hunt, regulatory years 1999-2006 (Tobey 2005 and 2007, ADF&G 2009b)

| Hunt # | Regulatory Year | Permits Issued | % did not hunt | % Successful | Bulls | (%) | Cows | (%) | Unk | Total Harvest |
|-----------------------------|-------------------------|----------------|----------------|--------------|-------|------|------|-----|-----|---------------|
| TC566 ^a | 2001-2002 | 1996 | 16% | 49% | 977 | 99% | 4 | 1 | 1 | 982 |
| | 2002-2003 | 2003 | 15% | 48% | 965 | 99% | 1 | 0 | 0 | 966 |
| | 2003-2004 | 2005 | 24% | 38% | 746 | 99% | 3 | 0 | 3 | 752 |
| | 2004-2005 | 1869 | 10% | 48% | 884 | 99% | 5 | 1% | 5 | 894 |
| | 2005-2006 | 4001 | 16% | 65% | 1614 | 74% | 548 | 25% | 15 | 2177 |
| | 2006-2007 | 5494 | 21% | 59% | 1813 | 72% | 686 | 27% | 3 | 2502 |
| | 2007-2008 | 3003 | 30% | 32% | 693 | 72% | 272 | 28% | 1 | 966 |
| | 2008-2009 | 2500 | 28% | 54% | 787 | 75% | 262 | 25% | | 1049 |
| | RC 513/514 ^b | 2001-2002 | 2568 | 24% | 19% | 492 | 98% | 3 | 1 | 6 |
| 2002-2003 | | 2552 | 31% | 14% | 349 | 96% | 2 | 1 | 12 | 363 |
| 2003-2004 | | 2598 | 32% | 12% | 318 | 99% | 2 | 1 | 1 | 321 |
| 2004-2005 | | 2558 | 34% | 13% | 250 | 74% | 86 | 26% | 1 | 337 |
| 2005-2006 | | 2570 | 39% | 24% | 369 | 60% | 239 | 39% | 7 | 615 |
| 2006-2007 | | 2641 | 44% | 17% | 319 | 60% | 239 | 37% | 8 | 572 |
| 2007-2008 | | 2408 | 48% | 15% | 259 | 72% | 120 | 27% | 5 | 385 |
| 2008-2009 | | 2569 | 49% | 22% | 180 | 68% | 89 | 33% | 4 | 273 |
| Totals for all permit hunts | | 2001-2002 | 4703 | 21% | 32% | 1476 | 98% | 17 | 1% | 7 |
| | 2002-2003 | 4726 | 25% | 28% | 1326 | 100% | 6 | 0% | 12 | 1344 |
| | 2003-2004 | 4754 | 29% | 23% | 1077 | 99% | 6 | 1% | 4 | 1087 |
| | 2004-2005 | 4600 | 25% | 27% | 1162 | 93% | 93 | 7% | 6 | 1261 |
| | 2005-2006 | 6749 | 24% | 42% | 1995 | 71% | 798 | 29% | 23 | 2816 |
| | 2006-2007 | 8,135 | 33% | 38% | 2,132 | 66% | 925 | 32% | 11 | 3074 |
| | 2007-2008 | 5,411 | 39% | 24% | 952 | 72% | 392 | 28% | 11 | 1351 |
| | 2008-2009 | 5069 | 39% | 38% | 967 | 70% | 351 | 29% | 6 | 1322 |

^a State Tier II subsistence drawing permit
^b Subsistence registration for local resident (Unit 11 & 13), administered by BLM as federal hunt RC513 in 1990, and includes 20D residents in hunt 514. Harvest limit was 2 caribou, so percentages related to permits, not hunters.

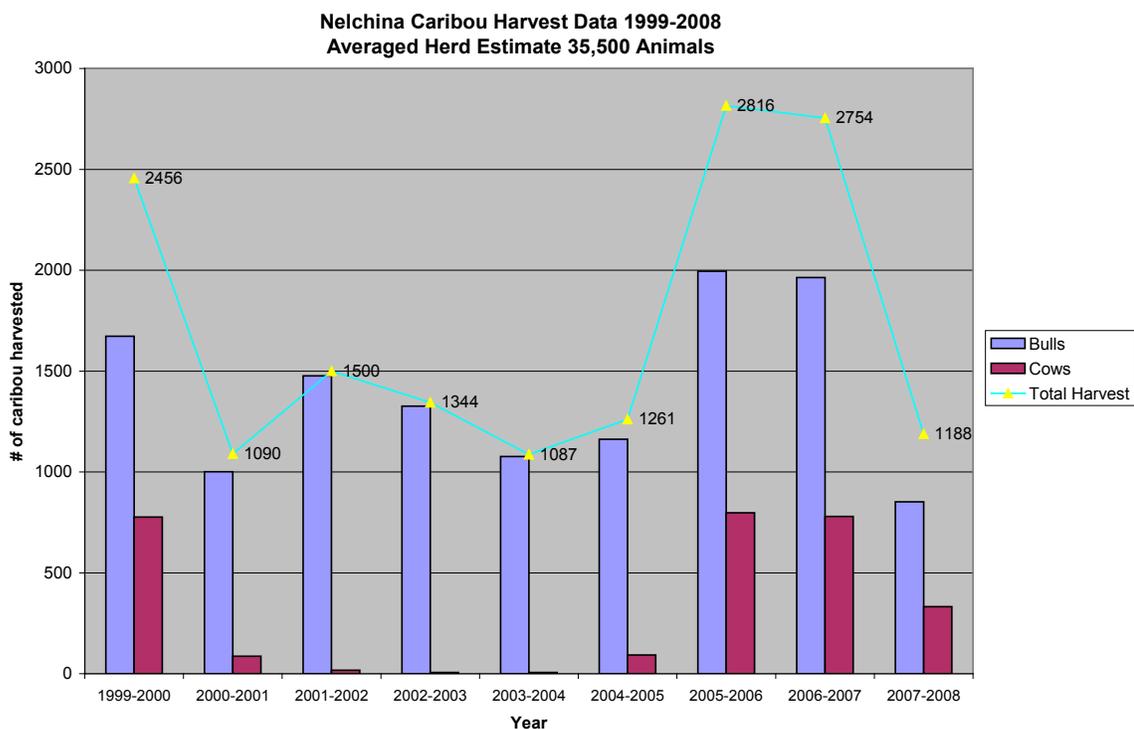


Figure 1. Nelchina Caribou Harvest Data (1999-2008) by sex of harvested animal and total harvest of all animals.

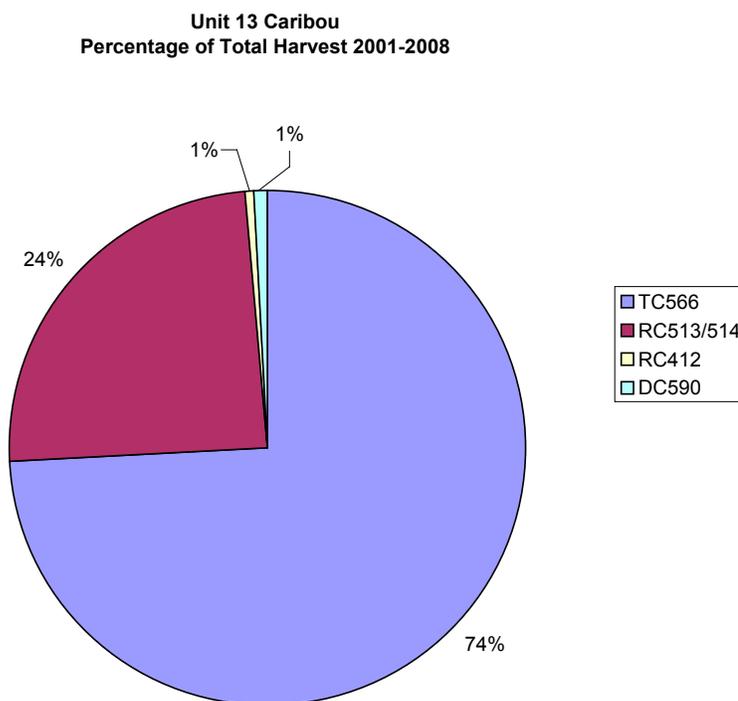


Figure 2. Unit 13, Percentage of Total Harvest by State and Federal Hunts, 2001-2008.

Distribution and Movements

ADF&G (Tobey and Kelleyhouse 2007) conducts aerial composition surveys twice each year. In June, to determine postcalving aggregations and herd productivity, in October to ascertain bull:cow and calf:cow ratios, and in the winter to determine winter distribution. Radio-collared caribou are located seasonally to delineate herd distribution and seasonal range use.

Winter habitat for the NCH ranges from northern Unit 13 to Unit 20E. Caribou winter range in 20E is generally considered high quality due to high lichen biomass as a result of old burns (>50 years) (Dale 2000, Joly et al. 2003). In 2004, a large proportion of NCH winter range in Unit 20E burned. Many caribou still winter in 20E, although caribou now utilize adjacent unburned areas. Winter distribution for the NCH in 2006 extended into Unit 13E, across 13A and 13B, and northeast into Units 11, 12 and 20E (Tobey and Kelleyhouse 2007). In some years, a small number of caribou winter in Unit 13D and have been observed as far south as Edgerton Highway.

The eastern Talkeetna Mountains, from the Fog Lakes southeast to the Little Nelchina River, is the typical area for calving for the NCH with the core calving area extending from the Little Nelchina River north to Kosina Creek (Tobey and Kelleyhouse 2007).

Harvest History

Between 2001 and 2008, the State Tier II subsistence hunt (TC566) was the primary source for harvest of the NCH and accounted for 74% of the overall harvest (**Table 2, Figure 2**). The Federal registration hunts (RC513/514), limited to those users with a positive customary and traditional use determination for caribou in Unit 13 are administered by the BLM and comprised 24% of the harvest between 2001 to 2008 (**Table 2, Figure 2**).

The fall caribou season is the most popular time to hunt (Tobey 2005). Successful harvests in the fall make the winter season more susceptible to emergency closures when the harvest quota is reached before the end of the season on March 31. A large percentage of NCH typically migrates out of Unit 13 in October and does not return from wintering areas in Units 11, 12 and 20E until April, therefore success during the winter season is largely dependent upon the number of caribou that remain in Unit 13 (Tobey and Kelleyhouse 2007) and if the season has been closed due to successful harvest in the fall season reaching the harvest objective.

Participation in the Federal registration hunt has remained relatively consistent with an average of 2500 permits issued from 2001 to 2008 (**Table 2**) with an average annual harvest of 421 caribou, (ranged from 273 to 615). Between 2003 and 2007, an average of 138 hunters harvested two caribou, and 165 hunters reported taking one caribou.

Currently, much of the Federal land in subunits 13B and 13E along the Denali Highway is selected by the State of Alaska, keeping these areas closed to Federal subsistence management regulations. Once over-selections return to Federal status, additional Federal subsistence harvest opportunity will likely occur, which may result in an increase in caribou harvested under this hunt. Currently, the majority of the harvest occurs under State hunts (**Table 2, Figure 3**) and BLM lands provide approximately 2% of total lands in Unit 13 for Federal harvest when caribou cross along the Richardson Highway between Paxson and Sourdough during the fall migration. Additional caribou are also available to qualified Federal hunters throughout the entire season in small areas of 13E near Broad Pass in Denali National Park and on BLM lands along the Denali Highway near Tangle Lakes (Tobey 2005). Increased available Federal lands after State conveyances are finalized could possibly increase the total caribou harvest under the Federal

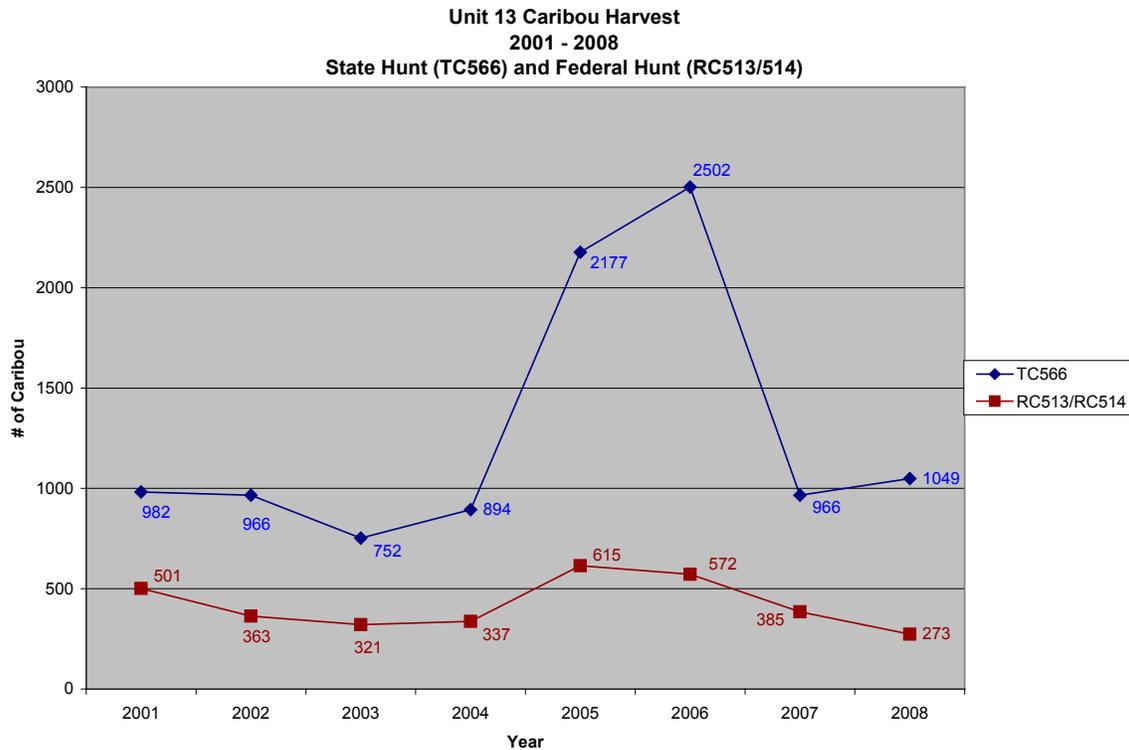


Figure 3. Unit 13, Harvest by predominate State and Federal Hunts (TC566, RC513/514), 2001-2008.

registration hunt, however it is premature to speculate on the effects to the NCH until conveyances are complete.

Prior to 2009, the State Tier II hunt (TM566) provided a State subsistence opportunity from August 10–September 20 and October 21–March 31. This has been eliminated and a community harvest (CC001) from August 10–September 20 and October 21–March 31 has been established for residents of Gulkana, Cantwell, Chistochina, Gakona, Mentasta, Tazlina, Chitina and Kluti Kaah with a harvest limit of 300 caribou. All other Alaskan hunters may obtain a permit and participate in a Tier I (resident only) hunt. A Federally qualified subsistence user could opt into the community harvest system or a State registration permit to harvest one caribou and then get a Federal permit to harvest another caribou since the Federal limit is two.

Current Events Involving Species

Prior to 2009, the State Tier II hunt (TM566) provided a State subsistence opportunity from August 10–September 20 and Oct. 21–Mar. 31. Although the Tier II hunt has been eliminated, the new State Tier I hunt and the community harvest hunt (CC001) are expected to result in the same number of caribou harvested annually (Schwanke 2009, pers. comm.).

In July 2009, the BLM Glennallen Field Office concurred with the recommendation of the Glennallen ADF&G office to restrict Nelchina Caribou hunt to bulls only for the 2009–2010 regulatory year. A harvest quota of 1,000 bulls has been set for the combined Nelchina Caribou hunt (Cebrian 2009, pers. comm.).

The State of Alaska was required to submit the final state-wide land selections to BLM by September 30, 2009, however BLM has not processed the final selections to date making this proposal premature since final conveyances could take more than a year to process. Furthermore, because the over-selected lands are statewide, to date it is not known which specific areas are to become unencumbered.

Effects of the Proposal

Currently, Federally qualified subsistence users may harvest two caribou on Federal lands, which comprises approximately 10% of the land in Unit 13. If this proposal is adopted it would reduce the Federal harvest limit from two to one caribou, which would reduce opportunity and adversely affect Federally qualified subsistence users. At present, conservation concerns are minimal considering the productivity for the NCH has been high with an average of 52 calves:100 cows (1985–1996). More recent (2007–2009) productivity measures show an average of 34 calves:100 cows which is below the management goal of 40 calves:100 cows. In October 2007, sex and age composition survey estimated ratios of 35 calves:100 cows and 34 bulls:100 cows (ADF&G 2008) and in 2008 showed 40 calves:100 cows and 39 bulls:100 cows (ADF&G 2009a). During the most recent fall survey in 2009, 29 calves:100 cows and 42 bulls:100 cows were observed (Schwanke 2009, pers. comm.). Current management strategies appear to be working as the NCH population remains near management goals.

A Federally qualified subsistence user could opt for a community permit or a State registration permit to harvest one caribou and then get a Federal permit to harvest another caribou since the Federal limit is two. With an increase of Federal lands there may be more permits given (individuals who did not apply for Federal permits before, but may choose to apply for one if Federal lands were more accessible), which could increase the overall harvest. However, the Community harvest is new under State regulations and may satisfy the subsistence needs for those within the community, thereby not increasing the harvest even if more lands are conveyed. Because the land selections from the State of Alaska have not been finalized nor conveyed, the potential of increased Federal harvests should lands change to Federal subsistence management regulations is unknown. In addition, rescinding the delegated authority of the Glennallen Field Office Manager to announce the sex of the animal to harvest would reduce the ability for in-season management, which could have deleterious effects on the population by not allowing adaptive management based on recent herd composition data.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP10-27

Justification

The State has selected most of the Federal lands in subunits 13B and 13E along the Denali Highway (Tobey and Kelleyhouse 2007). However, the land selections from the State of Alaska have not been finalized; therefore an accurate estimation of what lands would return to Federal management is not possible at this time and the effects thereof are impossible to determine. (Cebrian 2009, pers. comm.).

The majority of the NCH harvest comes from State administered hunts, which are closed by Emergency Order when the annual harvest quota is reached. The Federal hunt, if necessary, can also be closed to avoid exceeding the annual harvest quota. Since the Nelchina Caribou population is currently below management objectives, it is critical to maintain the delegated authority to allow the sex of the harvested animals be determined by the Glennallen Field Office Manager in consultation with the other various managers. Rescinding the delegated authority would reduce the ability for in-season management and could have deleterious effects on the population. Currently conservation concerns seem minimal

considering the productivity for the NCH has been high with an average of 52 calves:100 cows (1985–1996) and is determined primarily by October surveys by ADF&G. More recent (2007–2009) productivity measures show an average of 34 calves:100 cows which is below the management goal of 40 calves:100 cows. In October 2007, sex and age composition survey estimated ratios of 35 calves:100 cows and 34 bulls:100 cows (ADF&G 2008) and in 2008 showed 40 calves:100 cows and 39 bulls:100 cows (ADF&G 2009a). Once land conveyances are finalized, the NCH hunt should be re-evaluated. At that time, conservation of the herd as well as hunting opportunity should be re-addressed.

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Comments WP10-27
January 29, 2010; Page 1 of 2

Alaska Department of Fish and Game
Comments to the Regional Advisory Council

Wildlife Proposal WP10-27: This proposal would reduce the bag limit for federal subsistence permittees in Unit 13 from two caribou to one.

Introduction: Annual federal subsistence caribou harvests in GMU 13 have been as high as 600 animals. Total Nelchina Caribou Herd harvest quotas in recent years ranged from 1,000–2,000 caribou. The amount of land open to federal subsistence hunting in GMU 13 is about 2% of the unit. The federal subsistence hunt can currently exceed 50% of the yearly harvest quota. With increasing federal land ownership, federal subsistence harvests could significantly impact the caribou herd north of Denali Highway and could also impact opportunity for subsistence by federally qualified users hunting under the state’s community harvest system.

Impact on Subsistence Users: An average of 138 individuals (range = 84–204) from 2003–2007 reported taking 2 caribou. Federal subsistence regulations allow any federal hunter to be a designated hunter, so multiple caribou could be harvested in households with 2 or more hunters.

Opportunity Provided by State: Beginning 2009, the state provides for two alternative Tier I hunts open to all state residents but geared towards two separately recognized uses: (1) local, community-oriented subsistence use, and (2) nonlocal, much more individually-oriented use.

The Tier I community use is provided by creation of a system that allows harvesting under community harvest permits, as requested by local subsistence hunters. Up to 300 caribou may be harvested under this hunt; and, again based on input from local users, federally-taken caribou are counted against this total. Under community harvest permits, a few communal hunters may harvest on behalf of their entire communities, up to the total amount of participants who sign up to partake in the program, so there is, effectively, a very large potential bag limit for communal hunters. There are other unique, subsistence-oriented advantages under this system, including the ability to hunt throughout nearly all of the tradition hunting territories of all villages currently participating under a single permit, the ability to preserve customary and traditional practices, and applicability on all federal and non-federal lands.

The other Tier I hunt is a drawing-type opportunity that is designed to provide participants with a permit about every four years to harvest a single caribou bull, so long as doing so is consistent with established yearly harvest objectives for the Nelchina Caribou Herd. This opportunity was based on input and requests from nonlocal users. Federally-taken caribou will also count against the total number of animals available in this hunt, but the nonlocal users who are most likely to participate in this hunt will generally not qualify as federal subsistence users, so their federal take is likely to be very small. In other words, the more caribou taken under federal regulation, the fewer will be available for both communal hunting and individual hunting, but because communal hunting is limited to 300 animals and communal hunters are the most likely to also harvest under federal regulations, communal hunters may face an early state closure if they take too many animals under federal regulations. Thus, the higher federal bag limit may lead to an overall decrease of subsistence opportunity for the local, rural users it is designed to protect and to short-circuit the broad, carefully negotiated and locally-oriented subsistence hunting system

Comments WP10-27
January 29, 2010; Page 2 of 2

adopted by the Board of Game for this region, as requested by the users and applicable on all federal and nonfederal lands in the area.

Enforcement Issues: Enforcement of the herd harvest quota is difficult with the federal program authorizing multiple bag limits. Also, emergency orders closing a season are less effective when hunters can take more than one animal, especially when animals are abundant during fall migrations near highways.

Recommendation: Support.

| WP10-28 Executive Summary | |
|---|--|
| General Description | Proposal WP10-28 requests that the harvest limit of 1 antlered bull moose be changed to 1 antlered bull per household for Unit 13B and that the season be changed from August 1–September 20 to August 20–September 30. <i>Submitted by the Paxson Fish and Game Advisory Committee</i> |
| Proposed Regulation | <p>Unit 13 remainder—Moose</p> <p><i>1 antlered bull moose by Federal registration permit only</i> <i>Aug. 1–Sept. 20</i></p> <p>Unit 13B—Moose</p> <p><i>1 antlered bull moose per household by Federal registration permit only</i> <i>Aug. 20–Sept. 30</i></p> |
| OSM Preliminary Conclusion | Oppose |
| Southeast Regional Council Recommendation | |
| Eastern Interior Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | Support with modification to change the bag limit to one antlered bull moose per household as proposed and in federal regulations for subunit 13E, but modify it to apply to all Unit 13. This will reduce impacts of federal regulations on future subsistence opportunity of the majority of federally qualified users in Unit 13. Oppose shifting the moose season into the rut and the remainder of the proposal. |
| Written Public Comments | |

**DRAFT STAFF ANALYSIS
WP10-28**

ISSUES

Proposal WP10-28, submitted by the Paxson Fish and Game Advisory Committee, requests that the harvest limit of 1 antlered bull moose be changed to 1 antlered bull per household for Unit 13B and that the season be changed from August 1–September 20 to August 20–September 30.

DISCUSSION

The proponent requests the moose harvest season in 13B be changed due to concern that more lands will be open for hunting once Federal-State land conveyances are completed. The proponent is concerned that there is a potential to increase harvest beyond sustainable levels once the land has been conveyed. The proponent also states that this change would help keep moose harvest at a sustainable level while still allowing most households to participate in a hunt.

Existing Federal Regulation

Unit 13 remainder—Moose

1 antlered bull moose by Federal registration permit only *Aug. 1–Sept. 20*

Proposed Federal Regulation

Unit 13 remainder—Moose

1 antlered bull moose by Federal registration permit only *Aug. 1–Sept. 20*

Unit 13B—Moose

1 antlered bull moose per household by Federal registration permit only *Aug. 20– Sept. 30*

Existing State Regulations

Unit 13—Moose

1 bull by Community permit for residents *Aug. 10–Sept. 20*

OR

One bull with spike-fork or 50-inch antlers or antlers with 4 or more brow tine on at least one side for residents *Sept. 1–Sept. 20*

One bull by drawing permit *Sept. 1–Sept. 20*

One bull with 50-inch antlers or antlers with 4 or more brown tine on a at least one side for non-residents by drawing permit *Sept. 1–Sept. 20*

Extent of Federal Public Lands

Federal public lands comprise approximately 10% of Unit 13 and consist of 2% BLM, 6% Denali National Park and Wrangell-St. Elias National Preserve, and 2% Chugach National Forest lands. For Unit 13B specifically, Federal lands comprise 8% of the subunit and are managed by the Bureau of Land Management (See **Unit 13 map**).

The land selections from the State of Alaska have not been finalized; therefore an accurate estimate of conveyed lands is not possible at this time.

Customary and Traditional Use Determinations

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

Regulatory History

Since 1998, the Federal subsistence moose hunting regulations for Unit 13 have allowed one antlered bull moose by Federal registration permit only, from August 1 to September 20, except in Unit 13E where only one Federal registration permit is issued per household.

The State general harvest regulations for moose in Unit 13 were changed in 2000 when the designation of a legal bull went from 3 or more brow tines or 50-inch antler spread to a 4 or more brow tines or 50-inch antler spread and has been in effect ever since. The same year, non-resident general moose hunting was eliminated from Unit 13 due to low population numbers. In addition, the Alaska Department of Fish and Game (ADF&G) also managed a State Tier II hunt (TM300) for one bull moose by permit August 15–31 between 1995 and 2008.

By Alaska law, giving preference to individuals based on residency to harvest fish and wildlife for subsistence is allowed through the Tier II provisions (AS 16.05.258(b)(4)(B)). In 2008, the State Tier II hunt was changed to add a community harvest (CM300) and the season was modified to August 10–September 20 with an upper harvest limit of 25 any-bull moose for Unit 13B. For residents, drawing permit hunts (DM330-334) for one bull moose from September 1 to September 20 were added as a new harvest option in select areas where moose numbers have increased. For non-residents, drawing permit hunts (DM 335-339) were established to harvest one bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side from September 1 to September 20. Adoption of the Federal regulation for one permit per household would reduce the opportunities for Federal subsistence users to harvest moose in Unit 13B, while the State regulations have no such caveat.

Management Direction

Current ADF&G management objectives for the moose population in Unit 13 are to increase to 20,000–25,000 moose with a minimum of 25 bulls:100 cows, 25–30 calves:100 cows, and 10 yearling bulls:100 cows in the fall. In addition, the human use management objective includes providing the potential to harvest bulls and cows to a combined total of 1,200–2,000 animals and provide subsistence harvest of 300–600 moose per year.

Biological Background

Since the 1940s, the moose population in Unit 13 has fluctuated broadly with a decrease in population of an estimated 47% in 2001 (Tobey 2008). Aerial surveys conducted in the fall to acquire sex and age composition and populations trends have shown an increase in bull:cow and calf:cow ratios throughout Unit 13 since 2001 (**Table 1**). Long-term population trends for all of Unit 13 are monitored by observing annual changes in numbers of moose during the fall and show a general increase in the number of moose counted from 2001 to 2007 (**Table 1**). The fall 2007 aerial moose composition counts showed that Unit 13B met the management objectives of ADF&G for both bull and yearling bull:cow ratios, but falls short of calf:cow ratios (**Table 2**) with similar results in 2008 with 38 bulls:100 cows and 18 calves:100 cows (Schwanke 2009, pers. comm.). Recent increases in yearling bulls have been attributed to less winter mortality of calves due to mild winters and reduction in wolf population (Tobey and Schwanke 2008). Winter mortality due to deep snow conditions was lower than average in 2006–2008. ADF&G has developed a winter severity index within Unit 13 that records snow depths to determine snow pack and severe conditions that might effect moose survival (Testa 2004). The winter severity index for 13B in 2004–2005 showed severely high snowpack conditions compared to the previous eleven years. Moose numbers remained stable from 2004 to 2005 (Schwanke 2009, pers. comm.) Since 2005, moose numbers have increased in 13B (**Table 3**). The 2007 fall aerial surveys estimated 2265 moose which is approximately 1.5 moose/mi², showing an increase (25%) in moose density in Unit 13B since 2001 (**Table 3**).

Nutritional constraints can result in low twinning rates and delays in age of first reproduction (Testa 2004) and therefore can be an important limiting factor in moose populations. While no studies have been done regarding productivity in Unit 13B, the twinning rate at birth for collared cows in 13A, based on calf observations, averaged 21% between 1994 and 2007. Twinning rates are obtained in other subunits by flying aerial surveys from late May to early June, just past the peak of parturition and tend to be higher than in 13A, averaging 27% between 1992 and 2006 (Tobey and Schwanke 2008). While specific correlation between productivity in Unit 13A and 13B can not be compared, the variation in productivity illustrate population dynamics have a myriad of constraints beyond harvesting.

The use of prescribed fires to replace wildfire as a method of improving moose habitat has had limited application in Unit 13 (Tobey and Schwanke 2008). The Alphabet Hills controlled burn, a joint project between BLM and the State, was ignited in August 2004 and burned approximately 41,000 acres around Kelly Lake on the south slopes of the Alphabet Hills in subunit 13B (Tobey and Schwanke 2008). The burn area is near the headwaters of the West Fork of the Gulkana River, and is expected to increase moose productivity in this area in coming years (Schwanke 2009, pers. comm.).

From 1977 to 1984, predation of moose calves by predominately brown bears (73%) was a limiting factor for moose population growth in the Nelchina Basin (Ballard et al. 1981, 1991). In addition to bears, wolves also have a substantial impact on the moose population in Unit 13 (Tobey and Schwanke 2008). Since 2001, ADF&G has maintained an active wolf management program in Unit 13 specifically to increase the moose population. The plan is up for reauthorization in July 2010 (ADF&G 2009b). Since 2006, the Unit 13 wolf population estimates have been within the ADF&G spring population objective of 135–165 wolves (ADF&G 2009b). Predation by bears and wolves have been shown to contribute to high rates of mortality of moose in Unit 13, while human harvest of moose is limited to a limited number of males (Testa 2004). Research models with data from 1996–2004 in Unit 20A which is north of Unit 13B showed bear and wolf predation contributed to 9% and 8–15%, respectively, of the post-calving mortality, while hunters contributed 2–6% (Boertje et al. 2007).

Table 1. Unit 13 fall aerial moose composition counts (Tobey and Schwanke 2008)

| Year | Bulls:100 cows | Yearling bulls: 100 cows | Calves:100 cows | % Calves | Adults observed | Total moose observed | Moose/hour | Density moose/mi ² (observed range) |
|-------------------|----------------|--------------------------|-----------------|----------|-----------------|----------------------|------------|--|
| 2001 | 23 | 3 | 15 | 11 | 3086 | 3466 | 37 | 1.0 (0.6 – 1.4) |
| 2002 ^a | 24 | 6 | 22 | 15 | 2918 | 3428 | 36 | 1.0 (0.5 – 1.2) |
| 2003 | 24 | 8 | 18 | 12 | 3707 | 4230 | 47 | 1.2 (0.5 – 1.7) |
| 2004 | 28 | 6 | 22 | 15 | 3215 | 3768 | 40 | 1.1 (0.5 – 1.7) |
| 2005 | 27 | 7 | 18 | 13 | 3500 | 4009 | 45 | 1.1 (0.4 – 1.4) |
| 2006 | 30 | 8 | 23 | 15 | 3416 | 4028 | 49 | 1.1 (0.5 – 1.5) |
| 2007 ^b | 32 | 10 | 22 | 14 | 3875 | 4517 | 40 | 1.3 (0.5 – 1.8) |
| 2008 ^c | 35 | 12 | 19 | 13 | 3918 | 4481 | 54 | 1.3 (0.5 - 1.9) |

a Two of eight count areas were not flown in 2002, therefore data was estimated for those areas

b One of eight count areas was not flown in 2007, therefore data was estimated

c (Schwanke 2009, pers. comm.)

Table 2. Unit 13B subunit fall 2007 aerial moose composition counts (Tobey and Schwanke 2008)

| Unit | Bulls: 100 cows | Yearling bulls: 100 cows | Calves: 100 cows | Calves % | Total moose observed | Density moose mi ² |
|------|-----------------|--------------------------|------------------|----------|----------------------|-------------------------------|
| 13A | 23 | 9 | 27 | 18 | 1256 | 1.3 |
| 13B | 35 | 12 | 20 | 13 | 2265 | 1.5 |
| 13C | 36 | 15 | 21 | 14 | 463 | 1.5 |
| 13D | 66 | 7 | 15 | 8 | 183 | 0.5 |
| 13E | 24 | 5 | 16 | 11 | 346 | 0.8 |

^a 13D not counted in 2007, data was estimated.

Table 3. Unit 13B fall aerial moose composition counts (2001-2007) (Tobey and Schwanke 2008, Tobey and Kelleyhouse 2006, Tobey 2004, Tobey 2002)

| Year | Bulls:100 cows | Yearling bulls:100 cows | Calves:100 cows | % Calves | Total moose observed | Density moose/mi ² |
|------|----------------|-------------------------|-----------------|----------|----------------------|-------------------------------|
| 2001 | 22 | 3 | 16 | 11 | 1833 | 1.2 |
| 2003 | 22 | 6 | 17 | 12 | 1943 | 1.3 |
| 2005 | 27 | 7 | 23 | 15 | 1891 | 1.3 |
| 2007 | 35 | 12 | 20 | 13 | 2265 | 1.5 |

Moose are abundant along the southern slopes of the Alaska Range and within the Alphabet Hills portion of Unit 13B (**Table 2**). Moose typically congregate in subalpine habitats during fall rutting and post-rutting and historically, moose numbers in Unit 13B tend to fluctuate more than lower density areas (Tobey and Schwanke 2008).

Harvest History

Historically, Unit 13 has been an important area for moose hunting in Alaska due to the proximity to major human populations within the State. Throughout the 1960s and early 70s, harvests were large and averaged more than 1,200 bulls and 200 cows annually (Tobey 2004). During this time, the harvests extended into both fall and winter hunts and moose numbers began to decline. By the late 1970s harvests had been reduced to approximately 775 bulls annually, cow harvests and the winter season were eliminated, but the bull:cow ratios were still low. In response, the ADF&G changed the harvest of any bull to a harvest of a bull with an antler spread of at least 36 inches or 3 brow tines on at least one antler in 1980. This harvest regime eventually allowed an increase of moose populations and subsequently the harvests increased as well, peaking with a harvest of 1259 moose in 1988 (Tobey 2004). Since 2001 moose harvest and population levels have continued to increase in Unit 13 (**Tables 1, 2, and 3 and Figure 1**) which lead to harvest regulations being liberalized in these specific areas in 2008 with the addition of 5 resident-only any bull drawing hunts, and limited large bull non resident drawing hunts. However, the State general hunt is not likely to be liberalized due to lower moose numbers in accessible roadside hunt areas (Schwanke 2009, pers. comm.).

Currently, the Federal harvest season in Unit 13 is from August 1–September 20 which allows for a longer subsistence opportunity for Federally qualified subsistence users. Annual reported harvests by Federal subsistence users have been consistent from 2004–2007 with an average of 33 bulls harvested (**Table 4 and Figure 1**). Since 2004, the early part of the season from August 1–20 has only accounted for about 7% of the total bull moose harvest. (**Table 5 and Figure 2**). The latter portion of the season sees more harvest success with 25% of the moose in Unit 13B being harvested in the last week of the hunt (**Figure 2**).

The State general harvest season is from September 1–20 in Unit 13 and is the predominate source of moose harvest under State regulations (**Table 4 and Figure 1**). Prior to 2009, the State Tier II hunt (TM300) provided a State subsistence opportunity from August 15–30. This has been eliminated and a community harvest hunt (CM300) from August 10–September 20 with a harvest limit of one bull has been established for residents of Gulkana, Cantwell, Chistochina, Gakona, Mentasta, Tazlina, Chitina and Kluti Kaah. All other Alaskan hunters may participate in the general season hunt from September 1–20 for bulls

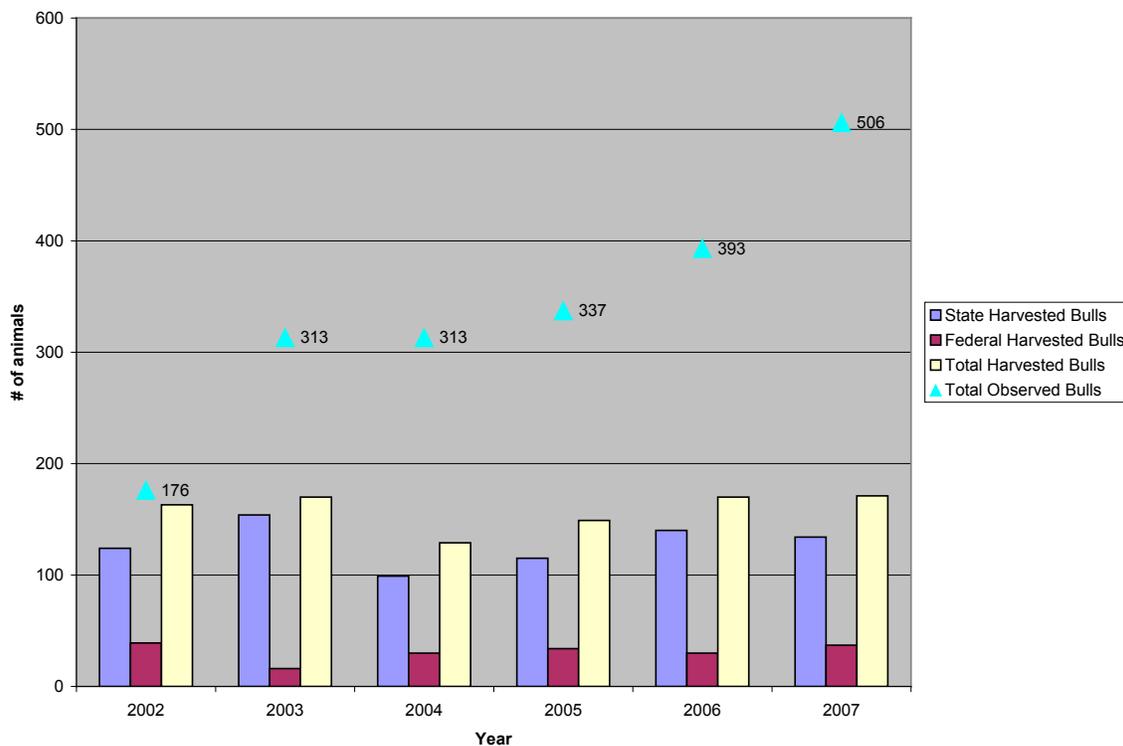


Figure 1. Unit 13B Bull Moose Harvest Data (2002-2007) and total number of bulls observed for a portion of Unit 13B. (Total observed bull data courtesy of Schwanke 2009, pers. comm.).

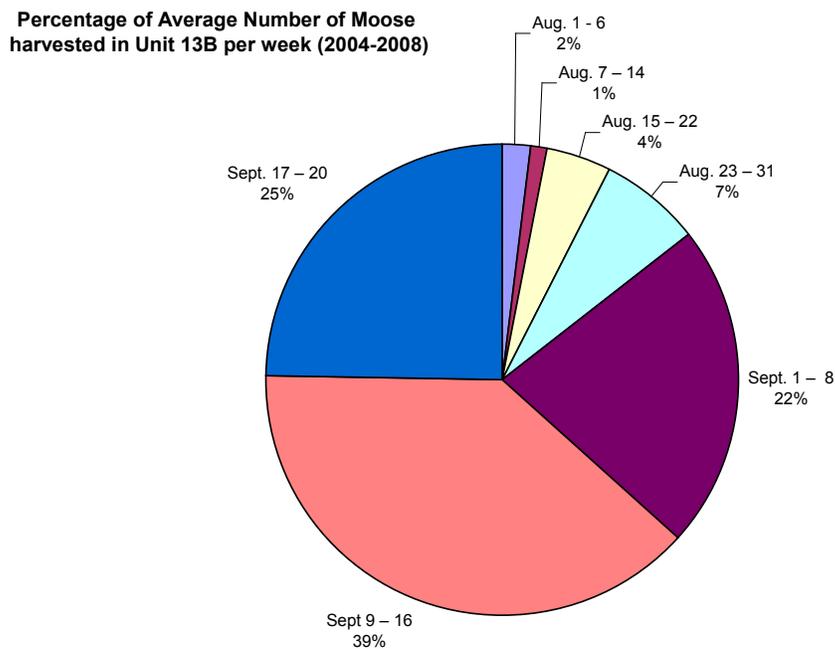


Figure 2. Unit 13B Average Moose Harvest per week (2004-2008).

Table 4: Results of State and Federal moose hunts in **Unit 13B** from 2004-2007 (ADFG 2009 and FWS 2009)

| Year | State Tier II harvest (TM300) Sept 1–Sept 20 | General harvest Sept 1–Sept 20 | # of State hunters reported ^a | Total State Bull Harvest | Federal subsistence harvest (BLM/FM 313/314) Aug 1–Sept 20 | # of Federal hunters reported | Total Federal Bull Harvest |
|------|--|--------------------------------|--|--------------------------|--|-------------------------------|----------------------------|
| 2004 | 6 | 93 | 689 | 99 | 30 | 378 | 30 |
| 2005 | 6 | 109 | 800 | 115 | 34 | 357 | 34 |
| 2006 | 15 | 127 | 923 | 142 | 30 | 114 | 30 |
| 2007 | 12 | 122 | 776 | 134 | 37 | 293 | 37 |

^a Actual number of hunters who hunted both unsuccessfully and successfully
Moose harvest management objective for Unit 13B is 310-620 moose.

Table 5. Unit 13B moose harvest chronology percent by week for State and Federal hunts 2008 (ADF& G 2008, FWS 2008)

| Week Harvested | RM313 Aug. 1 – Sept. 20 | | | | | | | | RM314 Aug. 1 – Sept. 20 | | | | | | | | TM300 Aug. 15 – Aug. 31 | | | | | | | | State General Sept. 1 – Sept. 20 | | | | | | | |
|---------------------|----------------------------|----|----|----|----|----|----|----|----------------------------|----|-----|-----|-----|-----|-----|-----|----------------------------|-----|-----|-----|-----|-----|-----|-----|-------------------------------------|----|--|--|--|--|--|--|
| | Year | | | | | | | | Year | | | | | | | | Year | | | | | | | | Year | | | | | | | |
| | 08 | 07 | 06 | 05 | 04 | 04 | 08 | 07 | 06 | 05 | 04 | 08 | 07 | 06 | 05 | 04 | 08 | 07 | 06 | 05 | 04 | 08 | 07 | 06 | 05 | 04 | | | | | | |
| Aug. 1 – Aug. 6 | 1 | 0 | 1 | 0 | 4 | 3 | 0 | 3 | 1 | 3 | 1 | 0 | 3 | 0 | 3 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | | | | |
| Aug 7 – Aug. 14 | 5 | 1 | 0 | 2 | 1 | 1 | 2 | 0 | 0 | 0 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | | | | |
| Aug. 15 – Aug. 22 | 5 | 1 | 1 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 9 | 5 | 6 | 3 | 1 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | | | | |
| Aug. 23 – Aug. 31 | 4 | 3 | 4 | 1 | 1 | 2 | 3 | 1 | 2 | 1 | 9 | 7 | 9 | 2 | 5 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | | | | | | | |
| Sept. 1 – Sept. 8 | 1 | 2 | 2 | 2 | 5 | 0 | 0 | 1 | 2 | 1 | n/a | n/a | n/a | n/a | 35 | 32 | 38 | 31 | 23 | | | | | | | |
| Sept 9 – Sept. 16 | 7 | 10 | 5 | 5 | 3 | 1 | 3 | 2 | 1 | 5 | n/a | n/a | n/a | n/a | 56 | 60 | 59 | 41 | 47 | | | | | | | |
| Sept. 17 – Sept. 20 | 6 | 6 | 6 | 10 | 2 | 4 | 6 | 4 | 4 | 3 | n/a | n/a | n/a | n/a | 37 | 27 | 27 | 35 | 19 | | | | | | | |
| Total | 29 | 23 | 19 | 24 | 17 | 11 | 14 | 11 | 10 | 13 | 18 | 12 | 15 | 5 | 6 | 128 | 119 | 124 | 107 | 89 | | | | | | | | | | | | |

with spike-fork or 50-inch antlers or antlers with 4 or more brow tine on at least one side or the drawing permits (DM330-334) for one bull by permit for residents.

Current Events Involving Species

For the 2009–2010 state regulatory year, the State Tier II hunt (TM300) changed to Community harvest for residents of Gulkana, Cantwell, Chistochina, Gakona, Mentasta, Tazlina, Chitina and Kluti Kaah, as well as any bull permit hunts (DM330-334) in select areas where moose numbers have increased. Both of these hunts are expected to increase moose hunting opportunity in Unit 13. All Alaskan hunters may participate in the general season hunt from September 1–20.

The State of Alaska was required to submit the final state-wide land selections to BLM by September 30, 2009, however BLM has not processed the final selections to date making this proposal premature since final conveyances could take more than a year to process. Furthermore, because the over-selected lands are statewide, to date it is not known which specific areas are to become unencumbered.

Effects of the Proposal

Currently, Federally qualified subsistence users may harvest one antlered bull moose by permit from August 1 to September 20. If the proposal is adopted it would shift the time of the harvest season by 10 days compared to the State community harvest hunt (August 10–September 20), but would be longer than the current State general season (September 1–20). Currently, there is an upward population trend of moose in Unit 13B and the 2007 fall aerial surveys estimated 1.5 moose/mi², showing an increase (25%) in moose density since 2001. While cyclical winter mortality can negatively affect moose populations, the current moose populations in Unit 13B can support the current harvest regulations. In addition, adoption of this proposal for one permit per household would reduce the opportunities for Federal subsistence users to harvest moose in Unit 13B, while the State regulations have no such restriction.

Land selections from the State of Alaska have not been finalized; therefore an accurate estimate of conveyed lands and the effect of changing land status on the harvest of moose in Unit 13 are unknown at this time (Cebrian 2009, pers. comm.). Once land conveyances have been achieved, the resultant effects can be evaluated.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP10-28

Justification

The proponent is concerned that there is a potential to increase harvest beyond sustainable levels once the land has been conveyed, however the proposed change could actually increase the number of moose harvested. Sustainable harvest levels for moose are evaluated annually by ADF&G, and regulations and permit numbers are adjusted accordingly with the guiding principle of sustainable yield. Currently, there is an upward population trend of moose in Unit 13B and total State and Federal harvest numbers are stable to increasing in response to this increase in moose numbers. The 2007 fall aerial surveys estimated approximately 1.5 moose/mi², showing an increase (25%) in moose density in Unit 13B since 2001).

Since 2004, the chronology of the total moose harvest has shown August 1–20 to comprise approximately 7% of the total bull moose harvest while more harvest success is in the later portion of the season with 25% of the moose in Unit 13B being harvested in the last week of the hunt, which currently

ends September 20. Overall harvest numbers for Federal subsistence have been relatively consistent from 2002–2007 (The State general harvest season is from September 1–20 in Unit 13 and harvest predominately occurs under State regulations). Therefore, shifting the time of the season to August 20 to September 30 would negatively affect Federally qualified subsistence users by reducing the season. In addition, adoption of the regulation for one permit per household further limits the Federal subsistence user in harvest of moose in Unit 13B, while the State regulations have no such restriction.

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Alaska Department of Fish and Game
Comments to the Regional Advisory Council

Wildlife Proposal WP10-28: Change the bag limit, antler restrictions, and season dates for the federal subsistence moose hunt in Unit 13B.

Introduction: Existing federal regulations limit take to one antlered bull moose in Unit 13B August 1 through September 20. This proposal would limit federal subsistence users to one bull per household as is in federal regulations for Unit 13E. The proposal would also shift the federal moose season in Unit 13B from August 1 through September 20 to August 20 through September 30. (The proposal requests one any-bull per household; federal subsistence regulations restrict harvest to “antlered bulls.”)

Impact on Subsistence Users: The reduction in bag limits would not impact federal subsistence users. During the 5 years from 2003 to 2007, only 6 families took 2 federal subsistence moose and one family took 3. If the proposal is adopted, however, the 10-day season extension from September 20 through September 30 would negatively affect the moose population and reduce future subsistence hunting opportunity on federal public lands.

Opportunity Provided by State: The state provides a 20-day moose season for spike or fork, 50 inch antler spread, or four brown tine bull moose throughout Unit 13. In addition, a community harvest hunt for eight Unit 13 rural villages is administered by Ahtna, Inc., that provides for 100 any-bull and *an unlimited number of* spike or fork, 50 inch antler spread, or four brown tine bulls with a 20-day longer season from August 10 through September 20. There are also any-bull drawing hunts available in parts of Units 13A, 13B, and 13C, though only in areas where the moose population can sustain this additional pressure.

Conservation Issues: An any-bull bag limit for a general hunt occurred in Unit 13 in 1979. Heavy hunting pressure under an any-bull bag limit greatly reduced the bull:cow ratio as low as 5:100 in heavily hunted areas. As the amount of federal public land is increasing, if this proposal is adopted, the bull ratios can be expected to decline. Currently, the amount of federal public land open for subsistence in Unit 13 is small and over harvest of bulls is not a conservation issue because of the limited land open to federal subsistence hunting. Additional protection is also provided for small bulls under the state spike or fork, 50 inch antler spread, or four brown tine bull moose antler restriction regulation.

As additional large parcels of federal land become available for subsistence harvest, the any-bull bag limit, coupled with increased hunting pressure of extending the season after September 20 through September 30, is expected to greatly reduce bull:cow ratios on these lands. The decline would be accentuated because moose are extremely vulnerable to hunting after September 20, when leaf fall increases visibility and breeding behavior of the bulls during the rut makes them more vulnerable.

Enforcement Issues: Extending the federal season after the state season closes will increase risk of enforcement on nonfederal land. Current federal subsistence moose harvests are in excess of 2% of the total take in Unit 13 despite only 2% of the land being open to federal moose

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hunting. Moose do not congregate on federal public lands, therefore it is highly likely that some current take already comes from adjacent state lands. This change could create additional enforcement issues for state and federal law enforcement.

Recommendation: Support with modification to change the bag limit to one antlered bull moose per household as proposed and in federal regulations for subunit 13E, but modify it to apply to all Unit 13. This will reduce impacts of federal regulations on future subsistence opportunity of the majority of federally qualified users in Unit 13. Oppose shifting the moose season into the rut and the remainder of the proposal.

| WP10-29/30 Executive Summary | |
|---|---|
| General Description | Proposals WP10-29 and 30 request a positive customary and traditional use determination for brown bear and black bear in the Unit 11 remainder area for some rural residents of Unit 12: Tok Cutoff road (mileposts 79 –110, Mentasta Pass), and Nabesna Road (mileposts 25–46). <i>Submitted by the Wrangell-St. Elias Subsistence Resource Commission</i> |
| Proposed Regulation | <p>Customary and Traditional Use Determination</p> <p>Unit 11 north of the Sanford River—Brown Bear</p> <p><i>Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Units 11 and 12.</i></p> <p>Unit 11 remainder—Brown Bear</p> <p><i>Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, Unit 11, Tok Cutoff Road (mileposts 79–110 Mentasta Pass), and Nabesna Road (mileposts 25–46).</i></p> <p>Unit 11 north of the Sanford River—Black Bear</p> <p><i>Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Units 11 and 12.</i></p> <p>Unit 11 remainder—Black Bear</p> <p><i>Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, Unit 11, Tok Cutoff Road (mileposts 79–110 Mentasta Pass), and Nabesna Road (mileposts 25–46).</i></p> |
| OSM Preliminary Conclusion | Support |
| Southeast Regional Council Recommendation | |
| Eastern Interior Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | |

DRAFT STAFF ANALYSIS WP10-29 and 30

ISSUES

Proposals WP10-29 and 30, submitted by the Wrangell-St. Elias Subsistence Resource Commission, request a positive customary and traditional use determination for brown bear and black bear in the Unit 11 remainder area for some rural residents of Unit 12: Tok Cutoff road (mileposts 79 –110, Mentasta Pass), and Nabesna Road (mileposts 25–46).

DISCUSSION

Proposals WP10-29 and 30 seek a positive customary and traditional use determination for the residents of Tok Cutoff Road (mileposts 79 –110, Mentasta Pass) and Nabesna Road (mileposts 25–46), referred to in this analysis as the proposal area (see **Map 1**), to harvest brown and black bear in the remainder portion of Unit 11. The remainder of Unit 11 consists primarily of lands within the Wrangell-St. Elias National Park and Preserve located south of the Sanford River. The proponent states that residents of the proposal areas have subsistence use patterns that closely resemble those of Slana and Mentasta Lake (in Unit 13). Further, the proponent stated that residents of this area “traditionally harvest wildlife resources, including bear, throughout the Copper Basin and were inadvertently omitted from the current customary and traditional use provisions.” The proponent also notes that it is confusing to be out “hunting one species, then a bear walks by that we would shoot to eat, but not be allowed to harvest the animal.” Residents from the proposal area also have customary and traditional use determinations for other large mammals in Unit 11 remainder, i.e. sheep and wolf.

Existing Federal Regulation

Customary and Traditional Use Determinations

Unit 11 north of the Sanford River— Brown Bear

Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Units 11 and 12.

Unit 11 remainder— Brown Bear

Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Unit 11.

Unit 11 north of the Sanford River—Black Bear

Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Units 11 and 12.

Unit 11 Remainder— Black Bear

Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Unit 11.

Proposed Federal Regulation

Customary and Traditional Use Determination

Unit 11 north of the Sanford River—Brown Bear

Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Units 11 and 12.

Unit 11 remainder—Brown Bear

*Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, Unit 11, **Tok Cutoff Road (mileposts 79–110 Mentasta Pass), and Nabesna Road (mileposts 25–46).***

Unit 11 north of the Sanford River—Black Bear

Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Units 11 and 12.

Unit 11 remainder—Black Bear

*Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, Unit 11, **Tok Cutoff Road (mileposts 79–110 Mentasta Pass), and Nabesna Road (mileposts 25–46).***

Extent of Federal Public Lands/Waters

Federal public lands comprise approximately 81% of Unit 11 and includes lands managed by Wrangell-St. Elias National Park and Preserve (79%), Chugach National Forest (2%) and Bureau of Land Management (1%).

Regulatory History

The regulatory history is described in full in Appendix A. The main points in the regulatory history pertinent to the analysis for Proposals WP10-29 and 30 are as follows:

When the Federal Subsistence Board (Board) assumed management of subsistence wildlife resources on Federal public lands in 1990, it adopted State of Alaska customary and traditional use determinations. In 1990, in Unit 11, there was a “no subsistence” determination for brown bear under State regulations. The customary and traditional use determination for black bear was “no determination” (which meant that all Federally qualified rural residents were eligible to harvest black bears) and there was “no closed season,” with a limit of three bears per year.

In 1997, the Board addressed the customary and traditional use of brown bear in Unit 11 for rural residents of Unit 12. There was no proposal for black bear because the liberal State regulations, “no closed season, three bears per year” had been adopted by the Federal program. The Board recognized the customary and traditional use of brown bear in Units 12 and 20E by residents of Unit 12 and Dot Lake (FSB 1997:33, 38, 40–41). The customary and traditional uses of brown bear in Unit 11 by

residents of Unit 12 were not recognized by the Board (see Appendix A for more details on the Council recommendations for this decision).

In 1998, the Board addressed Proposals 21 and 22, which requested a revised customary and traditional use determination in Unit 11 for black and brown bear for the rural residents of Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta, and Tazlina (FSB 1998:25). All of these communities are in Unit 13 situated on or near the border of Unit 11. In its review of Proposals 21 and 22, the Board noted that many black and brown bear harvests are incidental and that because Unit 12 residents have customary and traditional use determinations for other species (moose, caribou, and sheep) in Unit 11 north of the Sanford River, it would be consistent for residents of Unit 12 to also have a customary and traditional use determination for black and brown bear in Unit 11 north of the Sanford River, but not Unit 11 remainder (south of the Sanford River) (FSB 1998:214–216; 223–226).

To summarize, a review of the regulatory history and record indicates that the Board carefully reviewed the information provided in staff analyses, Council recommendations, and public comment and concluded that the uses of black and brown bear by residents of Unit 12 in Unit 11 remainder were not customary and traditional. However, the Board did not specifically discuss the uses of the residents residing along the Tok Cutoff Road (mileposts 79–110, Mentasta Pass) and Nabesna Road (mileposts 25–46). The Board looked at Unit 12 in a holistic manner and did not distinguish the pattern of use of the residents of the proposal area from the Upper Tanana region.

Community Characteristics

The settlement patterns of the Upper Tanana and Copper Basin areas are diverse; some residents live in “recognized” communities and many households are dispersed along the road system between communities (Cellarius 2010, pers. comm.). It is difficult to describe the community characteristics of Tok Cutoff Road (Mentasta Pass) and Nabesna Road because they are not communities per se. Neither are listed in the State of Alaska Division of Community and Regional Affairs community database. They are not census designated places (U.S. Census 2000). Additionally, it is difficult to determine harvest estimates based on the ADF&G harvest ticket data because residents can get their mail at one of several post offices in the area and their mailing address does not necessarily indicate where they actually live. ¹

Tok Cutoff Road or Mentasta Pass

For the purposes of this analysis, the area of milepost 79–110 was designated by the proponent because this segment of the road extends north from the boundary of Units 12 and 13. The Mentasta Pass area of the Tok Cutoff Road was described as “homesites along the Tok Cutoff from milepost 79–110” (McMillan and Cuccarese 1988:127; NPS 1995:323).

According to ADF&G Subsistence Division surveys conducted in 1987, there were approximately 11 households in this area with an estimated population of 26 people (ADF&G 2010).² In 1987, these households harvested an estimated 187 pounds of subsistence resources per person or approximately 4,962 pounds for the Tok Cutoff Road area (ADF&G 2010). At the Fall 2009 EISRAC meeting, one member stated,

¹ For example: Nabesna Road residents are on a rural delivery route that have a Gakona Address and a Gakona zip code. The same zip code is also used to deliver mail to the Slana post office although mail for Slana has “Slana” on the address rather than “Gakona” (Cellarius 2010, pers. comm.).

² The Mentasta Pass or Tok Cutoff Road survey unit for the 1987 study was the area between mileposts 79–110 (McMillan and Cuccarese 1988: 127).

...the community around the Tok Cutoff, it is where I live, I know, but I can tell you that the surrounding area from Mentasta on the Tok Cutoff Road and Nabesna Road, we're like all one. We all kind of do the same thing. So I just wanted to align the people where we live (EISRAC 2009:322).

No ADF&G Subsistence Division studies have been conducted on Mentasta Pass since 1987 and there is no specific census data for this area, thus it is unknown how many residents live in this area today nor is there new information on their subsistence uses.

Nabesna Road

For the purposes of this analysis, the area of milepost 25–46 was designated by the proponent because this segment of the road falls within Unit 12. Mileposts 1–24 of the Nabesna Road are in Unit 11.

Like Mentasta Pass, this area is primarily comprised of homesites along the Nabesna Road. Nabesna Road is a state maintained road, much of which is located in Wrangell-St. Elias National Park and Preserve. The road was constructed to access the Nabesna gold mine in the 1930s although the area was used traditionally by Upper Ahtna and Upper Tanana Athabascans and the road follows a historic route, also used by early homesteaders, between upper Ahtna and Upper Tanana territory. Generally, when people refer to “Nabesna,” they are referring to the end of the road where the mine was located. There are a number of localities along the road that are culturally significant, including the Ahtna Athabascan family settlement of Twin Lakes in the Unit 12 portion of the road and Batzulnetas (Ahtna) in Unit 11 (Cellarius 2010, pers. comm.; Reckord 1983:146–150).

In her early 1980s study on subsistence in Wrangell-St. Elias National Park, Reckord described the Nabesna Road area:

At Slana, a dirt road parallels the Copper River and its mass of arteries for 20 miles...to the Old Nabesna Mine...Approximately 10–12 families live along the road...most live in the area year round. At least seven of the families are involved principally in the guiding business (1983:269–270).

According to ADF&G Subsistence Division surveys conducted in 1987, there were approximately 13 households in this area with an estimated population of 37 people (ADF&G 2010)³. In 1987, these households harvested approximately 250 pounds of subsistence resources per person or 9,212 pounds total for the Nabesna Road study area (ADF&G 2010). No ADF&G Subsistence Division studies have been conducted on the Nabesna Road since 1987 and there is no specific census data for this area, thus it is unknown how many residents live in this area today nor is there new information on their subsistence uses.

Mentasta Lake

The proponent stated that the subsistence harvest patterns of the residents of the Tok Cutoff Road (mileposts 79–110, Mentasta Pass) and Nabesna Road (mileposts 25–46), both located in Unit 12, are similar to those of Mentasta Lake and Slana, both located in Unit 13. For this reason, the characteristics of these two communities are reviewed here.

³ The “Nabesna Road” survey unit of the 1987 study was from mile 7 of the Nabesna Road to the end of the road at the Nabesna mine site, referred to as Nabesna (McMillan and Cuccarese 1988:132). Slana “is a dispersed community that is centered on the intersection of the Tok Cutoff and Nabesna roads (McMillan and Cuccarese 1988:142).

Not to be confused with Mentasta Pass, Mentasta Lake, also referred to as Mentasta, is a distinct community and a census designated place located in Unit 13. According to the Alaska Division of Community and Regional Affairs Community database, the current 2010 population is approximately 112 and it is located 6 miles off the Tok Cutoff Road on the west side of Mentasta Pass. Mentasta Lake is further described as “primarily Athabascan and subsistence activities are important...the families in Mentasta Lake come from Nabesna, Suslota, Slana and other villages with the area” (DCRA 2009). According to ADF&G Subsistence Division surveys conducted in 1987, there were approximately 25 households in this area with an approximate population of 77 people (ADF&G 2010). In 1987, these households harvested approximately 125 pounds of subsistence resources per person or a total community harvest of 9,672 pounds (ADF&G 2010). Mentasta Lake is situated on the northern border between the Ahtna Athabascan (Copper Basin) communities or territory and the Upper Tanana Athabascan communities or territory (Map in Haynes and Simeone 2007:9). This border also bisects the Nabesna Road as does the border between Units 11 and 12.

Slana

Slana, according to DCRA, has a current 2010 population of 107 people, “the community is comprised primarily of homesteaders...it stretches along the Nabesna Road” (to approximately mile 4) (DCRA 2009). Slana has also been described as “a dispersed community that is centered on the intersection of the Tok Cutoff and Nabesna roads (McMillan and Cuccarese 1988:142). According to ADF&G Subsistence Division surveys, conducted in 1987, there were approximately 25 households in this area with an approximate population of 57 people (ADF&G 2010). In 1987, these households harvested approximately 249 pounds of subsistence resources per person or a total community harvest of 14,185 pounds (ADF&G 2010).

Eight Factors for Determining Customary and Traditional Uses

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

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

that concern through the imposition of harvest limits or season restrictions rather than by limiting the customary and traditional use finding.

Specific information on each of the eight factors is not required because a community or area seeking a customary and traditional use determination only has to “generally exhibit” the eight factors (50 CFR 100.16(b) and 36 CFR 242.16(b)).

The Board previously determined that the residents of Unit 12 generally exhibit the eight factors for brown and black bears and has made positive customary and traditional use determinations for the residents of Unit 12—which includes the residents of the proposal area—for brown and black bears in Unit 12 and in Unit 11 north of the Sanford River. The question for this analysis is not whether a customary and traditional pattern of use of black or brown bears occurred, but rather whether or not the residents of the proposal area have a pattern of use harvesting brown and black bears in Unit 11 remainder as well. As such, it is a question of where the use occurs, not if the use occurs. Thus, a full analysis of the eight factors is not necessary because an analysis of the eight factors has been conducted previously in the analyses for Proposals WP98-21 and WP98-22 (EISRAC 1998, FWS 1998, and FSB 1998). The discussion of the eight factors in these analyses indicates that the residents of Unit 12 generally exhibit the eight factors for harvesting brown and black bears in Units 11 north of the Sanford River and in Unit 12 and the Board has recognized the customary and traditional uses of residents of Unit 12 for brown and black bears (FSB 1998). The Board’s decision was based on the premise that the Unit 12 boundary is not only a boundary of management units, but also a boundary between Native cultures and harvest areas. Unit 12 residents, however, are not limited to Athabascan residents. In the early 1980s, Reckord noted:

Subsistence resources have played a major role in the history of white people in the Copper River Valley. From the very first visit of Russian-Aleut explorers in 1848 through the gold rush and mining period at the turn of the century and into the present, subsistence resources have contributed to the diet of the residents of the valley...Over the years an indigenous white culture developed which highly valued the use of subsistence foods such as moose, caribou, sheep and fish. At first some of the white settlers learned from the Native people; they were educated by young Natives in the local species and where these species could be taken...Contrary to the belief of some observers, the use of subsistence resources by white people in the region extends beyond mere recreation (1983:166).

Further, Reckord described the Tok Cutoff area:

The people living along the Tok Cutoff often live several miles from their nearest neighbors. Small settlements are found at Gakona, Chistochina, and Mentasta (Lake). The Tok Cutoff people are often oriented to businesses serving the tourists and hunters who regularly travel this route between the Copper River Valley and the Alaska Highway. Homesteaders, retired people, and guides are also found living along the road. Some of these residents have lived here for 20 or 30 years and suddenly find the area developing around them...Most of the permanent residents along the Tok Cutoff utilize a number of subsistence species each year. Most people are oriented to the highway...It is obvious when talking to the Tok Cutoff residents that it is the bush lifestyle that has brought them to this place (1983:256–257).

There is no new information on brown or black bear harvests for the areas under consideration in the current proposal. The ADF&G harvest ticket database was searched for harvest information for the proposal area, but the database does not accurately reflect harvests for the areas of consideration in this proposal because of the difficulties in identifying location of hunter residence by mailing address.

Residents in the proposal area get their mail in communities near the area, so there is no way to distinguish their harvests from others in these communities.

The proponent states that the residents of the Tok Cutoff Road (mileposts 79 –110, Mentasta Pass) and Nabesna Road (mileposts 25–46) share similar subsistence patterns with the residents of Slana and Mentasta, which are both in close proximity to the proposal area (**Map 1**). Mentasta Lake is located only 6 miles to the west of the Tok Cutoff Road. Slana is a dispersed community that is centered on the intersection of the Tok Cutoff and Nabesna roads. Slana is in Unit 13 on the border between Units 11 and 13 and close to the border of Unit 12. Mentasta Lake also is in Unit 13, but close to the border of Unit 12. The proposal area is in Unit 12. Mentasta Lake and Slana are both included in the positive customary and traditional use determinations for brown and black bear in Unit 11 remainder (see **Map 1**).

In her early 1980s study on subsistence in Wrangell-St. Elias National Park, Reckord described the Tok Cutoff area:

The people living along the Tok Cutoff often live several miles from their nearest neighbors.... The Tok Cutoff people are often oriented to businesses serving the tourists and hunters who regularly travel this route between the Copper River Valley and the Alaska Highway. Homesteaders, retired people, and guides are also found living along the road. Some of these residents have lived here for 20 or 30 years and suddenly find the area developing around them...Most of the permanent residents along the Tok Cutoff utilize a number of subsistence species each year. Most people are oriented to the highway...It is obvious when talking to the Tok Cutoff residents that it is the bush lifestyle that has brought them to this place (1983:256–257).

In order to engage in subsistence activities in Wrangell-St. Elias National Park, the National Park Service requires that subsistence users live within the park's resident zone (36 CFR 13.430, 36 CFR 13.1902) or have been issued a subsistence permit (36 CFR 13.440) by the park superintendent. The Tok Cutoff Road extends between Slana and Tok, which are resident zone communities, and the Nabesna Road extends between Slana and Nabesna, which also is a resident zone community. A designation by the National Park Service as a resident zone community indicates that the residents in these communities are recognized as having customary and traditional uses of the Wrangell-St. Elias National Park. Thus, the National Park Service recognizes Slana and Mentasta as resident zone communities and these communities are also including in the customary and traditional use determination for brown and black bears for all of Unit 11. The people living in proposal area in close proximity to Slana and Mentasta Lake should not be excluded from being eligible to hunt in the same areas that Slana and Mentasta Lake hunt in just because they live along a road and not in Slana or Mentasta Lake. Therefore, the residents of the proposal area should have the same customary and traditional use determinations as Slana and Mentasta.

Effects of the Proposal

If this proposal is adopted, the Unit 12 residents of the Tok Cutoff Road (mileposts 79 –110, Mentasta Pass), and the Nabesna Road (mileposts 25–46) would be able to harvest brown and black bear in Unit 11 remainder, similar to the communities closest to their area of residence, Mentasta Lake and Slana. Residents of the proposal area would still have to comply with National Park Service regulations for engaging in subsistence activities in Wrangell-St. Elias National Park, which requires that subsistence users live within the Park's resident zone or have been issued a subsistence permit (13.440 permit) by the park superintendent. The proposal area is not a resident zone community.

If this proposal is adopted, there would be minimal effects on nonsubsistence users because black and brown bear hunting in Unit 11 remainder includes National Preserve lands where nonrural residents may hunt under State of Alaska regulations.

If this proposal is adopted, no effects on black and brown bear populations are anticipated as it is not expected that black and brown bear harvests would increase substantially. There are only 24 households estimated to be in the areas under consideration.

If this proposal is not adopted, the Unit 12 residents of the Tok Cutoff Road (mileposts 79 –110, Mentasta Pass), and the Nabesna Road (mileposts 25–46) would not be able to harvest brown and black bear in the portion of Unit 11 remainder that is Park⁴ land, however, they could request from the National Park Service individual customary and traditional use determinations for black and brown bear in this area.

If this proposal is not adopted, the residents of the proposal area would be able to continue harvesting brown and black bear in Unit 12 and in Unit 11 north of the Sanford River and for brown bear in Unit 20E where their customary and traditional uses are recognized. All rural residents may hunt black bear in Unit 13 and brown bear in Unit 20 remainder.

OSM PRELIMINARY CONCLUSION

Support Proposals WP10-29 and 30.

Justification

In 1997 and 1998, the Federal Subsistence Board addressed the customary and traditional use determinations for black and brown bear for Unit 12 residents. The Board determined that the residents of Unit 12 generally exhibit the eight factors for brown and black bears and made positive customary and traditional use determinations for the residents of Unit 12—which includes the residents of the Tok Cutoff Road (mileposts 79 –110, Mentasta Pass) and Nabesna Road (mileposts 25–46)—for brown and black bear in Unit 11 north of the Sanford River. While the Board carefully reviewed the information provided in staff analyses, council recommendations, and public comment and concluded that the uses of black and brown bear by residents of Unit 12 in Unit 11 remainder were not customary and traditional, they did not specifically address the areas under consideration in this proposal, both in Unit 12. The residents of Unit 12 have customary and traditional use determinations for black and brown bear for Unit 11 north of the Sanford River (as well as moose, caribou) and for sheep in all of Unit 11 as well as other areas. The proponent states that the residents of the proposal area have subsistence use patterns more similar to those of Slana and Mentasta, which are in close proximity to the proposal area. Those people living along a road close to a community should be included in the customary and traditional use determinations of the closest community or communities.

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APPENDIX A: REGULATORY HISTORY

When the Federal Subsistence Board assumed management of subsistence wildlife resources on Federal public lands in 1990, it adopted State of Alaska customary and traditional use determinations. At the time, in Unit 11, there was a “no subsistence” determination for brown bear under State regulations and the determination for black bear was “no closed season” with a limit of three bears per year.

In the 1997–98 regulatory year, twenty-one Unit 11 customary and traditional use proposals for a wide variety of species were submitted to the Board. Many of these proposals included Units 11, 12, 13 and 20 (FWS 1997:36–261) The NPS conducted extensive research of the customary and traditional uses of the area for the Board. This research included interviews with residents, historic and ethnographic literature including kinship and trade routes, biological reports, planning documents and both subsistence survey and harvest ticket harvest data. The results of this research provided the basis for staff analyses of the numerous customary and traditional use proposals (NPS 1994 and 1995).

As noted by OSM staff in 1997 when reviewing the Unit 11 proposals:

...in this region the question of customary and traditional eligibility is made even more complex by the heterogeneity of the communities involved. And as was discussed this morning, the mobility of the people that live in this region, there is among both natives and non-Natives there is considerable variation in the length of residence in the communities and so it is important that we consider the composition of the communities in order to best give a customary and traditional use determination for the people that historically lived in a particular area or used a particular area for hunting...(SCRAC 1997:75)

Most of the customary and traditional use determinations for Unit 11 have been divided into two areas: Unit 11 north of the Sanford River and Unit 11 remainder (**see Unit 11 Map**).

The division of Unit 11 into two portions, “north of the Sanford River” and Unit 11 “remainder” was a major aspect of the customary and traditional use determinations for Units 11, 12, 13 and 20 in 1997. The 1997 proposal analyses illustrate that this boundary was based on detailed examinations of customary and traditional uses which indicated that when Unit 12 residents harvested subsistence resources in Unit 11, these harvests occurred north of the Sanford River (SCSRAC 1997a:78; FSB 1997:43, 45–46, 53, 68–71, 74; (SCRAC 1998:65) and that much of this use, in addition to the uses of the non-Native residents of the area, was determined by the boundary, agreements and kinship ties between Upper Tanana and Ahtna Athabascan communities (FWS 1997:36–261; FSB 1997, see Haynes and Simeone 2007:9).

The Sanford River was chosen as a geographic boundary that was easily recognizable. It has a steep canyon and people who know the area know where it is located (Rabinowitch 2010, pers. comm.). In some cases, harvest areas did not extend as far south as the Sanford River, however in an attempt to simplify the boundaries, it became the designated line (SCSRACb 1997:141; FSB 1997:43, 45–46, 53, 68–71, 74).

Residents of Unit 12 have positive customary and traditional use determinations in Unit 11 north of the Sanford River for most large land mammals: black and brown bear, caribou, moose and sheep. The residents of Unit 12 do not have a positive customary and traditional use determination for these species in the Unit 11 remainder. There is, however, one exception. Some residents of Unit 12 have a positive customary and traditional use determination for sheep in Unit 11 remainder. These are the Unit 12 residents who live on the Tok Cutoff Road (mileposts 79–110 Mentasta Pass) and Nabesna Road (mileposts

25–46). The first part of the Nabesna Road, mileposts 0–25, is in Unit 11. This customary and traditional use determination for sheep in the remainder of Unit 11 for specific residents of Unit 12 is from the State of Alaska customary and traditional use determinations adopted by the Federal Board in 1990. From testimony provided at the 1997 Board meeting, it appears this may be the only place in the region where abundant sheep populations are accessible to subsistence harvesters (FSB 1997:64–65).

Among the many 1997 proposals, there was a proposal for customary and traditional use of brown bear for rural residents of Unit 12 in Unit 11. There was probably no need for a proposal for black bear because the liberal State regulations “no closed season, three bears per year” had been adopted by the Federal program. The SCSRAC opposed⁵ and the EIRSAC supported the proposal (FWS 1997:36; EIRAC 1997:226; SCRAC 1997:72–73). The Board supported the aspects of recommendations from both Councils for their “respective regions” (FSB 1997:33). The Board rejected the portion of the proposal for Units 11 and 13 in accordance with the SCSRAC recommendation and adopted the EIRSAC recommendation with modification to recognize the customary and traditional use of brown bear in Units 12 and 20E by residents of Unit 12 and Dot Lake (FSB 1997:33, 38, 40–41). Thus, residents of Unit 12 did not obtain a customary and traditional use determination for brown bear in Unit 11.

In the 1998–99 regulatory year, six Unit 11 customary and traditional use proposals were submitted to the Board. Proposals 21 and 22 requested a revised customary and traditional use determination for in Unit 11 black and brown bear for the rural residents of Chistochina, Chitina, Copper Center, Gakona, Gulkana, Mentasta, and Tazlina (FSB 1998:25). All of these communities are in Unit 13 situated on or near the border of Unit 11. The EIRSAC and the SCSRAC both supported the proposals with modification.

For Proposal 21 (black bear) the EIRSAC requested the addition of residents of Unit 11 and residents of adjacent subunits in Region 9 (Unit 12) (FWS 1998:25, 47). The SCSRAC requested the addition of residents of Glennallen, Tonsina, Kenny Lake and Unit 11 (FWS 1998:25). One Southcentral council member stated that “I don’t think they should be able to come in and hunt in Unit 11 because that is traditional Ahtna territory but portions of Unit 12 and the upper northern part [of Unit 12], that is their historical hunting area (SCSRAC 1998:65) March 18, 1998 page 65). A member of the Upper Tanana/Fortymile Advisory Committee responded “...last year when some of the C&Ts were established for Unit 12 residents, most of the designations have been set north of the Sanford River. And...I’m relatively certain that Upper Tanana residents are willing to look at that as a boundary line for their usage. Certainly most of the people that did use that resource did it in that particular area” (SCSRAC 1998:65). Federal staff noted that there was no information provided which indicated harvest of black bear in Unit 11 by Unit 12 residents (FSB 1998:212). However, the Board noted that many bear harvests are incidental and that because Unit 12 residents have customary and traditional use determinations for other species (moose, caribou, and sheep) in Unit 11 north of the Sanford River, it would be consistent for residents of Unit 12 to also have a customary and traditional use determination for black bear in Unit 11 north of the Sanford River (FSB 1998:214–216).

For Proposal 22 (brown bear) the EIRSAC requested the addition of the adjacent subunits of Region 9 (Unit 12) (FWS 1998:47). The SCSRAC recommended recognizing customary and traditional use of brown bear for the same communities as black bear (FWS 1998:47, SCRAC 1998:82–84). For the same reasons as above, the Board voted to adopt the SCSRAC recommendation with modification to include residents of Unit 12 in that portion of Unit 11 north of the Sanford River (FSB 1998:223–226).

⁵The Council also noted that this proposal would establish a subsistence priority for residents of units outside of Unit 11 who did not at the time have subsistence priority for brown bear in their units of residence (SCRAC 1997: 73).

| WP10-31 Executive Summary | |
|---|--|
| General Description | Proposal WP10-31 requests an individual customary and traditional use determination for moose and caribou in Unit 13E. In areas managed by the National Park Service where subsistence uses are allowed, customary and traditional use determinations may be made on an individual basis. <i>Submitted by Kevin Mayo of Healy</i> |
| Proposed Regulation | <p>Federal Regulation Regarding Individual Customary and Traditional Use Determinations for National Parks and Monuments</p> <p>§ __.16 <i>Customary and traditional use process</i></p> <p><i>(a) The Board shall determine which fish stocks and wildlife populations that have been customarily and traditionally used for subsistence. These determinations shall identify the specific community's or area's use of specific fish stocks and wildlife populations. For areas managed by the national Park Service, where subsistence uses are allowed, the determinations may be made on an individual basis.</i></p> <p>Customary and Traditional Use Determination</p> <p>Unit 13E—Moose</p> <p><i>Rural residents of Unit 13, Chickaloon, McKinley Village, Slana and the area between mileposts 216–239 of the Parks Highway and Kevin Mayo*. No Federal subsistence priority for the residents of Denali national park headquarters.</i></p> <p>Unit 13E—Caribou</p> <p><i>Rural residents of Units 11, 12, (along the Nabesna Road), 12, Chickaloon, McKinley Village, and the area between mileposts 216–239 of the Parks Highway and Kevin Mayo*. No subsistence priority for the residents of Denali National Park headquarters.</i></p> <p>*Note: Names of individuals do not appear in regulation booklets, they are on a list maintained by the respective National Park Service subsistence manager.</p> |
| OSM Preliminary Conclusion | Support |
| Southcentral Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS WP10-31

ISSUES

Proposal WP10-31, submitted by Kevin Mayo of Healy, requests an individual customary and traditional use determination for moose and caribou in Unit 13E. In areas managed by the National Park Service where subsistence uses are allowed, customary and traditional use determinations may be made on an individual basis.

DISCUSSION

The proponent has described a history of customary and traditional use of moose and caribou in Unit 13E of Denali National Park. Mr. Mayo holds a National Park Service subsistence use permit (13.440 permit, CFR 36).¹ He and his family are from Cantwell, which is a resident zone community of Denali National Park. Mr. Mayo is unable to harvest moose and caribou because he now resides in a rural community (Healy) which does not have a positive customary and traditional use determination for moose in the Park.

If a person has a 13.440 subsistence eligibility permit, lives in the Park or lives in a resident zone community, that person must also live in a community or area that has a customary and traditional use determination for the desired species and harvest area (NPSa 2010:3). If a person has a 13.440 permit and lives in a community without a customary and traditional use determination for the species they wish to hunt, they may submit a proposal to the Federal Subsistence Board for an individual customary and traditional use determination.

Federal subsistence regulations allow the Board to make individual customary and traditional use determinations in National Park and Monument areas, but not in Preserve areas. National Park Service regulations include unique subsistence eligibility requirements for National Park Service lands. Fewer people have subsistence eligibility in National Park Service areas than other Federal public lands. Requests for individual customary and traditional use determinations are analyzed in the same way that a community or area request for a customary and traditional use determination is analyzed (FSB 1999:224). Subsistence harvests are authorized only in the ANILCA additions to Denali National Park.

Existing Federal Regulation

Federal Regulation Regarding Individual Customary and Traditional Use determinations for National Parks and Monuments

§__ .16 Customary and traditional use process

(a) The Board shall determine which fish stocks and wildlife populations that have been customarily and traditionally used for subsistence. These determinations shall identify the

¹ Individuals residing outside of Denali National Park and Preserve's resident zone communities who have a personal or family history of using the Park additions established by ANILCA in 1980 for subsistence purposes at the time ANILCA was passed, may obtain a special subsistence use permit (36 CFR 13.440). They must provide documentation of their traditional subsistence use, without the use of aircraft for access. Eligible subsistence users for Denali National Park and Preserve must also comply with the Federal Subsistence Management Regulations regarding the harvest of fish and wildlife (NPSb 2010).

specific community's or area's use of specific fish stocks and wildlife populations. For areas managed by the national Park Service, where subsistence uses are allowed, the determinations may be made on an individual basis.

Customary and Traditional Use Determination

Unit 13E—Moose

Rural residents of Unit 13, Chickaloon, McKinley Village, Slana and the area between mileposts 216–239 of the Parks Highway. No Federal subsistence priority for the residents of Denali national park headquarters

Unit 13E—Caribou

Rural residents of Units 11, 12, (along the Nabesna Road), 12, Chickaloon, McKinley Village, and the area between mileposts 216–239 of the Parks Highway. No subsistence priority for the residents of Denali National Park headquarters.

Proposed Federal Regulation

Federal Regulation Regarding Individual Customary and Traditional Use Determinations for National Parks and Monuments

§ __.16 *Customary and traditional use process*

(a) The Board shall determine which fish stocks and wildlife populations that have been customarily and traditionally used for subsistence. These determinations shall identify the specific community's or area's use of specific fish stocks and wildlife populations. For areas managed by the national Park Service, where subsistence uses are allowed, the determinations may be made on an individual basis.

Customary and Traditional Use Determination

Unit 13E—Moose

*Rural residents of Unit 13, Chickaloon, McKinley Village, Slana and the area between mileposts 216–239 of the Parks Highway **and Kevin Mayo**². No Federal subsistence priority for the residents of Denali national park headquarters.*

Unit 13E—Caribou

*Rural residents of Units 11, 12, (along the Nabesna Road), 12, Chickaloon, McKinley Village, and the area between mileposts 216–239 of the Parks Highway **and Kevin Mayo**. No subsistence priority for the residents of Denali National Park headquarters.*

² Names of individuals do not appear in regulation booklets, they are on a list maintained by the respective National Park Service subsistence manager.

Other Relevant Federal/National Park Service Subsistence Regulations

Federal Regulation Regarding Individual Customary and Traditional Use Determinations for National Parks and Monuments

36CFR§ 13.41 Applicability.

Subsistence uses by local rural residents are allowed pursuant to the regulations of this Subpart in the following park areas:

(a) In national preserves;

(b) In Cape Krusenstern National Monument and Kobuk Valley National Park;

(c) Where such uses are traditional (as may be further designated for each park or monument in Subpart C of this part) in Aniakchak National Monument, Gates of the Arctic National Park, Lake Clark National Park, Wrangell-St. Elias National Park, and the Denali National Park addition.

36CFR§ 13.440 Subsistence permits for persons whose primary, permanent home is outside a resident zone.

(a) Any rural resident whose primary, permanent home is outside the boundaries of a resident zone of a national park or monument may apply to the appropriate Superintendent pursuant to the procedures set forth in Sec. 13.51 for a subsistence permit authorizing the permit applicant to engage in subsistence uses within the national park or monument. The Superintendent shall grant the permit if the permit applicant demonstrates that,

(1) Without using aircraft as a means of access for purposes of taking fish and wildlife for subsistence uses, the applicant has (or is a member of a family which has) customarily and traditionally engaged in subsistence uses within a national park or monument; or

(2) The applicant is a local rural resident within a resident zone for another national park or monument, or meets the requirements of paragraph (a)(1) of this section for another national park or monument, and there exists a pattern of subsistence uses (without use of an aircraft as a means of access for purposes of taking fish and wildlife for subsistence uses) between the national park or monument previously utilized by the permit applicant and the national park or monument for which the permit applicant seeks a subsistence permit.

Extent of Federal Public Lands/Waters

Federal public lands comprise approximately 19% of Unit 13 E, and are managed by the National Park Service, Denali National Park.

Regulatory History

Requests for individual customary and traditional use determinations began almost as soon as the Federal Subsistence Board assumed management authority for subsistence on Federal public lands in 1990. Because of the proximity of the Parks Highway to Denali National Park, many of the first requests came from residents of this area (Norris 2002:229). Cantwell is the only resident zone community on the

highway, yet many people who live along the highway outside of Cantwell also participate in subsistence hunting in the Park (Norris 2002:229). Many of the initial individual customary and traditional use proposals were held up for years because of a huge backlog of proposals for community customary and traditional use determinations and lack of clarity as to whether or not individual customary and traditional use determinations were within the purview of the Federal Subsistence Board (Norris 2002: 229–232. In 1999, the Board finally addressed several proposals for individual customary and traditional use determinations. Later in 1999 the Board recognized one individual customary and traditional use determination for Denali National Park and several from Wrangell St. Elias National Park (Norris 2002:232, FSB 1999:222–243). The Board also denied some of these proposals due to lack of sufficient information exemplifying the eight factors Norris 2002:232; FSB 1999: 222–243).

Eight Factors for Determining Customary and Traditional Uses

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

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

Specific information on each of the eight factors is not required because a community or area seeking a customary and traditional use determination only has to “generally exhibit” the eight factors (50 CFR 100.16(b) and 36 CFR 242.16(b)).

The following information regarding Kevin Mayo's subsistence uses in Denali National Park and Preserve were derived from personal communication with Mr. Mayo (2009 pers. comm.).

The Mayo extended families have depended upon moose in the Cantwell area as their primary source of sustenance for four generations and have regularly and consistently hunted in Unit 13 for 45 years. Mr. Mayo's great grandfather, Alywn Smith, came to Alaska in 1937 on a steamship, initially settled in Anchorage, left the state during World War II, and then returned to Anchorage after the war. In 1964 he moved to Cantwell, married into a local Native family (Nellie Norton, sister of Bud Carlson [residents of Cantwell]). Soon after he arrived in Cantwell he began hunting and trapping on a regular basis in

the Cantwell Creek area. Mr. Mayo's maternal grandfather, Herman Cotter Sr. first arrived in Alaska in 1947 and initially lived in Anchorage and then moved to Cantwell in 1964. Prior to moving to Cantwell, Herman was a subsistence hunter and trapper in the Wrangell St. Elias area. Immediately after arriving in Cantwell, Herman, his brothers, and his father formed a corporation and bought the town of Cantwell. Herman continued his subsistence hunting, fishing, and trapping activities within the boundary of what is now the boundary of the ANILCA addition to Denali Park in Unit 13E. Mr. Mayo's mother, Vivian Cotter Mayo, was born in Anchorage and moved to Cantwell in 1965. In 1970 Vivian's husband, Scott Mayo, moved to Cantwell to work with the railroad. Since 1964, multiple generations of his extended family have lived in Cantwell and harvested caribou, moose, firewood, fish, and berries in the ANILCA addition.

Mr. Mayo and his extended family continue to hunt moose together every hunting season in the Cantwell Creek and Foggy Pass area. The Mayo family's camp is on state land near Cantwell Creek and the Foggy Pass area in Unit 13E right at the border of the ANILCA addition to the Park. Their traditional harvest area is within the ANILCA addition. Mr. Mayo began to hunt moose when he was fourteen years old and continues to hunt with his father, brother, and extended family. Mr. Mayo was an eligible subsistence user who resided in Cantwell (a Denali National Park resident zone community) his entire life prior to moving to Healy (Unit 20A) in 2004 where he and his family continue to reside. He is applying for an individual customary and traditional use determination because Healy does not have a customary and traditional use determination for moose and caribou in the ANILCA addition of Denali National Park.

Prior to 2004, with the exception of 2001–2002, Mr. Mayo routinely received Federal subsistence moose and caribou permits for Unit 13E. Mr. Mayo did not apply for a permit hunt in 2001–2002 because he was in Arizona for three months of training. Although Mr. Mayo currently is not qualified for a Federal subsistence moose or caribou permit because he resides in Healy, which has no customary and traditional use determination for moose or caribou, he continues to actively participate in his family's moose and caribou hunting traditions by helping with the butchering, packing, and processing of the moose and caribou.

The Mayo extended family travels to their hunting area to hunt moose by foot, tracked vehicles and off-road vehicles (ORV). The Mayo's have not used airplanes for hunting. The Mayo family continues a recurring pattern of use within the area using traditional methods and means which are characterized by efficiency and economy of effort. According to Mr. Mayo, one of the main benefits of tracked vehicle and a trailer is that the Mayo family can haul all their family and gear to camp in one load. Once the family sets up their camp, they walk about two miles to a hill where they sit and spot for a moose with binoculars. Once they spot moose, they walk to within shooting distance of the moose. After they shoot the moose (generally located within the ANILCA Park addition), they pack out the moose by foot to a designated ORV trail to camp and then return to haul out the moose. Once the moose is at camp, they hang sections of meat from a meat pole and cover it with a tarp. Moose are gutted, skinned, and quartered in the field and then packed by foot to a designated ORV trail and transported by tracked vehicle to camp. The Mayo's use all edible parts of the moose. Much of the meat is canned or stored in the freezer and some portions of the moose dried. Mr. Mayo uses handling techniques that he was taught by his father, grandfather, and great grandfather.

The most recent generation of the Mayo family has hunted in the area since 1971 and established their current camp in 1985. In the past, the Mayo family used to put their tent up and take it down after every hunting season. Recently they built a tent platform. Generally the extended family prefers to hunt close to their camp. If they hunt a distance from camp it is difficult to salvage the moose or caribou and the likelihood of bears getting into the moose/caribou meat increases. The family enjoys the social aspects related to spending extended time at hunting camp.

One moose will feed three families. The Mayo family targets moose that have antler spreads greater than 50 inches and avoid harvesting moose that are smaller than 50 inches because they do think there is not enough meat on the smaller moose.

Knowledge, skills, and the use of particular hunting areas are passed from generation to generation. Mr. Mayo's grandparents learned how to hunt in the Cantwell area and passed this knowledge on to their descendants. Before he shot his first moose, Mr. Mayo accompanied his father, mother, and other relatives on moose hunts, long before he was actually old enough to hunt himself. Mr. Mayo continues to harvest moose and caribou with his family thereby passing these skills to his children. Hunting, trapping, berry picking, and fishing are significant resources upon which the Mayo family depend. Moose and caribou hunting is a family event, participated and shared by all the family members within and between households and generations.

It is the Mayo's family custom to share moose/caribou and equipment. If a family member or friend does not get enough meat for the season it is expected that the Mayo family will share their harvest with that person or household. For example, Mr. Mayo's mother shares moose/caribou meat with her sister, mother, and Cantwell elders.

Mr. Mayo's great-grandparents passed down their traditional subsistence lifestyle to their extended multi-generational family. Typically the extended family harvests one moose per hunting season or two caribou each season. Wild food is on the table at least four days per week. The Mayo family enjoys eating moose and caribou meat because it is healthful and fall moose and caribou hunting is a family tradition.

Moose and caribou were and continue to be the Mayo families' primary source of meat. The family harvests a variety of subsistence resources such as berries, bear, ptarmigan, fish and furbearers including beaver, marten, fox, wolf, and lynx. These resources fulfill the social and nutritional needs of the family. Moose and caribou hunting are a significant social and family effort.

Effects of the Proposal

If adopted, this proposal would recognize Mr. Mayo's customary and traditional uses of moose and caribou in Unit 13E and would allow Mr. Mayo to pass his traditional subsistence lifestyle to his children. Because this customary and traditional use determination is for one individual who has a history of moose and caribou harvests in this area, the effects on other users should be minimal.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-31.

Justification

Mr. Mayo possesses a National Park Service subsistence use permit (13.440 permit) for Denali National Park. Mr. Mayo provided information regarding his family's customary and traditional use of moose and caribou that exemplify the eight factors for customary and traditional use determinations.

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**DRAFT STAFF ANALYSIS
WP10-32a**

ISSUES

Proposal WP10-32, submitted by Paul Genne and Dennis Ressler, requests a positive customary and traditional use determination for Hope and Sunrise for caribou in Unit 7 as well as season and harvest limits. The customary and traditional portion of the proposal is addressed in this analysis for Proposal WP10-32a and the season and harvest limit portion is addressed in the analysis for Proposal WP10-32b.

DISCUSSION

The proponent is requesting a positive customary and traditional use determination for caribou in Unit 7 for Hope and Sunrise residents because it would re-establish the customary and traditional use of this resource for the residents of Hope and Sunrise (**Map 1**). Based on historical reports, caribou were relatively abundant on the Kenai Peninsula prior to the late 1800s (Porter 1893, Sherwood 1974). Large forest fires on the Peninsula in the late 1800s, including a massive fire in 1883, destroyed a significant amount of caribou habitat and contributed to a decline in the Kenai Peninsula caribou population (Leopold and Darling 1953; Sherwood 1974). It is thought that caribou were extirpated on the Kenai Peninsula by about 1912 (Lutz 1956). The Kenai Mountains Caribou Herd in Unit 7 was derived from reintroductions of caribou on the Kenai Peninsula in 1965 and 1966. The State has had a caribou hunt in Unit 7 since 1972. The State’s Kenai Mountains Caribou Hunt is a drawing hunt, which is available to all Alaska residents and nonresidents (including non-US residents). For more details on the history of caribou in Unit 7, see the analysis for Proposal WP10-32b.

Existing Federal Regulations

Unit 7—Caribou
Unit 7

Customary and Traditional Use Determination
No Federal subsistence priority.

Proposed Federal Regulations

Unit 7—Caribou
Unit 7

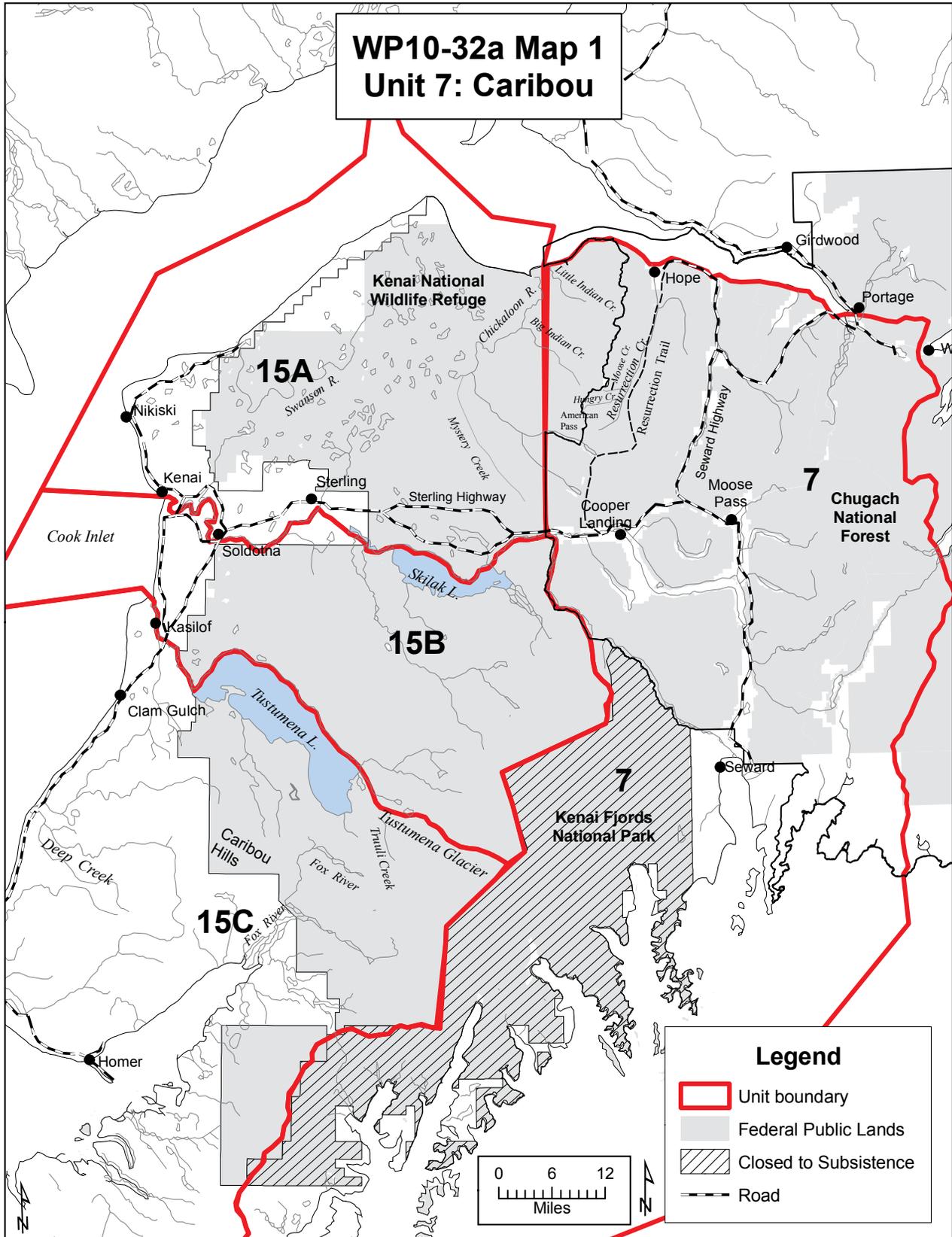
Customary and Traditional Use Determination
Residents of Hope and Sunrise.

Extent of Federal Public Lands

Approximately 78% of the lands in Unit 7 are comprised of Federal public lands, consisting of 50% Chugach National Forest lands managed by the U.S. Forest Service (USFS), 23% Kenai Fjords National Park lands managed by the National Park Service, and 5% of lands managed by the Kenai National Wildlife Refuge (NWR). The Kenai Fjords National Park lands are not open to subsistence uses (see **Map 1**).

Regulatory History

The Federal Subsistence Board (Board) has addressed customary and traditional use determinations for the Kenai Peninsula since the inception of the Federal Subsistence Management Program in 1990. The



Board adopted the State’s customary and traditional use determinations in 1990. At that time the State determined the road-connected portion of the Kenai Peninsula—which is most of Units 7 and 15—to be a nonsubsistence area. As a result of the State’s nonsubsistence area, the Federal Board then determined that all wildlife resources in Units 7 and 15 had a “no Federal subsistence priority” customary and traditional use determination. For a summary of the regulatory history, see **Appendix A**. While the Board has revisited its determinations for Unit 15, this is the first time that a proposal has been submitted for the Board’s consideration to change the “no Federal subsistence priority” for Unit 7 for caribou.

The request in Proposal WP10-32a is the first request from Hope residents to include Hope in any of the customary and traditional use determinations. The Board has recognized the use of “all fish” in the Federal public waters of the Kenai River Area partially located within Unit 7 by residents of Hope, but this was through an analysis of a request for a customary and traditional use determination for the entire Kenai Peninsula.

Reintroduced and Introduced Species: The Board has recognized the customary and traditional uses of reintroduced species, for example, muskoxen in Units 22, 23, and 26. Elk and deer were introduced in Unit 3 and the Board has recognized customary and traditional uses for these species in Unit 3. Deer were introduced in Unit 8 and the Board has recognized customary and traditional uses of the species in Unit 8. Moose were introduced near Cordova in Unit 6 and the Board has recognized customary and traditional uses of this species as well.

Community Characteristics

Hope is a small, unincorporated community located in Unit 7 within the Kenai Peninsula Borough with an estimated permanent year-round population of 148 in 2008 (ADCRA 2008). Hope is recognized as a rural community by the Federal Subsistence Board. Hope is located on the northern end of the Kenai Peninsula, on the southshore of the Turnagain Arm of Cook Inlet, 86 miles from Anchorage to the north and 103 miles from Kenai to the South (**Map 1**). The community is within the Chugach National Forest and is the northern terminus of the popular Resurrection Trail. Almost half (48%) of the houses in Hope are vacation houses or cabins. There is one school with eleven students. The school and local businesses are the only employment. Alaska Natives lived in the area later named in 1896 by miners “Hope City.” At the turn of the 20th century, about half of Hope’s residents were Native (Mishler 1985). The Hope post office began operating in 1987 (ADCRA 2008).

Sunrise is only seven miles from Hope and had a year-round population of 22 in 2008 (**Map 1**). Sunrise is a census designated place and has very little in the way of a community and is considered a “subcommunity” of Hope. Sunrise was established on Sixmile Creek and was the dominant community during the early part of the 20th century, but the population declined and had no residents in 1940 (Barry 1973). Gradually people have moved into Sunrise since the 1940s, but the population continues to be small. There are no schools, businesses, and government organizations. Any children in Sunrise would attend school in Hope; Sunrise residents receive their mail in Hope. Because of the close proximity of Sunrise to Hope and the interconnectedness between the two communities, Sunrise is considered a part of Hope for this analysis. All references in this analysis to Hope’s uses of caribou include Sunrise.

Dena’ina Athabascans inhabited the Hope area long before the miners arrived. The Dena’ina had a settlement at the mouth of the Resurrection River and one at Chickaloon Bay. Once the miners moved in, the Dena’ina communities declined due to out-migration and mortality from disease (Barry 1973). Some of the Dena’ina moved to Point Possession, another Athabaskan community, 30 miles to the west. The inhabitants of Point Possession were decimated by the flu epidemic of 1918 and the community never recovered (Holmes 1985).

Hope became connected by road to Seward in 1951 (Buzzell and McMahan 1986). This road system greatly enhanced the opportunity for tourists and seasonal residents to enjoy the wildlife, scenery, and sport fishing available in the Hope area.

Eight Factors for Determining Customary and Traditional Uses

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

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

Specific information on each of the eight factors is not required because a community or area seeking a customary and traditional use determination only has to "generally exhibit" the eight factors (50 CFR 100.16(b) and 36 CFR 242.16(b)).

Existing information indicates that Hope residents traditionally harvested the resources available to them, including caribou. Hunting, fishing, trading, bartering, and trapping of resources were important activities for the early residents of Hope (Barry 1973) and continued to be an important part of Hope residents' lifestyle into the 1950s (Seitz et al. 1994). Caribou were harvested by the early inhabitants of the Kenai Peninsula (de Laguna 1975, Buzzell and McMahan 1986). Osgood (1976) [1937] discusses the use of caribou among the Dena'ina in general, and Ackerman (1975) mentions the use of caribou by the Kenaitze Tribe specifically. Pedersen (1983) discusses the use of caribou in the beginning of the 1900s. Seitz et al. (1994) documents the contemporary use of caribou by Hope residents.

Caribou existed on the Kenai Peninsula until the early 1900s. The last known sighting of caribou during that period was about 1912. Today there are four small herds which are the result of reintroductions in 1965 to 1966 and 1985 to 1986. The Kenai Mountains Caribou Herd normally ranges in the area drained by the Chickaloon River, Big Indian Creek, and Resurrection Creek in Unit 7 (FWS 1993:25). The contemporary harvest of caribou is dictated by regulations and restrictions. Hope residents have harvested caribou in small numbers as a result of the limited harvest opportunities on the Kenai Mountains Caribou Herd since its reintroduction in the mid-1960s. The first hunting season occurred in 1972 and a State

season has occurred every year since. Since 1977, ADF&G has managed the hunt using a limited drawing permit system that has been open to residents as well as nonresidents (McDonough 2007). Generally there have been few permits available for a large number of people applying for permits, with a 10 to 12% chance of drawing a permit in recent years (see Proposal WP10-32b for a discussion of harvest permit history).

A household survey in 1990–1991 indicated that even with low numbers locally available caribou during the study year, caribou ranked second to moose among large mammals in frequency of use and harvest quantities (Seitz et al. 1994). During the study period, eight caribou, or about eight pounds per person, were harvested by Hope residents. Of the sampled households, 20% used caribou, 9% hunted and 7% harvested caribou (ADF&G 2009). The Alaska Department of Fish and Game does not have data on the number of caribou harvested by Hope residents from 1972 through 1981, however, a Hope resident reported that he and other Hope residents harvested caribou from the Kenai Mountains Caribou Herd in Unit 7 between 1972 and 1982 (Marrs 2009, pers. comm.). The ADF&G harvest ticket database indicates that 22 caribou have been harvested from 1981 through 2008 by Hope residents in Unit 7, although the last time a Hope resident harvested a caribou in Unit 7 was in 1997. Since 1988, Hope residents have received permits to hunt caribou sporadically (**Table 1**, ADF&G 2010). From 1981 through 2008, 56 Hope residents have received permits, 41 have hunted, and 22 have been successful (**Table 1**). In 1985 and 1986, three caribou were harvested each of those years. After 1986, caribou were only harvested in four years through 2008 in Unit 7 from the Kenai Mountains Caribou Herd, with a total of five caribou harvested (**Table 1**). It has become difficult for Hope residents to get a caribou permit since the drawing permit system was implemented by ADF&G. The State drawing permit is available to both Alaska residents and nonresidents. The success rate of getting a drawing permit was 12% in 2008. A local Hope resident, who has participated in about 20 caribou hunts since 1972, stated that he applies for a caribou permit to hunt in Unit 7 every year, but has been unable to receive a permit in years (Marrs 2009, pers. comm.).

Caribou also are harvested by Hope residents outside of Unit 7. From 1977 through 2009, 80 caribou were harvested outside of Unit 7 by Hope residents (**Table 2**; ADF&G 2010). While Hope residents have a history of harvesting caribou outside of Unit 7, this analysis only concerned with the customary and traditional uses of caribou from Unit 7.

No information is available concerning the early settler or Dena'ina caribou hunting seasons in Unit 7. Current hunting regulations govern the seasons and harvest limits as well as the available permits. Caribou are hunted under State regulations from mid-August through September (FWS 1993:25). Currently there is no Federal subsistence priority for caribou in Unit 7.

The Hope caribou harvest area within Unit 7 is in a 25 to 30 mile arc south of the community and is extremely difficult to access (FWS 1993). This is the area used by the Kenai Mountains Caribou Herd and all of this area is Federal public land managed by the U.S. Forest Service. The ADF&G harvest ticket database indicates that all of Hope residents who held caribou permits to harvest caribou in the Kenai Peninsula from 1984 through 1997 hunted caribou in Unit 7. As discussed previously, no harvests have occurred in Unit 7 since 1997 (ADF&G 2007). Mapping conducted by ADF&G in 1991 indicated that Hope residents harvested caribou in Unit 7 (ADF&G 1991).

No data are available on the methods and means used by Hope residents to harvest large mammals, including caribou, except that the primary means of access for all hunters of the Kenai Mountains Caribou Herd is hiking in on foot or with horses, due to the difficult access (FWS 1993:27).

Table 1. Hope caribou harvest and permit data for the Kenai Mountains Caribou Herd in Unit 7, 1981-2008 (ADF&G 2009 and 2010).

| Year | Total Number of Permits Issued | Number of Hope Permittees | Number of Permittees that Hunted | Number of Caribou Harvested | Percent Chance of Winning a Permit |
|--------------|--------------------------------|---------------------------|----------------------------------|-----------------------------|------------------------------------|
| 1981 | 100 | 4 | 2 | 0 | 32 |
| 1982 | 150 | 7 | 6 | 8 | No Data |
| 1983 | 150 | 1 | 1 | 0 | 33 |
| 1984 | 200 | 5 | 5 | 3 | 31 |
| 1985 | 200 | 17 | 11 | 3 | 24 |
| 1986 | 250 | 4 | 3 | 3 | 30 |
| 1987 | 250 | 2 | 2 | 1 | 35 |
| 1988 | 150 | 0 | 0 | 0 | 16 |
| 1989 | 150 | 0 | 0 | 0 | 15 |
| 1990 | 50 | 0 | 0 | 0 | 5 |
| 1991 | 100 | 1 | 1 | 1 | 7 |
| 1992 | 100 | No Data | No Data | No Data | 8 |
| 1993 | 200 | 0 | 0 | 0 | 13 |
| 1994 | 200 | 0 | 0 | 0 | 13 |
| 1995 | 200 | 0 | 0 | 0 | 15 |
| 1996 | 250 | 3 | 2 | 2 | 24 |
| 1997 | 250 | 4 | 3 | 1 | 29 |
| 1998 | 250 | 0 | 0 | 0 | 19 |
| 1999 | 250 | 2 | 2 | 0 | 17 |
| 2000 | 250 | 1 | 0 | 0 | 15 |
| 2001 | 250 | 2 | 0 | 0 | 14 |
| 2002 | 250 | 0 | 0 | 0 | 14 |
| 2003 | 250 | 0 | 0 | 0 | 13 |
| 2004 | 250 | 0 | 0 | 0 | 13 |
| 2005 | 250 | 0 | 0 | 0 | 14 |
| 2006 | 250 | 0 | 0 | 0 | 14 |
| 2007 | 250 | 1 | 1 | 0 | 12 |
| 2008 | 250 | 2 | 2 | 0 | 12 |
| Total | --- | 56 | 41 | 22 | --- |

Caribou meat was traditionally dried, smoked, or frozen outdoors. No data are available concerning contemporary methods of handling, preparing, preserving, or storing caribou by Hope residents. It is likely that most caribou meat is preserved by freezing (FWS 1993:27).

No data are available concerning the handing down of knowledge of caribou hunting skills, value, and lore from generation to generation.

In a study conducted in Hope in 1991, most households were involved in giving or receiving wild resources. About 90 percent of households received at least one kind of wild resource from another household. Caribou was received by 13% of households and was given by 7% of households (ADF&G 2009). McCart (1983) also refers to a wide sharing of wild resources in the 1930s by Hope residents.

Residents of Hope depend on a wide diversity of fish and wildlife resources, harvesting an average of 9.1 different kinds of resources, similar to other road-connected communities on the Kenai Peninsula (Fall et al. 2000:240–245). Almost all Hope households (94%) hunted, fished, or gathered wild foods and 100% used at least one type of wild resource. The per capita harvest of wild resources, measured in pounds of useable weight, was 110.7 pounds while the mean household harvest was 262.2 pounds. The average number of wild resources used in the communities and areas in the Kenai Peninsula ranged from 7.6 (North Fork Road) to 21.5 (Nanwalek) (Fall et al. 2000:240–245).

Table 2. Caribou harvests by Hope residents outside of Unit 7, 1977 – 2009 (ADF&G 2010).

| Year | Number of Caribou Harvested |
|--------------|-----------------------------|
| 1977 | 2 |
| 1978 | No data |
| 1979 | No data |
| 1980 | No data |
| 1981 | 1 |
| 1982 | No data |
| 1983 | No data |
| 1984 | 1 |
| 1985 | No data |
| 1986 | No data |
| 1987 | No data |
| 1988 | 1 |
| 1989 | No data |
| 1990 | 2 |
| 1991 | No data |
| 1992 | No data |
| 1993 | 4 |
| 1994 | 5 |
| 1995 | 6 |
| 1996 | 11 |
| 1997 | 6 |
| 1998 | 2 |
| 1999 | 8 |
| 2000 | 6 |
| 2001 | 2 |
| 2002 | 5 |
| 2003 | 3 |
| 2004 | 3 |
| 2005 | 2 |
| 2006 | 4 |
| 2007 | 4 |
| 2008 | No data |
| 2009 | 2 |
| Total | 80 |

in Unit 7 from 1981 through 2008. Mapping of Hope's subsistence use areas confirms that caribou are harvested by Hope residents in Unit 7.

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Effects of the Proposal

If the proposal is adopted, the customary and traditional use of caribou by the residents of Hope in Unit 7 would be recognized. This would enable Federally qualified subsistence users to harvest caribou under Federal subsistence regulations from Federal public lands in Unit 7, should a season be established.

If the proposal is rejected, Hope residents could continue to apply for a State drawing permit to harvest caribou under State regulations, although the competition with applicants from other areas of Alaska and nonresidents (including other parts of the U.S. and other countries) for one of the 250 permits makes it difficult for Hope residents to obtain a permit.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-32a.

Justification

Hope (including Sunrise) residents have a customary and traditional pattern of harvesting caribou in Unit 7. Early settlers of Hope harvested caribou in the early part of the 20th century in Unit 7. Hope residents demonstrate contemporary use of caribou in Unit 7, though in small numbers as a result of the limited harvest opportunities on the Kenai Mountains Caribou Herd since its reintroduction in the mid-1960s. A Hope resident reported harvesting caribou from the Kenai Mountains Caribou Herd beginning in 1972. The ADF&G harvest ticket database indicates that 22 caribou have been reported harvested by Hope residents

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APPENDIX A

Summary of the Regulatory History of the Federal Subsistence Board Customary and Traditional Use Determinations for Caribou on the Kenai Peninsula

- 1990: Federal Subsistence Management Program established; State’s customary and traditional use determinations adopted.
 - State considers that the road-connected portion of the Kenai Peninsula—which is most of Units 7 and 15—is a nonsubsistence area. As a result, the Federal Board determined that Unit 7 had “no subsistence” determinations for caribou.
- April 1994: Federal Subsistence Board (Board) deferred all customary and traditional use determinations for all large mammals on the Kenai Peninsula until a process and schedule for making customary and traditional use determinations statewide could be established (FSB 1994).
- July 1995: Board continued to defer customary and traditional use determinations for Hope and other Kenai Peninsula communities (FSB 1995).
- May 1996: After an extensive Federal process involving data gathering, public hearings, and court decisions, Board made the customary and traditional use determinations for Unit 15 moose for Nanwalek, Ninilchik, Port Graham and Seldovia, but decisions on the remaining species and communities were deferred until rural determinations on the Kenai Peninsula could be made (FSB 1996).
- 2003: Board addressed customary and traditional use determinations for moose in Unit 15, but again deferred making customary and traditional use determinations for remaining communities and resources on the Kenai Peninsula until the completion of a report by the Institute for Social and Economic Research on rural determination and methodology and the subsequent review of rural determinations as required by regulation on a 10-year basis (FSB 2003:102).
- 2006: Board made its final rural determinations in 2006.

| WP10-32b Executive Summary | |
|---|--|
| General Description | Proposal WP10-32, submitted by Paul Genne and Dennis Ressler, requests that a caribou harvest season and limit be established in Unit 7. The proposal also requests a positive customary and traditional use determination for Hope and Sunrise residents for caribou in Unit 7, which is addressed in the analysis of Proposal WP10-32a. Proposal WP10-32b is only applicable if the Federal Subsistence Board adopts Proposal WP10-32a and recognizes the customary and traditional uses of Hope for caribou in Unit 7. |
| Proposed Regulation | Unit 7—Caribou <i>One caribou</i> <i>Aug. 10–Dec. 31</i> |
| OSM Preliminary Conclusion | Unit 7— north of the Sterling Highway and west of the Seward Highway <i>One caribou by Federal registration permit only.</i> <i>No Federal Open Season</i> <i>Aug. 10–Dec. 31</i> <i>The Seward District Ranger is authorized to close the season based on conservation concerns in consultation with ADF&G and the Chair of the Southcentral Alaska Subsistence Regional Advisory Council.</i> Unit 7— remainder <i>No Federal Open Season</i> |
| Southcentral Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS WP10-32b

ISSUES

Proposal WP10-32, submitted by Paul Genne and Dennis Ressler, requests that a caribou harvest season and limit be established in Unit 7. The proposal also requests a positive customary and traditional use determination for Hope and Sunrise residents for caribou in Unit 7, which is addressed in the analysis of Proposal WP10-32a. Proposal WP10-32b is only applicable if the Federal Subsistence Board adopts Proposal WP10-32a and recognizes the customary and traditional uses of Hope for caribou in Unit 7.

DISCUSSION

This proposal requests a Federal subsistence season and harvest limit so residents of Hope and Sunrise have opportunity to participate in the Unit 7 caribou harvest under Federal subsistence regulations. There is a State hunting season for caribou in part of Unit 7 that requires a drawing permit that is available to Alaska residents and non-residents.

On July 31, 2009, one of the two proponents clarified that he would like to have a harvest limit of one caribou with an August 10 to December 31 season (Ressler 2009, pers. comm.).

Existing Federal Regulation

Unit 7—Caribou

No Federal open season

Proposed Federal Regulation

Unit 7—Caribou

One caribou

Aug. 10–Dec. 31

Existing State Regulation

Unit 7—north of the Sterling Highway and west of the Seward Highway

One caribou by permit DC001

Aug. 10–Dec. 31

Unit 7— remainder

No open season

Extent of Federal Public Lands

Federal public lands comprise approximately 78% of Unit 7. The U.S. Forest Service (USFS) manages 50% (Chugach National Forest), the U.S. Fish and Wildlife Service (FWS) 5% (Kenai National Wildlife Refuge), and the National Park Service 23% (Kenai Fjords National Park, which is closed to subsistence harvest) (**Map 1**).

Regulatory History

There has been a State hunting season for the Unit 7, Kenai Mountains Caribou Herd since 1972. From 1972 to 1976, ADF&G issued an unlimited number of registration permits, and the season was closed by emergency order when the caribou harvest exceeded sustainable limits. Since 1977, ADF&G has managed the Kenai Mountains Caribou Herd using a limited drawing permit system (McDonough 2007). The State has issued 250 drawing permits per year for one caribou of either sex from the Kenai Mountain Caribou Herd since 1996 (McDonough 2007). The State currently requires successful hunters to report within 10 days of harvest, and unsuccessful hunters to report within 15 days of season end (ADF&G 2009).

The State season for the Kenai Mountains caribou hunt has changed over time (Selinger 2005). Between 1993 and 1996, the hunting season was August 10 to September 30. In 1997 and 1998, the season was August 10 to September 30 and November 10 to December 10. From 1999 to present, the season has been August 10 to December 31.

Biological Background

When the Russians began occupying the Kenai Peninsula in 1786, caribou were plentiful and there were some moose (Pedersen 1976). Kenai Peninsula caribou were reasonably abundant in 1850 and 1890 (Seton-Karr 1887; Porter 1893; Palmer 1938). ADF&G et al. (1994) observed that although reports indicate that Kenai Peninsula caribou distribution was widespread, suitable habitat is limited, and caribou were probably never numerous.

There were large forest fires on the Kenai Peninsula beginning in the late 1800s, including a massive fire in 1883 (Sherwood 1974; Dufresne 1946). Widespread burning that accompanied Euroamerican settlement of the Kenai Peninsula contributed to a decline in the caribou population and increase in the moose population (Leopold and Darling 1953; Sherwood 1974; Spencer and Hakala 1964; Davis and Franzmann 1979; Klein 1965; Lutz 1956). Caribou depend upon climax vegetation, and as such, fires are detrimental (Leopold and Darling 1953; Lutz 1956). Lutz (1956) summarized information that suggested that it can take from 20 to more than 100 years for caribou/reindeer habitat to recover after a fire. A recent annotated bibliography on the role of wildfires in caribou ecology (Saperstein and Joly 2004) summarizes research done on the complexity of this relationship.

Settlers, miners, traders, and sport hunters brought improved firearms to the Kenai Peninsula. Caribou were harvested for their meat, hides and antlers with no laws to limit the harvest. It is thought that hunters quickly over-exploited Kenai Peninsula caribou (Elliott 1902; Davis and Franzmann 1979; Sherwood 1974); caribou are often very visible, as they favor open country. Uncontrolled killing of wildlife was likely worse in the period of a widely dispersed trapper-prospecter population (Leopold and Darling 1953). Market hunters obtaining meat for mining camps may have killed most of the remaining original Kenai Peninsula caribou population (ADF&G et al. 1994). From 1901 to 1911 there were reports of remnants of the caribou population from the southern, western, northern and central part of the Kenai Peninsula (Osgood 1901; Elliot 1901; Shea 1910 and 1911; Shiras 1912). It is thought that caribou were extirpated on the Kenai Peninsula by about 1912 or 1913 (Lutz 1956; Spencer and Hakala 1964).

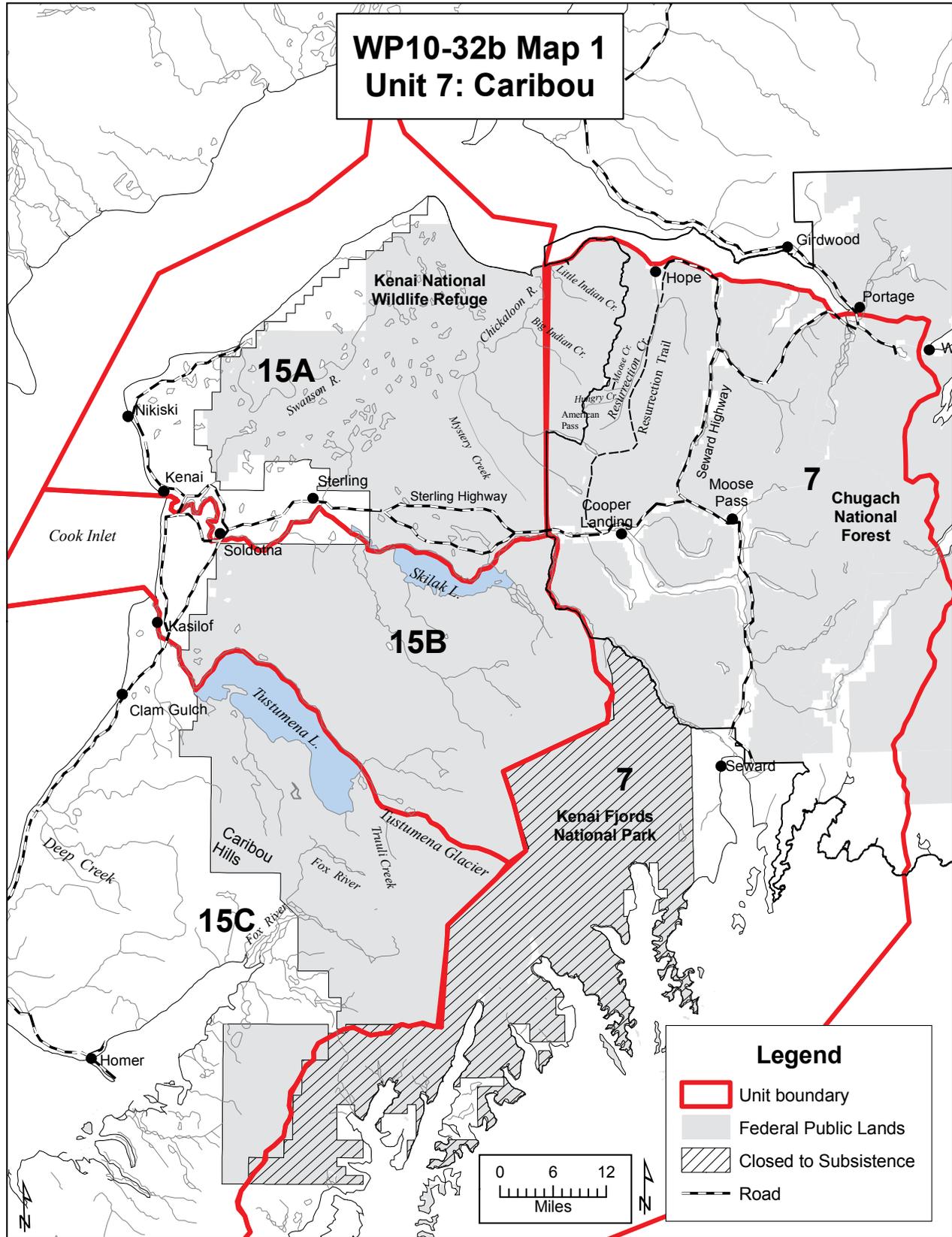
A 1952 FWS survey concluded that the range conditions on the Kenai Peninsula could support caribou (Alaska Game Commission 1952). In 1964, ADF&G, the U.S. Bureau of Sport Fisheries and Wildlife, and the USFS considered reintroducing caribou to the Kenai Peninsula (Lentfer 1965). Cooperative agreements for the reintroduction and management of Kenai Peninsula caribou were signed between these three agencies. Caribou transplants were conducted by ADF&G with funds provided by the Federal Aid

in Wildlife Restoration Act (Burriss and McKnight 1973). In 1965, 15 Nelchina caribou (3 bulls and 12 cows) were released at Chickaloon River and Mystery Creek on the Kenai Peninsula (**Map 1**) (Burriss and McKnight 1973; ADF&G et al. 1994). This first release was problematic; 14 animals died from the drug and transport prior to release. In 1966, 29 more Nelchina caribou (3 bulls and 26 cows) were released near Sterling (**Map 1**) (Burriss and McKnight 1973; ADF&G et al. 1994). Some of the caribou from one or both of these releases migrated to the high country to colonize the northern portion of the Kenai Mountains in Unit 7 (Kenai Mountains Caribou Herd). Others colonized a portion of the lowlands in Subunit 15A north of the Kenai Airport to Swanson River and in the extreme western portion of 15B (Kenai Lowlands Caribou Herd).

The Kenai Mountains Caribou Herd numbered 119 animals in November 1970, 162 in November 1971, and 214 in December 1972 (Burriss and McKnight 1973). The Kenai Mountains Caribou Herd grew to a pre-hunting season population of 339 animals in 1975 (Selinger 2005). Hunters reduced the population to 193 caribou by 1977 (Selinger 2003). The pre-hunting season herd population estimates in 1985 and 1988 were 434 and 305 caribou respectively (Selinger 2003). The herd population estimate ranged from 300-500 caribou from regulatory years 1995/96 to 2005/2006 (**Table 1**; Selinger 2003 and 2005; McDonough 2007). ADF&G's management objective for the Kenai Mountains Caribou Herd is to maintain a post-hunt population of 300-400 animals (McDonough 2007). The calf to cow ratio ranged from 20-34:100 when composition counts were done between 1985 and 1996 (Selinger 2003; ADF&G et al. 1994). During this same period the bull to cow ratio was 37-44:100 (Selinger 2005; ADF&G et al. 1994). Average weight of yearling caribou was among the highest in Alaska, indicating good nutrition (Crowser 2002).

| Regulatory Year | Date/Timing | Estimated Herd Size | Comments |
|-----------------|---------------------|---------------------|---------------|
| 1995/96 | March 14, 1996 | 450 | aerial survey |
| 1996/97 | March 14, 1997 | 500 | aerial survey |
| 1997/98 | February 27, 1998 | 475 | aerial survey |
| 1998/99 | January 7, 1999 | 425 | aerial survey |
| 1999/00 | March 5, 2000 | 325 | aerial survey |
| 2000/01 | March 31, 2001 | 400 | aerial survey |
| 2001/02 | Oct. 23, 2001 | 375 | aerial survey |
| 2002/03 | post-hunting season | 300 | No survey |
| 2003/04 | post-hunting season | 300 | No survey |
| 2004/05 | post-hunting season | 325 | aerial survey |
| 2005/06 | post-hunting season | 325 | No survey |

Reintroductions in 1985 and 1986 established the Fox River Caribou Herd (McDonough 2007). The Fox River Caribou Herd range is south of the Tustumena Glacier between upper Fox River and Truuli Creek in Subunit 15C (**Map 1**). Some caribou from this herd occasionally move west into Unit 7, toward Seward (McDonough 2007). Although caribou inhabited the Seward area more than 100 years ago (Porter 1893, Sherwood 1974), it is unknown if the small number of dispersing animals is enough to establish a caribou population in this part of Unit 7 (McDonough 2007). The Fox River Caribou Herd peaked in



1998 at nearly 100 caribou and now appears to be much lower and is possibly no longer a viable herd (McDonough 2007).

Efforts to reestablish caribou on the Kenai Peninsula have met with limited success. Crowser (2002) observed that it appears that the Kenai Mountains Caribou Herd is currently only using a portion of the available historic habitat. It appears that the Kenai Mountains Caribou Herd does not mix with Kenai lowland herds (Crowser 2002). The Kenai Mountains Caribou Herd was established by some portion of the survivors from only 44 caribou (6 males and 38 females) that were released on the Kenai lowlands more than 40 years ago. Based on the very small gene pool, it is likely that inbreeding and lack of genetic variability (Lockran et al. 2009; O'Grady et al. 2006; Keller and Waller 2002) are limiting caribou reproduction, survival and the harvestable surplus.

Habitat

Alaska's barren-ground caribou (*Rangifer tarandus granti*) prefer treeless tundra during all seasons and sometimes winter in boreal forest; calving areas are usually located in mountains or on open tundra (Harper 2007). This Kenai Mountains Caribou Herd occupies mostly alpine tundra habitat between elevations of approximately 2,000 to 4,500 feet (ADF&G et al. 1994). This herd exhibits strong fidelity to approximately 205 mi² of winter range habitat on the south-facing, windblown ridges of that portion of the Kenai Mountains bordered by American Pass on the south, Little Indian Creek on the north, Big Indian Creek on the west, and Resurrection Creek on the east (**Map 1**) (Selinger 2003; ADF&G et al. 1994). The calving ground extends from American Pass to the headwaters of Big Indian Creek, including the headwaters of American, Hungry and Moose creeks (**Map 1**) (ADF&G et al. 1994). In summer the Kenai Mountains Caribou Herd expands its range to include areas east and south of Resurrection Creek to the Seward and Sterling highways; the summer range is approximately 560 mi² (Selinger 2003; ADF&G et al. 1994). The herd occupies habitat which is managed almost exclusively by the Chugach National Forest and Kenai National Wildlife Refuge. This land status provides protection for this herd's critical habitat year-round. The habitat utilized by the herd was affected by wildfires during the 1990s; this could be affecting the productivity of the herd (Crowser 2002).

Harvest History

When the Russians began occupying the Kenai Peninsula in 1786, Kenai Natives were using caribou skins for clothing. Both men and women wore "long shirts of caribou hide that fell to the knees... and loose boots of caribou" (Pedersen 1976). Hunting was unregulated by the Federal Government in Alaska through the 1800s. Placer gold mining operations on Resurrection Creek began in 1888 (Crowser 2002; Kenai Peninsula 2010). During the 1990s prospectors spread throughout the Kenai Mountains searching of gold; Hope and Sunrise were the center of activity (Cassidy and Titus 2003). Transient miners harvested fish and wildlife that they needed for food. Extensive hydraulic and hand placer mining began on Resurrection Creek in 1895 (Jansons et al. 1984). In 1896 the population of the Hope/Sunrise area grew to 3000 people, more than any other community in Alaska at that time (Cassidy and Titus 2003, Kenai Peninsula 2010). Some miners abandoned mining to work as professional market hunters (Sherwood 1981). Market hunters provided meat for the railroad and mining companies (Sherwood 1981; Cassidy and Titus 2003). Meat from wildlife was sold locally; heads, horns, and hides were exported from the state and sold (Sherwood 1981). As late as 1898, large numbers of caribou were "at least occasionally taken" on the Kenai Peninsula (Lutz 1956). Lee (1899) harvested three caribou in 1898 while trophy hunting near the head of Kachemak Bay. Lee noting that "game is wantonly killed by market hunters every winter, and if this is not soon put a stop to it will be entirely exterminated." Allen (1901) reported that the Andrew Stone expedition of 1900 collected three caribou from the Kenai

Peninsula for the American Museum of Natural History. Stone reported that caribou soon would be exterminated from the Kenai Peninsula by hunters who sold antlers, “at good prices for shipment to San Francisco.” The Alaska Game Law of 1902 prohibited some wildlife exports and sales (Sherwood 1981). The Governor of the Territory of Alaska was authorized to hire game wardens starting in 1908 (Cassidy and Titus 2003). The Alaska Game Law of 1908 prohibited the killing of caribou on the Kenai Peninsula and restricted the shipment of heads and trophies (Alaska Game Regulations 1910). These regulations exempted the killing of Kenai Peninsula caribou for food or clothing by Natives, miners or explorers, when in need of food. In 1909, the Game Warden Vian raised concern to Territorial Governor Clark about the exception to the 1908 Alaska Game Law noted above (Vian 1909). In 1911, Game Warden Shea requested the Secretary of Interior’s help protect Kenai caribou with changes to the game law (Shea 1911). The Alaska Game Law of 1912 retained the prohibitions against killing caribou on the Kenai Peninsula as well as the exception for food or clothing for Natives, miners and explorers, when in need of food (Alaska Game Regulations 1913). However, laws and regulations came too late to save Kenai Peninsula caribou from extirpation.

Following caribou reintroductions in 1965 and 1966 and the establishment of a small herd in the northern portion of the Kenai Mountains, the State allowed hunting beginning in 1972. In regulatory years 1993/94 to 2008/09, the reported State harvest (drawing permit DC001) of Kenai Mountains Caribou Herd was 17-29 animals/year (**Table 2**; ADF&G 2009). During those years, most people that received a State DC001 drawing permit did not hunt, and only 7.6-11.6 % of those that received a permit, harvested a caribou. From regulatory years 1999/00 to 2005/06, even though the season extended from August 10 to December 31, 91% of the harvest occurred in August and September (Selinger 2003 and 2005; McDonough 2007).

Table 2. Kenai Mountains caribou harvest in the State DC001 drawing permit hunt 1993-2008 (ADF&G 2009)

| Regulatory Year | Reported Harvest | | | | | |
|--------------------|------------------|-----|---------|-----|------|-------|
| | Males | (%) | Females | (%) | Unk. | Total |
| 1993/94 | 19 | 66% | 10 | 33% | 0 | 29 |
| 1994/95 | 17 | 61% | 11 | 39% | 0 | 28 |
| 1995/96 | 10 | 56% | 8 | 44% | 0 | 18 |
| 1996/97 | 10 | 43% | 13 | 57% | 0 | 23 |
| 1997/98 | 12 | 44% | 14 | 52% | 1 | 27 |
| 1998/99 | 17 | 68% | 8 | 32% | 0 | 25 |
| 1999/00 | 11 | 46% | 13 | 54% | 0 | 24 |
| 2000/01 | 15 | 68% | 7 | 32% | 0 | 22 |
| 2001/02 | 13 | 68% | 6 | 32% | 0 | 19 |
| 2002/03 | 11 | 61% | 8 | 39% | 0 | 18 |
| 2003/04 | 14 | 64% | 7 | 32% | 1 | 22 |
| 2004/05 | 10 | 59% | 7 | 41% | 0 | 17 |
| 2005/06 | 16 | 76% | 5 | 24% | 0 | 21 |
| 2006/07 | 10 | 59% | 7 | 41% | 0 | 17 |
| 2007/08 | 9 | 47% | 9 | 47% | 1 | 19 |
| 2008/09 | 15 | 79% | 4 | 21% | 0 | 19 |
| 2009/10 | | % | | % | | |

The Kenai Mountains Caribou Herd is usually found near the headwaters of Big Indian Creek (**Map 1**) during the fall (ADF&G 2009). This area is 10 to 20 miles from the nearest road. Access to the herd is generally from the Resurrection Pass Trail (**Map 1**; ADF&G 2009) where USFS regulations 36 C.F.R. 261.54(a), 36 C.F.R. 261.55(b), 36 C.F.R. 261.56, and 36 C.F.R. 261.58(y) prohibit use of motorized vehicles during most of the caribou hunting season. Resurrection Pass Trail and watersheds are closed to summer and fall motorized vehicle use (both recreational and subsistence) due to safety concerns and resource damage potential (Zemke 2009, per. comm.). The Kenai Mountains caribou hunt normally requires long hikes, horseback trips, or a float plane to limited lakes (McDonough 2007). From regulatory years 2001/02 to 2005/06, 60% of successful DC001 hunters backpacked into the hunting area from their highway vehicle (McDonough 2007). Other transport methods used by successful hunters included horses (18%), planes (9%), and ORVs (1%; includes mountain bikes). From regulatory years 2001/02 to 2005/06, no successful hunters reported using a 3- or 4-wheeler, boat, or snowmobile; 11% did not report their transportation method (McDonough 2007).

Bud Marrs (2009, pers. comm.) has been a resident of Hope for 41 years and said he had participated in about 20 Kenai Mountains caribou hunts over the years. Mr. Marrs said he puts in for the State drawing permit for Kenai Mountains caribou every year. He thought that if Federal permits for caribou could be made available, about 20 residents of Hope and Sunrise might get a permit. Of these, he estimated that only about six would harvest a caribou. Mr. Marrs noted that he has always backpacked in to hunt Kenai Mountains caribou, and that it is a tremendous amount of work to carry the meat out 10 to 12 miles on his back. He noted that he is 66 years old, but would definitely get a Federal permit to hunt Kenai Mountains caribou if Federal permits were “made available.”

Effects of the Proposal

If Proposal WP10-32b is adopted, it would establish a season and harvest limit for caribou for the residents of Hope and Sunrise in Unit 7. A Federal subsistence hunt by residents of Hope and Sunrise would affect the State drawing permit (DC001) hunt, as the Kenai Mountains Caribou Herd is small and has a limited harvestable surplus each year. It is difficult to anticipate the level of harvest from the Kenai Mountains Caribou Herd that would occur if the Federal Subsistence Board were to implement a Unit 7 caribou hunt for residents of Hope and Sunrise. However, based on the small population of these two communities and difficult access to the Kenai Mountains Caribou Herd, it is likely that the harvest by residents of these two communities would be small. The Federal subsistence permit hunt would have priority over the State drawing permit hunt, and it is likely that the State hunt would need to be reduced to accommodate the Federal hunt.

OSM PRELIMINARY CONCLUSION

Support WP10-32b with modification to implement a Federal registration permit hunt in part of Unit 7 and provide in-season management authority to the local Federal land manager.

The modified regulation should read:

Unit 7— north of the Sterling Highway and west of the Seward Highway

One caribou by Federal registration permit only.

*No Federal Open Season
Aug. 10–Dec. 31*

The Seward District Ranger is authorized to close the season based on conservation concerns in consultation with ADF&G and the Chair of the Southcentral Alaska Subsistence Regional Advisory Council.

Unit 7— remainder

No Federal Open Season

Justification

The State currently allows a caribou harvest by drawing permit from the Kenai Mountains Caribou Herd in Unit 7 north of the Sterling Highway and west of the Seward Highway. The State issued 250 drawing permits/year for this hunt. These permits are available to both Alaska residents and non-residents. The average annual harvest during the 8-year period from regulatory years 1993/94 to 2000/01 was 24.5 caribou per year. The average annual harvest during the 8-year period from regulatory years 2001/02 to 2008/09 was 19 caribou per year (ADF&G 2009). Virtually all of the hunting area for the Kenai Mountains Caribou Herd is Federal public land (Chugach National Forest and Kenai National Wildlife Refuge). ANILCA Section 102(2) requires that subsistence shall be given preference on Federal public lands over other consumptive uses.

A Federal hunt should be limited to that portion of Unit 7 that is north of the Sterling Highway and west of the Seward Highway; this is the area where the Kenai Mountains Caribou Herd is located. The hunt occurs primarily on land managed by the U.S. Forest Service. It is anticipated that Federally qualified subsistence users would hunt these caribou during the same general timeframe and using the same access methods that have been used by hunters with State drawing permits. Caribou very rarely occur in other parts of Unit 7; caribou hunting should not be allowed in other parts of Unit 7 for conservation reasons.

It would be important to closely monitor the inseason caribou harvest from a Federal hunt to assure that the combined harvest from the Federal permits and State drawing permits did not exceed the harvestable surplus of the Kenai Mountains Caribou Herd. As such, it is recommended that a Federal hunt be managed using a registration permit with timely harvest reporting requirements. This would allow Federal resource manager to closely track the caribou harvest inseason. The combined harvest from Federal registration permits and the State drawing permits, in any given year, may necessitate an inseason closure if it is projected that the harvestable surplus of Kenai Mountains Caribou Herd would be taken before the end of the season. Delegation of authority to the Seward District Ranger (local Federal land manager) to close this season would expedite the inseason decision making process.

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| WP10-33 Executive Summary | | | | | | | |
|---|--|---------------------|--|---|---|-------------------------|--|
| General Description | Proposal WP10-33 requests a positive customary and traditional use determination for residents of Hope and Sunrise for moose in Unit 7. <i>Submitted by Paul Genne and Dennis Ressler</i> | | | | | | |
| Proposed Regulation | <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;">Unit 7—Moose</td> <td style="width: 50%; vertical-align: top;">Customary and Traditional Use Determination</td> </tr> <tr> <td><i>Unit 7, that portion draining into Kings Bay</i></td> <td><i>Residents of Chenega Bay, Tatitlek, and Cooper Landing, Hope and Sunrise.</i></td> </tr> <tr> <td><i>Unit 7 remainder</i></td> <td><i>Residents of Cooper Landing, Hope and Sunrise.</i></td> </tr> </table> | Unit 7—Moose | Customary and Traditional Use Determination | <i>Unit 7, that portion draining into Kings Bay</i> | <i>Residents of Chenega Bay, Tatitlek, and Cooper Landing, Hope and Sunrise.</i> | <i>Unit 7 remainder</i> | <i>Residents of Cooper Landing, Hope and Sunrise.</i> |
| Unit 7—Moose | Customary and Traditional Use Determination | | | | | | |
| <i>Unit 7, that portion draining into Kings Bay</i> | <i>Residents of Chenega Bay, Tatitlek, and Cooper Landing, Hope and Sunrise.</i> | | | | | | |
| <i>Unit 7 remainder</i> | <i>Residents of Cooper Landing, Hope and Sunrise.</i> | | | | | | |
| OSM Preliminary Conclusion | Support | | | | | | |
| Southcentral Regional Council Recommendation | | | | | | | |
| Interagency Staff Committee Comments | | | | | | | |
| ADF&G Comments | | | | | | | |
| Written Public Comments | None | | | | | | |

DRAFT STAFF ANALYSIS WP10-33

ISSUES

Proposal WP10-33, submitted by Paul Genne and Dennis Ressler, requests a positive customary and traditional use determination for residents of Hope and Sunrise for moose in Unit 7.

DISCUSSION

The proponent is requesting a positive customary and traditional use determination for moose in Unit 7 for Hope and Sunrise residents because it would “re-establish the customary and traditional use” of this resource for the residents of Hope and Sunrise. The proponent also requested seasons and harvest limits, but the seasons and harvest limits requested are already in regulation, thus will not be addressed.

Existing Federal Regulations

Unit 7—Moose

Unit 7, that portion draining into Kings Bay

Unit 7 remainder

Customary and Traditional Use Determination

Residents of Chenega Bay, Tatitlek, and Cooper Landing.

Residents of Cooper Landing.

Proposed Federal Regulations

Unit 7—Moose

Unit 7, that portion draining into Kings Bay

Unit 7 remainder

Customary and Traditional Use Determination

Residents of Chenega Bay, Tatitlek, ~~and~~ Cooper Landing, Hope and Sunrise.

Residents of Cooper Landing, Hope and Sunrise.

Extent of Federal Public Lands

Approximately 78% of the lands in Unit 7 are comprised of Federal public lands, consisting of 50% Chugach National Forest lands managed by the U.S. Forest Service (USFS), 23% Kenai Fjords National Park lands managed by the National Park Service, and 5% of lands managed by the Kenai National Wildlife Refuge (NWR). The Kenai Fjords National Park lands are not open to subsistence uses (see **Unit 7 Map**).

Regulatory History

The Federal Subsistence Board (Board) has addressed customary and traditional use determinations for the Kenai Peninsula since the inception of the Federal Subsistence Management Program in 1990. The Board adopted the State’s customary and traditional use determinations in 1990. At that time the State determined the road-connected portion of the Kenai Peninsula—which is most of Units 7 and 15—to be a nonsubsistence area. As a result of the State’s nonsubsistence area, the Federal Board then determined that

all wildlife resources in Units 7 and 15 had a “no Federal subsistence priority” customary and traditional use determination. For a summary of regulatory history for Hope, see **Appendix A**.

The Board has never specifically considered the customary and traditional uses of moose by residents of Hope or Sunrise. In 2007, the Board added Cooper Landing to the customary and traditional use determination for moose in Unit 7.

The request in Proposal WP10-33 is the first request from Hope residents to include Hope in any of the customary and traditional use determinations. The Board has recognized the use of “all fish” in the Federal public waters of the Kenai River Area within Unit 7 by residents of Hope, but this was through an analysis of a request for a customary and traditional use determination for the entire Kenai Peninsula.

Community Characteristics

Hope is a small, unincorporated community located in Unit 7 within the Kenai Peninsula Borough with an estimated permanent year-round population of 148 in 2008 (ADCRA 2008). Hope is recognized as a rural community by the Federal Subsistence Board. Hope is located on the northern end of the Kenai Peninsula, on the south shore of the Turnagain Arm of Cook Inlet, 86 miles from Anchorage to the north and 103 miles from Kenai to the South (**Map 1**). The community is within the Chugach National Forest and is the northern terminus of the popular Resurrection Trail. Almost half (48%) of the houses in Hope are vacation houses or cabins. There is one school with eleven students. The school and local businesses are the only employment. Hope was founded in 1896 by miners and called “Hope City.” At the turn of the 20th century, about half of Hope’s residents were Native (Mishler 1985). The Hope post office began operating in 1987 (ADCRA 2008).

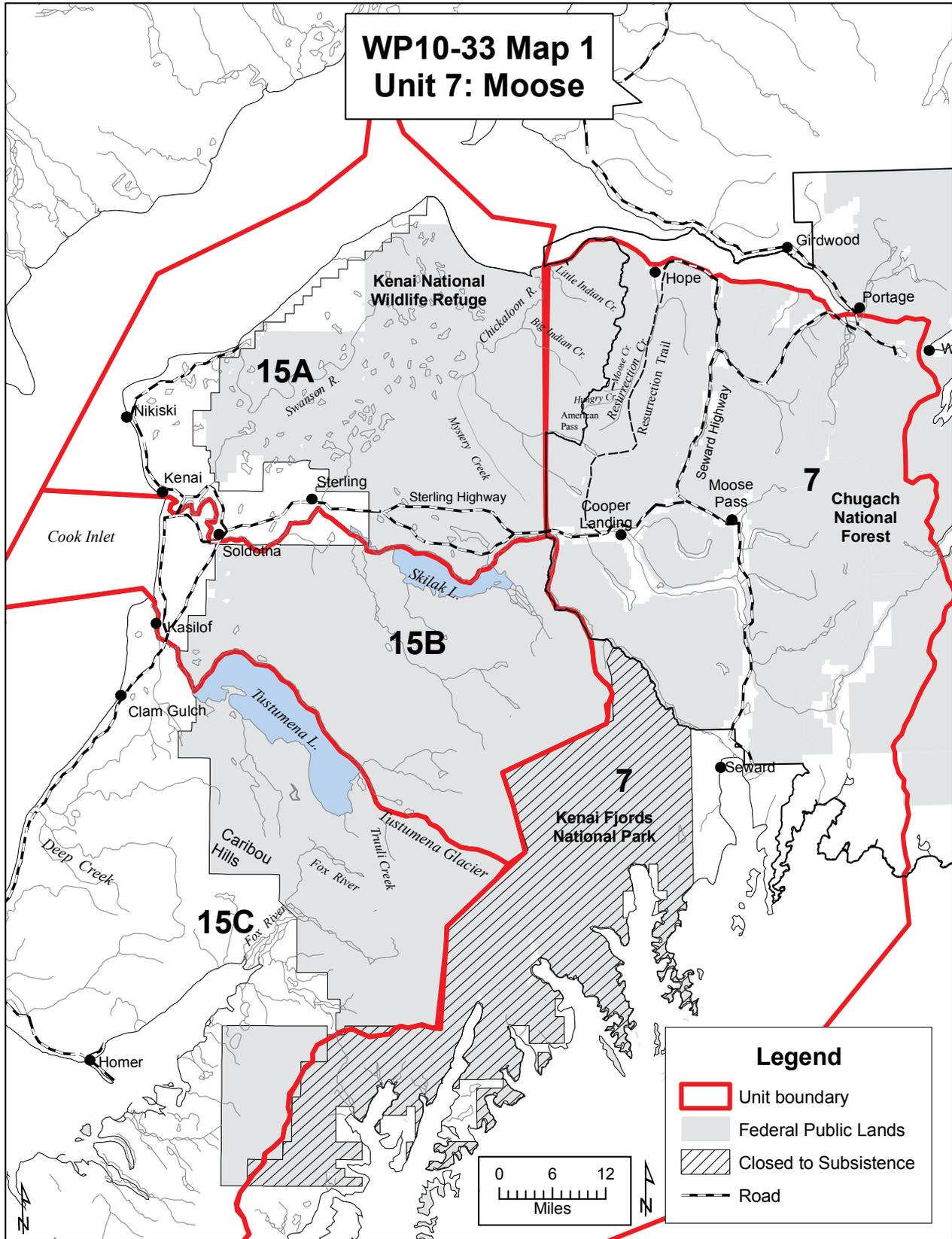
Sunrise is only seven miles from Hope and had a year-round population of 22 in 2008 (**Map 1**). Sunrise is a census designated place and has very little in the way of a community and is considered a “subcommunity” of Hope. Sunrise was established on Sixmile Creek and was the dominant community during the early part of the 20th century, but the population declined and had no residents in 1940 (Barry 1973). Gradually people have moved into Sunrise since the 1940s, but the population continues to be quite small. There are no schools, businesses, and government organizations. Any children in Sunrise would attend school in Hope; Sunrise residents receive their mail in Hope. Because of the close proximity of Sunrise to Hope and the interconnectedness between the two communities, Sunrise is considered a part of Hope for this analysis. All references in this analysis to Hope’s uses of moose include Sunrise.

Dena’ina Athabaskans inhabited the Hope area long before the miners arrived (de Laguna 1975). The Dena’ina had a settlement at the mouth of the Resurrection River and one at Chickaloon Bay. Once the miners moved in, the Dena’ina communities declined due to out-migration and mortality from disease (Barry 1973). Some of the Dena’ina moved to Point Possession, another Athabascan community, 30 miles to the west. The inhabitants of Point Possession were decimated by the flu epidemic of 1918 and the community never recovered (Holmes 1985).

Hope became connected by road to Seward in 1951 (Buzzell and McMahan 1986). This road system greatly enhanced the opportunity for tourists and seasonal residents to enjoy the wildlife, scenery, and sport fishing available in the Hope area.

Eight Factors for Determining Customary and Traditional Uses

A community or area’s customary and traditional use is generally exemplified through the eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community



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

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

Specific information on each of the eight factors is not required because a community or area seeking a customary and traditional use determination only has to “generally exhibit” the eight factors (50 CFR 100.16(b) and 36 CFR 242.16(b)).

The Dena’ina of the Kenai Peninsula used the wild resources available to them (Osgood 1976 [1937], Ackerman 1975, and Holmes 1985). Dena’ina in the Hope area were harvesting resources at the time of contact with the Russians. Dena’ina communities were established at the mouth of Resurrection Creek and at Chickaloon Bay. Existing information indicates that Hope residents traditionally harvested the resources available to them, including moose. Hunting, fishing, trading, bartering, and trapping of resources were important activities for the early residents of Hope (Barry 1973) and continued to be an important part of Hope residents’ lifestyle into the 1950s (Seitz et al. 1994). One resident in the early 1990s stated that in the 1940s when he was a child his family ate a great deal of moose, goat, bear, and fish. Another resident stated that his family depended heavily on moose meat. Knecht-Levine (1983) noted that moose were hunted by Hope residents.

The contemporary harvest of moose is dictated by regulations and restrictions as well as the availability of moose. Because of the low moose populations, many Hope hunters no longer harvest moose. Many residents report that they no longer rely on moose as much as they did in the past; however, it continues to be a subsistence resource for Hope residents (Seitz et al. 1994). In a study conducted in Hope in 1991, 9% of households harvested moose, 25% of households attempted to harvest moose, and 68% used moose. An estimated 19 pounds per capita of moose were harvested during the study year (ADF&G 2009). Not all of the moose harvest is within Unit 7. From 1977 to 2009, 125 moose were harvested by Hope residents outside of Unit 7 (**Table 1**, ADF&G 2009 and 2010), compared to 46 moose harvested in Unit 7 during the same time period (**Table 2**). However, while 46 moose were harvested in Unit 7, there were, in the same time period, 258 permits where the hunters hunted in Unit 7, but were not successful (**Table 2**, ADF&G 2009 and 2010). The overall hunter success rate in Unit 7 by Hope residents from 1977 to 2009 was 18%.

Table 1. Moose harvests by Hope residents outside of Unit 7, 1977 – 2009 (ADF&G 2010).

| Year | Number of Moose Harvested |
|--------------|---------------------------|
| 1977 | 8 |
| 1978 | 3 |
| 1979 | No data |
| 1980 | No data |
| 1981 | 2 |
| 1982 | 4 |
| 1983 | 6 |
| 1984 | 9 |
| 1985 | 3 |
| 1986 | 5 |
| 1987 | 3 |
| 1988 | 4 |
| 1989 | 1 |
| 1990 | 3 |
| 1991 | 3 |
| 1992 | 5 |
| 1993 | 2 |
| 1994 | 1 |
| 1995 | 2 |
| 1996 | 5 |
| 1997 | 4 |
| 1998 | 4 |
| 1999 | 3 |
| 2000 | 1 |
| 2001 | 2 |
| 2002 | 2 |
| 2003 | 4 |
| 2004 | 4 |
| 2005 | 6 |
| 2006 | 7 |
| 2007 | 7 |
| 2008 | 8 |
| 2009 | 4 |
| Total | 125 |

Table 2. Moose harvests by Hope residents in Unit 7, 1977 – 2009 (ADF&G 2009 and 2010).

| Year | Number of Permits Hunted | Number of Moose Harvested |
|--------------|--------------------------|---------------------------|
| 1977 | 6 | 3 |
| 1978 | 11 | 5 |
| 1979 | 7 | 1 |
| 1980 | No data | No data |
| 1981 | 5 | 1 |
| 1982 | 7 | 1 |
| 1983 | 8 | 1 |
| 1984 | 13 | 1 |
| 1985 | 9 | 3 |
| 1986 | 9 | 3 |
| 1987 | 13 | 1 |
| 1988 | 7 | 1 |
| 1989 | 6 | 0 |
| 1990 | 9 | 2 |
| 1991 | 11 | 1 |
| 1992 | 8 | 2 |
| 1993 | 2 | 0 |
| 1994 | 4 | 1 |
| 1995 | 9 | 3 |
| 1996 | 10 | 2 |
| 1997 | 10 | 2 |
| 1998 | 4 | 1 |
| 1999 | 4 | 0 |
| 2000 | 8 | 1 |
| 2001 | 12 | 2 |
| 2002 | 8 | 2 |
| 2003 | 6 | 2 |
| 2004 | 5 | 0 |
| 2005 | 8 | 2 |
| 2006 | 12 | 0 |
| 2007 | 13 | 1 |
| 2008 | 10 | 1 |
| 2009 | 4 | 0 |
| Total | 258 | 46 |

Prior to the implementation of regulations mandating moose hunting seasons, moose were traditionally hunted in late October and early November (Seitz et al. 1994). The Hope moose harvest area is within Unit 7 within a 50 miles arc south of the community (FWS 1993). The ADF&G harvest ticket database indicates that all of Hope residents who held moose permits from 1991 through 2007 hunted moose in Unit 7 (ADF&G 2007). Mapping conducted by ADF&G in 1991 indicated that Hope residents harvested moose in Unit 7 (ADF&G 1991, cited in FWS 1993).

No data are available on the methods and means used by Hope residents to harvest large mammals, other than a reference by McCart (1983) to a moose hunt in the 1930s where dogsleds were the primary means of transportation with a few people using snowshoes.

The Hope area did not receive electricity until 1969 and canning was the best way to preserve most subsistence resources prior to the ability to freeze moose meat (Seitz et al. 1994).

No data are available concerning the handing down of knowledge of moose hunting skills, value, and lore from generation to generation.

In a study conducted in Hope in 1991, most households were involved in giving or receiving wild resources. About 90 percent of household received at least one kind of wild resource from another household. Moose was received by 62% of households and was given by 28% of households (ADF&G 1991). McCart also refers to a wide sharing of moose and other resources in the 1930s by Hope residents.

Residents of Hope depend on a wide diversity of fish and wildlife resources, harvesting an average of 9.1 different kinds of resources, similar to other road-connected communities on the Kenai Peninsula (Fall et al. 2000:240–245). Almost all Hope households (94%) hunted, fished, or gathered wild foods and 100% used at least one type of wild resource. The per capita harvest of wild resources, measured in pounds of useable weight, was 110.7 pounds while the mean household harvest was 262.2 pounds. The average number of wild resources used in the communities and areas in the Kenai Peninsula ranged from 7.6 to 21.5 (Fall et al. 2000:240–245).

Effects of the Proposal

If the proposal is adopted, the customary and traditional uses of moose in Unit 7 by residents of Hope residents would be recognized. This would enable Federally qualified subsistence users to harvest moose under Federal subsistence regulations from Federal public lands in Unit 7.

If the proposal is rejected, customary and traditional use of moose in Unit 7 by Hope residents would not be recognized. In this case, Hope residents would continue harvesting moose under State regulations.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-33.

Justification

Hope (including Sunrise) residents have a customary and traditional pattern of harvesting moose in Unit 7 and demonstrate a historic pattern of harvesting moose dating back to the turn of the 20th century. In a household subsistence use study conducted in 1990 to 1991, moose were widely used by 67% of the community. From 1977 through 2009, 46 moose were harvested by Hope residents in Unit 7 with an overall success rate of 18%. Moose hunting also occurs outside of Unit 7 due to the low availability of moose in Unit 7. Mapping of Hope's subsistence use areas also indicates that moose are harvested by Hope residents in Unit 7.

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APPENDIX A

Summary of the Regulatory History of the Federal Subsistence Board Customary and Traditional Use Determinations for Moose on the Kenai Peninsula

- 1990: Federal Subsistence Management Program established; State’s customary and traditional use determinations adopted.
 - State recognized the communities of Nanwalek and Port Graham as having customary and traditional use of moose in an area in the extreme southwest of Unit 15C, but the road-connected portion of the Kenai Peninsula—which is most of Units 7 and 15—was determined by the State of Alaska to be a nonsubsistence area, thus the Federal Board determined that Units 7, 15A and 15B had “no subsistence” determinations for moose.
- April 1994: Federal Subsistence Board (Board) deferred all customary and traditional use determinations for all large mammals on the Kenai Peninsula, until a process and schedule for making customary and traditional use determinations statewide could be established (FSB 1994).
- July 1995: Board made a positive customary and traditional use determination for moose for Unit 15 for residents of Port Graham, Nanwalek, Seldovia, and Ninilchik, but the Board deferred customary and traditional use determinations for Hope and Cooper Landing.
- May 1996: After an extensive Federal process involving data gathering, public hearings, and court decisions, Board made the customary and traditional use determinations for Unit 15 moose for Nanwalek, Ninilchik, Port Graham and Seldovia.
 - Decisions on the remaining species and communities were deferred until rural determinations on the Kenai Peninsula could be made (FSB 1996).
- 1997: Board adopted Proposal 18B that provided a customary and traditional use determination for moose for the residents of Chenega Bay and Tatitlek in the Kings Bay drainage in Unit 7.
- Hope and Sunrise’s customary and traditional use determinations for moose in Unit 7 were not considered in 1997.
- 2003: Board addressed customary and traditional use determinations for moose in Unit 15, but again deferred making customary and traditional use determinations until the completion of a report by the Institute for Social and Economic Research on rural determination and methodology and the subsequent review of rural determinations as required by regulation on a 10-year basis (FSB 2003:102).
- 2006: Board made its final rural determinations in 2006.
- 2008: Board considered Proposal WP08-22a and added Cooper Landing to the existing customary and traditional use determinations for Units 7 and 15.

| WP10-34 Executive Summary | |
|---|---|
| General Description | Proposal WP10-34 requests that the wolverine season be managed independently from the lynx season in Unit 11. <i>Submitted by Corey Schwanke</i> |
| Proposed Regulation | <p>Unit 11—Wolverine (Trapping)</p> <p><i>No limit</i> <i>Nov. 10.–Feb. 28</i></p> <p><i>Special Provision: The Assistant Regional Director for Subsistence Management, FWS, is authorized to align the Federal subsistence wolverine trapping season with the Federal subsistence lynx seasons in Unit 11.</i></p> |
| OSM Preliminary Conclusion | Oppose |
| Southcentral Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | Oppose |
| Written Public Comments | 3 Support |

**DRAFT STAFF ANALYSIS
WP10-34**

ISSUES

Proposal WP10-34, submitted by Corey Schwanke, requests that the wolverine season be managed independently from the lynx season in Unit 11.

DISCUSSION

The proponent states that it is a disservice to trappers to align wolverine seasons with lynx seasons. He notes that lynx populations are cyclic, while wolverine populations are not. The proponent requests independent seasons for both species using abundance based information.

Existing Federal Regulation

Unit 11—Wolverine (Trapping)

No limit

Nov. 10.–Feb. 28

Special Provision: The Assistant Regional Director for Subsistence Management, FWS, is authorized to align the Federal subsistence wolverine trapping season with the Federal subsistence lynx seasons in Unit 11.

Proposed Federal Regulation

Unit 11—Wolverine (Trapping)

No limit

Nov. 10.–Feb. 28

Special Provision: The Assistant Regional Director for Subsistence Management, FWS, is authorized to align the Federal subsistence wolverine trapping season with the Federal subsistence lynx seasons in Unit 11.

Existing State Regulation

Unit 11—Wolverine (Trapping)

No limit

Nov. 10.–Jan. 31

Extent of Federal Public Lands

Federal public lands comprise approximately 81% of Unit 11 and consist of 97% National Park Service (NPS), 3% Department of Agriculture, U.S. Forest Service (USFS) and <0.1% Bureau of Land Management (BLM) lands (**Unit 11 Map**).

Customary and Traditional Use Determinations

All rural Alaska residents are eligible to trap wolverines under Federal subsistence regulations in Unit 11. However, in order to engage in subsistence in Wrangell St. Elias National Park, the National Park Service requires that subsistence users either live within the park's resident zone (36 CFR 13.430, 36 CFR 13.1902) or have a subsistence permit (36 CFR 13.440) issued by the park superintendent.

Regulatory History

In 1990, the Federal Subsistence Board (Board) adopted temporary subsistence regulations for wolverine trapping that aligned with State regulations. The Unit 11 wolverine trapping season was from November 10 through February 28 with no harvest limit. For regulatory year 1992/93, the Federal subsistence wolverine trapping season was reduced by 28 days to November 10 through January 31, and the harvest limit was reduced to 2 wolverines in response to State and National Park Service manager's perception that the wolverine population had declined. At the same time, Federal public lands were closed to wolverine trapping except by Federally qualified rural Alaska residents. Likewise, State regulations shortened the season and reduced the harvest limit to two animals on non-Federal public lands.

In April 1994, the Board rejected a proposal to allow non-Federally qualified trappers to take wolverines in Unit 11 on Federal public lands. In 1997, the Board adopted WP97-32, removing the closure for trapping wolverines on Federal public lands by non-rural trappers in Unit 13 and modified it to include Unit 11. In addition, in 1997 both the Federal Board and the State dropped the harvest limit that had restricted trappers to 2 wolverines.

The issues raised in WP10-34 were addressed during the 2008 Federal Subsistence Management Program wildlife regulatory process through two proposals (WP08-03 and WP08-04) that were submitted by local trappers. At its public meeting in Cordova in March 2008, the Southcentral Alaska Subsistence Regional Advisory Council supported WP08-03/04 noting that, "...trappers prefer to have the trapping season for wolverine aligned with the lynx season so that subsistence trappers can keep wolverine caught incidentally in traps set for lynx." At its public meeting in Tok in March 2008, the Eastern Interior Alaska Subsistence Regional Advisory Council supported WP08-03/04 noting that "Passage of this proposal would provide an additional opportunity for subsistence users to keep wolverines incidentally harvested when trapping for lynx where presently they have to surrender them to the Alaska Department of Fish and Game."

At the spring 2008 Board meeting, ADF&G opposed proposal WP08-03/04, but noted that it "... can support in-season authority being delegated to either the National Park Service or to the Office of Subsistence Management to adjust the wolverine trapping season so that it matches the lynx trapping season"(FSB 2008). Southcentral Regional Advisory Council Chair Ralph Lohse explained to the Board that, "There's no way you can trap lynx without catching wolverine but there's no way you can trap wolverine without catching lynx." Chairman Lohse also noted that the idea of WP08-03/04 "... was to align the lynx and wolverine season so that somebody's not tempted to keep a wolverine after the lynx season is closed, or to keep lynx after the wolverine season's closed"(FSB 2008). On April 30, 2008, the Board voted to align the Federal subsistence wolverine trapping season with the Federal subsistence lynx seasons in Unit 11 and delegated its authority to do so to the Assistant Regional Director, Office of Subsistence Management in coordination with the State of Alaska regulations based on health of the lynx population in Unit 11. Based on the lynx season at that time, this resulted in the wolverine trapping season in Unit 11 being extended through the month of February.

Biological Background

Little research has been done on wolverine (*Gulo gulo*) in Unit 11. Knowledge about the biology of this species comes from other parts of Alaska, North America, and Scandinavia. Wolverines occur at low densities of 8 to 13 animals/1,000 mi² in parts of Southcentral Alaska (Golden 2007, Becker 1991, and Becker and Gardner 1992). Wolverines have an extremely large home range that varies from about 19 to 154 mi² for females and 89 to 610 mi² for males (Hornocker and Hash 1981, Gardner et al. 1993, Magoun 1985, Whitman et al. 1986, Banci 1987, Copeland 1996). Wolverines are opportunistic predators and scavengers, eating just about anything they can find or kill. They have a seasonal pattern to primarily scavenge in winter and use a variety of prey in summer, e.g. rodents, snowshoe hares, birds, and carrion. In a study in the Yukon Territory, snowshoe hare contributed the highest proportion of any single prey species to the wolverine's diet (Banci 1987).

Wolverines are solitary creatures throughout most of the year, and are active at any time of the day, year-round. Male wolverines range widely throughout most of the year (Golden 1997). Wolverines are polygamous and exhibit delayed implantation; they mate in summer, and fertilized eggs remaining in the blastocyst stage until early to mid-winter. The reproductive capacity of wolverines is limited; the abundance of food determines whether pregnancy will be maintained, and the number of young that will be born. Wolverine research in North America and Scandinavia found that only 38–57% of the females reproduced each year, and that the annual birth rate was only 0.4–0.9 kits/female (Magoun 1985, Copeland 1996, Persson 2003, and Krebs and Lewis 1999). Pregnant females den primarily in higher elevations of alpine, subalpine, taiga, or tundra habitat (Magoun and Copeland 1998). Council Chairman Ralph Lohse reported that in Unit 11 pregnant female wolverines den mostly in the inaccessible higher mountainous areas (FSB 2008). In Alaska and the Yukon Territory, wolverine kits are born predominantly from mid-February through March (Rausch and Pearson 1972). Juveniles are weaned in 9 to 10 weeks, begin to travel with their mothers in early summer, and are independent by late summer. Persson (2003) found that the annual recruitment of juveniles to one year of age was only 0.5 kits/female.

Human caused mortality is an important source of adult wolverine mortality according to many North American studies (Hornocker and Hash 1981, Whitman and Ballard 1983, Magoun 1985, Banci 1987). Banci (1994) and Copeland (1996) reported that starvation and predation are the most common natural causes of wolverine mortality. Persson (2003) found that predation by adult wolverines was the most important cause of juvenile wolverine mortality during their first summer. It appears that few wolverines live longer than 5 to 7 years in the wild, however some do survive to 13 years of age (Banci 1987, Liskop et al. 1981, Rausch and Pearson 1972).

Reports by hunters and trappers, harvest records, and field observations by ADF&G biologists are the main source of wolverine abundance information for Unit 11 (Schwanke and Tobey 2007). The species relative abundance index is used for all species of furbearer and is derived from a comparison of snowshoe hare densities obtained during fieldwork and trapper questionnaire responses (Brand and Keith 2007).

Wolverines are considered common in the mountainous regions of Units 11 and 12 and relatively scarce in the lower elevations (Schwanke and Tobey 2007). Some adult females may not be active prior to giving birth and subsequently the likelihood of being trapped remains small (Golden 2007).

Long distance dispersal of wolverine has been documented in Unit 13 (Golden 1997) and is a potential source of population redistribution into vacant habitat. Cross immigration between Units 11 and 12 could occur since Unit 12 is adjacent to Unit 11. Research in Southeast Alaska showed that there is

little interchange of genetics between wolverine populations in Alaska and adjacent Canadian provinces (Magoun et al. 2008).

Habitat

In Alaska, wolverine dens are usually long complex snow tunnels covered by at least one meter of snow. It appears that wolverines are able to reduce predation on the kits by retreating into mountainous regions with long-lasting, deep snow cover; such areas have lower late-winter populations of wolves (Magoun and Copeland 1998). Snow cover that persists through the spring denning period appears to be vital to wolverine reproduction (Ruggiero et al. 2007). Hornocker and Hash (1981) found that wilderness and remote country are essential to wolverine population viability. It is important that female wolverine have suitable habitat for refugia to successfully den and rear kits without having to make excursions into trapping areas (Magoun et al. 2008, Persson 2003). Most of Wrangell St. Elias National Park and Preserve is remote with difficult access and lack of roads. Therefore, the trapping pressure in Park and Preserve is light (Schwanke and Tobey 2007) and there are large areas of unfragmented refugia.

Harvest History

Since 1971, the State has required that wolverine be sealed; this has been the primary means for tracking harvest data. Based on general observations and trapper reports, it appears that wolverine numbers are stable in the mountainous areas of Unit 11. The majority of harvested animals in Unit 11 are from trapping (**Table 1**). Since 2001, an average of 10 wolverine per year have been harvested primarily from the foothills in Unit 11 with an average of 70% being male (**Table 1**; Schwanke and Tobey 2007, ADF&G 2009). The extension of the wolverine trapping season that the Board implemented in spring 2008 began in February 2009. In February 2009, 3 wolverines were harvested in Unit 11 under this new Federal regulation; all were males.

Table 1. Unit 11 wolverine harvest, 2001–2005 (Schwanke and Tobey 2007) 2005–2009 (ADF&G 2009 and 2010)

| Regulatory Year | Reported Harvest | | | | | | Method of Take | | | | |
|--------------------|------------------|----|--------|----|-----|-------|----------------|-----|------|----|-----|
| | Male | % | Female | % | Unk | Total | Trap- snare | % | Shot | % | Unk |
| 2001/02 | 2 | 40 | 3 | 60 | 1 | 6 | 5 | 83 | 1 | 17 | 0 |
| 2002/03 | 2 | 67 | 1 | 33 | 0 | 3 | 3 | 100 | 0 | 0 | 0 |
| 2003/04 | 7 | 78 | 2 | 22 | 0 | 9 | 8 | 89 | 1 | 11 | 0 |
| 2004/05 | 13 | 81 | 3 | 19 | 0 | 16 | 16 | 100 | 0 | 0 | 0 |
| 2005/06 | 10 | 83 | 2 | 17 | 0 | 12 | 11 | 92 | 1 | 8 | 0 |
| 2006/07 | 2 | 29 | 5 | 71 | 0 | 7 | 6 | 86 | 1 | 14 | 0 |
| 2007/08 | 15 | 75 | 5 | 25 | 0 | 20 | 20 | 100 | 0 | 0 | 0 |
| 2008/09 | 6 | 75 | 2 | 25 | 0 | 8 | 8 | 100 | 0 | 0 | 0 |

Effects of the Proposal

The issues raised in this proposal were addressed by the Federal Subsistence Management Program in 2008. Board action on that Proposal WP08-03/04 resulted in a 1 month extension to the Unit 11 wolverine trapping season beginning with trapping during the month of February 2009. It was noted that lynx sets catch wolverine and that wolverine sets catch lynx. The current regulation allows trappers to

retain wolverine that are taken during the lynx trapping season. The 2008 Board decision was based on an understanding that the current wolverine population in Unit 11 would be able to support the 1 month extension to the trapping season.

Lynx trapping seasons for Unit 11 are currently adjusted by the Assistant Regional Director, Office of Subsistence Management in coordination with the State of Alaska regulations based on health of the lynx population in Unit 11. If Proposal WP10-34 were adopted, the Unit 11 wolverine trapping season would not be linked with the Unit 11 lynx trapping season, and it would extend from November 10 to February 28. If WP10-34 were adopted and the Unit 11 lynx season is shortened in the future, lynx that are caught in wolverine sets after the close of lynx season could not be retained by a trapper. Similarly, if the Unit 11 lynx season were lengthened in the future, wolverine caught in lynx sets after the close of the wolverine trapping season, could not be retained by a trapper.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP10-34

Justification

The issues raised in Proposal WP10-34 were addressed during the 2008 Federal Subsistence Management Program wildlife regulatory process through two proposals (WP08-03 and WP08-04) submitted by local trappers. These proposals were discussed by the Southcentral Alaska Subsistence Regional Advisory Council, the Eastern Interior Alaska Subsistence Regional Advisory Council, and the Federal Subsistence Board. The 2008 Federal Subsistence Board decision resulted in a 1 month extension to the Unit 11 wolverine trapping season which took effect in February 2009. It was noted that lynx sets catch wolverines and that wolverine sets catch lynx; the current Federal Subsistence Management Program regulation allows trappers to retain wolverine that are taken in lynx sets during the lynx trapping season.

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Alaska Department of Fish and Game
Comments to the Regional Advisory Council

Wildlife Proposal WP10-34 (Wolverine Trapping Season) 21.1: This proposal would extend the federal subsistence wolverine trapping season in GMU 11 to February 28.

Introduction: The reported wolverine harvest in GMU 11 during the last 24 years has ranged from 2 to 27 annually and averaged 10 per year. Wolverine harvests, from initiation of the sealing requirement in 1971 to the reduction in season length in 1985, averaged 28 per year (range = 12–55).

Impact on Subsistence Users: If the proposal is adopted, federal subsistence trappers will have opportunity to continue harvesting lynx and wolverine despite low lynx abundance in GMU 11, when the federal subsistence trapping season for wolverine will not be shortened along with lynx.

Opportunity Provided by State: State regulations authorize wolverine trapping from November 10 through January 31, with no bag limit. The federal subsistence wolverine trapping season closes when the lynx season closes, which is February 28 but will be shortened to as early as January 31 if the federal subsistence lynx trapping season is shortened. Lynx trapping seasons are adjusted yearly under the Lynx Harvest Tracking Strategy that reduces trapping season length during lynx cyclic lows.

Conservation Issues: Trapping wolverine during the denning season in February would subject females to harvest when they are most vulnerable. Increasing harvests during February could reduce productivity and kit survival and reduce long term harvest opportunities for all users.

Enforcement Issues: Differences in federal and state regulations resulting from adoption of this proposal would further complicate trapping regulations and could create enforcement issues in areas of mixed land ownership.

Other Comments: The current season dates for wolverine were adopted during the last Federal Subsistence Board meeting. The wolverine season closure coinciding with the lynx closure was adopted because of concerns of incidental catch. The February 28 closure is not permanent and it reflects the conservation concerns of harvesting females during denning. This issue was discussed at length, and no new data or extenuating circumstances justify changing it.

Recommendation: Oppose.

WRITTEN PUBLIC COMMENTS

Support. Two years ago, Mr. Wilson and I submitted proposals to change the wolverine season in Unit 11 to the period from November 10 through February 28. Although the board temporarily made this change, they tied it to the lynx season so that when the lynx season is shortened the wolverine season will also shorten. This was not the intent of our proposals. I would like the wolverine season to begin November 10 and end February 28 without being tied to lynx season. My reasons for wanting this change are still the same, so I will only briefly mention them here.

1. Unit 11 has a healthy wolverine population with vast areas so remote that there is no trapping pressure.
2. Most serious traplines in Unit 11 require river travel, which is usually not possible before mid- to late-December. This inevitably cuts off the first five weeks of trapping season.
3. All GMUs in Alaska which have a wolverine season (except Unit 13) are open until Feb. 28 or later and are not tied to the lynx season.
4. It appears that the wolverine season was tied to lynx season in order to eliminate by-catch of lynx in wolverine sets when the lynx cycle is low. However, as a trapper, I find it extremely rare to catch lynx in purpose-made wolverine sets when the lynx population is high and completely improbable when the lynx population is low.

The above reasons are also supported by the McCarthy-area trappers.

Kieth Rowland, McCarthy, Alaska

Support. When I and Mr. Rowland submitted our proposal a couple years ago to extend the wolverine season to the end of February, the proposal did not include an extension of the season to be tied to the lynx season. The board took it upon themselves to mate up the two seasons without either proponent requesting it.

As a trapper in Unit 11, I assure you that trappers in this unit are rare compared to unit 13. Access and native lands restrict use; trappers take few too few wolverine to affect the population as a whole or in specific trapping areas. Trappers in Unit 11, south of the Wrangell Mountains, do not parallel each other's traplines so there is plenty of open country where wolverines are untargeted. I estimate that over 99% of unit 11 south of the Wrangell's is free of trappers. I will be fortunate to get six weeks of trapping in those areas and if this proposal doesn't pass, that six weeks will be two weeks or none at all in the future.

In regards to by-catch issues, I put out sets specifically targeting wolverine and rarely catch a lynx. It's hard to get a lynx to crouch into a box or bucket and get caught. Footholds traps for wolverine are set where wolverine are present and cats are not. Limiting the wolverine trapping season on the basis of by-catch in Unit 11 is a far stretch for game management of this valuable resource. Trappers don't come close to making a dent in the wolverine population from their catch in unit 11. Lynx populations are very cyclic and wolverine populations are, for the most part, not, so they need not be tied together in any way.

Dean Wilson Jr., Kenny Lake

Support. Unit 11 is 12,800 square miles, rugged, and remote, with only a few small communities. Why unnecessarily restrict the few who trap there? The 20-year mean annual wolverine harvest is 9.8 wolverine, and harvest density is low. The population is one of the healthiest in the state. The female take

in the harvest is small, 10-year mean of 30%, and validates the health of the population. Overharvest in the unit is absolutely not a concern and aligning the wolverine season with lynx was unnecessary.

Using the lynx harvest tracking strategy, when lynx are not at or near their peaks, will shorten the season as 45 days; it will probably be the shortest in the entire state. This makes no sense considering it is one of the state's healthiest wolverine populations. All adjacent GMUs, except Unit 13, and over 90% of the state have permanent wolverine seasons lasting into February. All of the managers in those areas are fine with a wolverine season ending February 28th, and even later in March (as with Unit 12) or as late as April 15 in more remote parts of the state. No other furbearer season, except lynx during non highs, closes prior to February 28th, and most land furbearer trapping seasons end Feb 28th in Unit 11 (fox, marten, mink, ermine, etc.). Trappers will now face difficulties associated with a short wolverine trapping season.

Under the current federal management strategy, federal subsistence users are going to have a shorter wolverine trapping season than state users during times of non lynx highs, which is over half the time during a typical lynx cycle. Yet the Board did not discuss the negative effects of a very short wolverine season during lynx lows. The Board was hung up on "by-catch" issues in 2008, which was a very small factor in my proposal. Lynx are rarely, if ever, caught in wolverine sets during lynx lows. The main reason I submitted this proposal was to provide more opportunity to trap wolverine under the sustainability guideline. Harvest might increase slightly, but will probably just occur later when a season extends into February. When the season was shortened in 1992, harvest did not change much. The season I propose will allow trappers to handle cases where wolverine are destroying their marten sets and eating their valuable furs.

During the Board of Game meeting in March 2009, ADF&G stated on record that during the next lynx low, the lynx season will be reduced on the back end, not the front end as is typically done in Unit 11 and 13. So if a 45-day lynx season is warranted, it will more than likely be a November 10-December 31 season. If the wolverine season stays aligned with the lynx season, opportunity to trap wolverine on most of Unit 11 trapper's "hard to reach" lines will be reduced to almost nothing. These lines are in prime wolverine areas.

ADF&G's concern about "vulnerability when denning" is questionable when referring to a season closing on February 28th. Plenty of testimony was offered in 2008 suggesting denning females are less prone to get caught, something I wholeheartedly agree with. Females typically den up high and their ranges shrink considerably once birth takes place, which makes them less vulnerable to catch. However, I do not think wolverine in Unit 11 even den in February. The 2008 Federal Board's transcripts on the matter show that Mr. Reakoff and Mr. Lohse have similar thoughts).

Corey Schwanke of Glennallen

| WP10-35 Executive Summary | |
|-----------------------------------|---|
| General Description | Proposal WP10-35 requests that the harvest limit of 1 antlered bull moose for Unit 13E be extended to Traditional Use Areas (TUAs) in Denali National Park and an additional harvest season be established from Dec. 1–Jan. 15. <i>Submitted by the Native Village of Cantwell</i> |
| Proposed Regulation | <p>Unit 13E(TUA Denali NPS lands) — Moose</p> <p><i>1 antlered bull moose by Federal registration permit only; only 1 permit will be issued per household</i> <i>Aug. 1–Sept. 20</i></p> <p style="text-align: center;">OR</p> <p><i>The Denali National Park and Preserve Superintendent will announce the closure when the quota of 10 bull moose is reached.</i> <i>Dec. 1–Jan. 15</i></p> <p>Unit 13E — Remainder — Moose</p> <p><i>1 antlered bull moose by Federal registration permit only; only 1 permit will be issued per household</i> <i>Aug. 1–Sept. 20</i></p> |
| OSM Preliminary Conclusion | <p>Support Proposal WP10-35 with modification to clarify the regulatory language and remove the quota of 10 bull moose to allow managers flexibility in setting a sustainable harvest depending upon annual moose population fluctuations.</p> <p>Unit 13E (TUA Denali NPS lands)—Moose</p> <p><i>1 antlered bull moose by Federal registration permit only; only 1 permit will be issued per household</i> <i>Aug. 1–Sept. 20</i></p> <p style="text-align: center;">OR</p> <p><i>Quotas and any needed closures may be announced by the Superintendent of the Denali National Park and Preserve, in consultation with ADF&G.</i> <i>Dec. 1–Jan. 15</i></p> <p>Unit 13E—Remainder—Moose</p> <p><i>1 antlered bull moose by Federal registration permit only; only 1 permit will be issued per household</i> <i>Aug. 1–Sept. 20</i></p> |

continued on next page

| <i>WP07-01 Executive Summary (continued)</i> | |
|---|---------------|
| Southcentral Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | Oppose |
| Written Public Comments | None |

**DRAFT STAFF ANALYSIS
WP10-35**

ISSUES

Proposal WP10-35, submitted by the Native Village of Cantwell, requests that the harvest limit of 1 antlered bull moose for Unit 13E be extended to Traditional Use Areas (TUAs) in Denali National Park and an additional harvest season be established from Dec. 1–Jan. 15.

DISCUSSION

The proponent requests that a winter season be established to allow for moose harvest via snowmachine in the Denali National Park. In 2008, the Denali National Park and Preserve placed limits on off-road vehicle (ORV) use within the Park and restricted ORV use to four routes within the Cantwell TUA. The new regulation does not affect the use of snowmachines for subsistence use within the area, but the season for moose in Unit 13E is prior to snowfall. The proponent requests a winter moose season from Dec. 1 to Jan. 15 with the Superintendent of Denali National Park having delegated authority to close the hunt via emergency closure when a quota of 10 moose for both the fall and winter season is reached to allow managers to have adaptive management to maintain conservation goals.

Existing Federal Regulation

Unit 13E — Moose

1 antlered bull moose by Federal registration permit only; only 1 permit will be issued per household *Aug. 1–Sept. 20*

Proposed Federal Regulations

Unit 13E(TUA Denali NPS lands) — Moose

1 antlered bull moose by Federal registration permit only; only 1 permit will be issued per household *Aug. 1–Sept. 20*

OR

The Denali National Park and Preserve Superintendent will announce the closure when the quota of 10 bull moose is reached. *Dec. 1–Jan. 15*

Unit 13E — Remainder — Moose

1 antlered bull moose by Federal registration permit only; only 1 permit will be issued per household *Aug. 1–Sept. 20*

Existing State Regulations

Unit 13—Moose

1 bull by Community permit for residents *Aug. 10–Sept 20*
OR

| | |
|--|-------------------------|
| <i>One bull with spike-fork or 50-inch antlers or antlers with 4 or more brow tine on at least one side for residents</i> | <i>Sept. 1–Sept. 20</i> |
| <i>One bull by drawing permit</i> | <i>Sept. 1–Sept. 20</i> |
| <i>One bull with 50-inch antlers or antlers with 4 or more brown tine on at least one side for non-residents by drawing permit</i> | <i>Sept. 1–Sept. 20</i> |

Extent of Federal Public Lands

Federal lands comprise 6% of Unit 13E and are managed by the Denali National Park (See **Unit 13 map**). The Cantwell Traditional Use Area within Denali National Park is represented in **Figure 1**.

Customary and Traditional Use Determinations

Rural residents of Unit 13, Chickaloon, McKinley Village, Slana and the area along the Parks Highway between mileposts 216 and 239 have a positive customary and traditional use determination for moose in Unit 13E. There is no Federal subsistence priority for residents of Denali National Park headquarters.

Regulatory History

Since 1998, the Federal subsistence moose hunting regulations for Unit 13E have allowed one antlered bull moose per household by Federal registration permit only, from Aug. 1 to Sept. 20.

The State general harvest regulations for moose in Unit 13E were changed in 2000 when the designation of a legal bull went from 3 or more brow tines or 50-inch antler spread to a 4- or more brow tines or 50-inch antler spread and has been in effect ever since. The same year, non-resident general moose hunting was eliminated from Unit 13 due to low moose population numbers. In addition, ADF&G also managed a State Tier II hunt (TM300) for one bull moose by permit Aug 15–Aug 31 between 1995 and 2008.

In 2008, the State Tier II hunt was changed to add a community harvest (CM300) and the season was modified to Aug 10–Sept 20 with an upper harvest limit of 15 any-bull moose for Unit 13E and an unlimited number spike/fork, 50”, and 4 or more brow tine moose. For residents, drawing permit hunts (DM330-334) for one bull moose from Sept 1 to Sept 20 were added as a new harvest option in select areas where moose numbers have increased. For non-residents, drawing permit hunts (DM 335-339) were established to harvest one bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side from Sept. 1 to Sept. 20. These three hunts are in addition to the State general harvest of one bull moose with spike-fork or 50-inch antlers or antlers with 4 or more brow tines on at least one side from Sept.1 to Sept. 20 for residents.

Management Direction

Current ADF&G management objectives for the moose population in Unit 13 are to increase to 20,000–25,000 with a minimum of 25 bulls:100 cows and 25–30 calves:100 cows, and 10 yearling bulls:100 cows in the fall. In addition, the human use management objective includes providing the potential to harvest bulls and cows to a combined total of 1,200–2,000 animals and provide subsistence harvest of 300–600 moose per year.

Biological Background

In 2008, the NPS conducted aerial surveys in the fall to acquire composition data and population trend data for the Cantwell area 1,085 km² (**Figure 1**) and estimated the moose density at 0.61 moose/mi². In the Cantwell survey area the calf:cow ratio was 28:100 and the bull:cow ratio was 40:100 (n= 255 moose) (**Table 1**). Calves, bulls, and cows represented 17%, 24%, and 59% of the estimated population, respectively (Owen and Meier 2009). Four percent of the Cantwell population estimate would allow a harvest of ten antlered bull moose which is a conservative percentage for sustainable harvest for moose populations. ADF&G has developed a winter severity index for Unit 13 that records snow depths to determine snow pack and severe conditions that might effect moose survival (Testa 2004). The winter of 2004–2005 was classified as severe with record snow depths in Unit 13E and subsequent lower moose survival (Tobey and Schwanke 2008). Deep snow depths is correlated with direct mortality of juvenile and adult moose either from malnutrition (Ballard et al. 1996, Modafferi and Becker 1997) and/or winter cumulative effects of malnutrition on recruitment (Solberg 1999) or susceptibility to predators (Paragi and Kellie 2008, Tobey and Kelleyhouse 2006).

Table 1. Moose cohort ratios and estimated populations, and densities (\pm 90% confidence intervals) for Cantwell area moose surveys, Denali National Park and Preserve, 1992–2008. (Owen and Meier 2009).

| Year | Calves: 100 cows | Bulls: 100 cows | Estimated population | Density Estimate moose/ km ² |
|------|---------------------|--------------------|-------------------------|--|
| 1992 | 28 | 29 | 317 \pm 13 | 0.51 |
| 1993 | 59 | 71 | 223 \pm 10 | 0.37 |
| 1995 | 24 | 28 | 200 \pm 16 | 0.36 |
| 2003 | 28 | 38 | 271 \pm 98 | 0.26 |
| 2005 | 19 | 47 | 257 | 0.25 |
| 2008 | 28 | 40 | 255 | 0.24 |

Harvest History

Historically, Unit 13 has been an important area for moose hunting in Alaska due to the proximity to major human populations within the State. Throughout the 1960s and early 70s, annual harvests averaged more than 1,200 bulls and 200 cows (Tobey 2004). During this time, harvests occurred in both fall and winter seasons, however moose numbers began to decline. By the late 1970s harvests were reduced to approximately 775 bulls annually, cow harvests and the winter season were eliminated, but the bull:cow ratios were still low. In response, the ADF&G changed the harvest of any bull to a harvest of a bull with an antler spread of at least 36 inches or 3 brow tines on at least one antler in 1980. This harvest regime helps to promote growth of the moose population. . Subsequently the harvests increased as well, peaking in 1998 when 1259 moose were reported harvested (Tobey 2004). However, since 1990 the State harvest regulations have been revised several times in response to low bull:cow ratios, severe winter mortality, and increased predation. Since 2001, moose harvest and population levels have continued to increase throughout Unit 13, but Unit 13E still has low bull:cow ratios (Tobey and Schwanke 2008).

Currently, the Federal harvest season in Unit 13 is from Aug. 1–Sept. 20 which allows for a longer subsistence opportunity for Federally qualified subsistence users than for State users. The State general

harvest season is from Sept. 1–Sept. 20 in Unit 13 and is the predominate source of harvest under State regulations (**Table 2**). Currently Federally qualified subsistence users on average harvest four bull moose during the fall season within Unit 13E which would allow, on average, six bull moose to be harvested in the winter season (**Table 2**). Prior to 2009, the State Tier II hunt (TM300) provided a State subsistence opportunity from Aug. 15–Aug. 30. This has been eliminated and a community harvest (CM300) from Aug. 10–Sept. 20 was established for residents of Gulkana, Cantwell, Chistochina, Gakona, Mentasta, Tazlina, Chitina and Kluti Kaah. In addition, Alaskan residents may participate in the Sept. 1–Sept. 20 season for spike-fork or 50-inch antlers or antlers with 4 or more brow tine on at least one side bull moose.

Effects of the Proposal

Since 2008, there has been access restrictions placed on the Cantwell Traditional Use Area due to resource damage from ORV's which has reduced the ability for Federal qualified subsistence users to harvest moose during the fall season with . However, snowmachines are exempt from the TUA area restriction, if this proposal is adopted it would allow subsistence users the opportunity to utilize snowmachines to harvest moose after snowfall. It would also establish a winter season which would provide an additional 45 days of opportunity for Federally qualified subsistence users. Because the winter season would be managed through a quota that encompasses both the fall and winter seasons, the additional opportunity in the form of hunting days would have limited effects on the moose population in Unit 13E.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-35 with modification to clarify the regulatory language and remove the quota of 10 bull moose to allow managers flexibility in setting a sustainable harvest depending upon annual moose population fluctuations.

Unit 13E (TUA Denali NPS lands)—Moose

*1 antlered bull moose by Federal registration permit only; Aug. 1–Sept. 20
only 1 permit will be issued per household*

OR

*Quotas and any needed closures may be announced by the Dec. 1–Jan. 15
Superintendent of the Denali National Park and Preserve, in
consultation with ADF&G.*

Unit 13E—Remainder—Moose

*1 antlered bull moose by Federal registration permit only; Aug. 1–Sept. 20
only 1 permit will be issued per household*

Justification

Since 2008, there has been access restrictions placed on the Cantwell Traditional Use Area due to resource damage from ORV's. Snowmachines are exempt from the TUA area restriction; however, the current moose season falls before snowfall, therefore making it impossible to utilize snowmachines to harvest moose. Removing the specific quota of ten animals allows the superintendent more management flexibility to change the quota based on the health of the moose population. A harvest quota of four percent of the observed population of moose in the are would allow ten bull moose to be harvested between the current fall season and the proposed winter season in Unit 13E. By establishing a winter

Table 2: Results of State and Federal moose hunts in Unit 13E from 2004–2007 (ADFG 2009 and FWS 2009)

| Year | State Tier II harvest (TM300) Sept 1–Sept 20 | General harvest Sept 1–Sept 20 | # of State hunters reported ^a | Total State Bull Harvest | Federal subsistence harvest (BLM/ FM 313/314 ^b) Aug 1 –Sept 20 | # of Federal hunters reported | Total Federal Bull Harvest |
|------|--|--------------------------------|--|--------------------------|--|-------------------------------|----------------------------|
| 2004 | 12 | 103 | 591 | 115 | 3 | 10 | 3 |
| 2005 | 7 | 98 | 652 | 105 | 4 | 12 | 4 |
| 2006 | 8 | 144 | 755 | 152 | 4 | 22 | 4 |
| 2007 | 8 | 126 | 729 | 134 | 3 | 15 | 3 |

^a Actual number of hunters who hunted both unsuccessfully and successfully

^b Federal subsistence harvest 3 14 is for Delta Junction residents only

season, it would provide an additional 45 days of opportunity for Federally qualified subsistence users. Because the winter season would be managed through a quota that encompasses both the fall and winter seasons, the additional opportunity in the form of hunting days would have limited effects on the moose population in Unit 13E.

Currently Federally qualified subsistence users on average harvest four bull moose during the fall season within Unit 13E which would allow, on average, six bull moose to be harvested in the winter season. In 2008, population estimates by DNP observed 250 moose in the proximate areas of the Cantwell TUA, a subarea within unit 13E, and in 2007; ADF&G estimated 346 moose within all of Unit 13E.

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Alaska Department of Fish and Game
Comments to the Regional Advisory Council

Wildlife Proposal WP10-35: This proposal would allow residents of the Native Village of Cantwell to harvest an antlered bull moose December 1 through January 15 on federal public lands in Denali National Park with a harvest quota of 10 bulls.

Introduction: This community qualifies for federal subsistence, and this proposal would extend the federal subsistence season and increase allocation. The proposal indicates, incorrectly, that a winter hunt is being sought because the proponent believes off road vehicle use in traditional use areas was banned by the National Park Service in 2008 and it is easier to harvest and transport moose with snowmachines during winter in Denali National Park lands. Recent National Park Service regulations for Denali National Park were cooperatively developed with residents of Cantwell to allow continued use of off road vehicles on designated trails in the park for federally qualified subsistence users to access traditional subsistence resources such as moose. The current federal subsistence moose hunting season for Unit 13E is August 1 through September 20, one antlered bull per household.

Impact on Subsistence Users: A winter take of bulls by a portion of eligible federal subsistence hunters could reduce the number of animals available to all subsistence hunters during fall season.

Opportunity Provided by State: The state provides for a community harvest hunt administered by Ahtna in which the Native Village of Cantwell is a member. The bag limit is 100 any-bull moose in GMU 11 and 13, plus an unlimited number of bull moose with an antler configuration of spike, fork, or antler spread of 50 inches or larger. Cantwell residents participating in the 2009 community harvest program harvested a total of 22 bull moose of which 11 were “any bulls” (not currently legal under general state hunting regulations). The residents of Cantwell harvested 24% of the 94 moose harvested during the community harvest program in 2009. Harvest quotas for moose were not met during the fall 2009 moose hunting season suggesting that current federal and state subsistence hunts are meeting the needs of local rural residents.

Conservation Issues: There are conservation concerns with all winter moose hunts, particularly when the population is relatively low. Moose movements to winter areas can easily result in overharvests and reduce fall hunting opportunity in future years. Also, hunting during periods of deep snow adds stress to moose populations in wintering areas that could impact overall survival. Winter hunts are not generally recommended unless moose populations are exceeding the carrying capacity of the area and reductions need to be made.

Enforcement Issues: Enforcement of winter hunts is difficult because of logistics and weather conditions, and user accountability diminishes as winter harvest reports are more difficult to acquire from the public.

Other Comments: Before a winter hunt is established, it is always recommended that the movement patterns of the affected moose population be studied.

Recommendation: Oppose.

| WP10-36/37/41 Executive Summary | |
|---|---|
| General Description | Proposals WP10-36 and -37, Submitted by the Defenders of Wildlife in conjunction with the Alaska Wildlife Alliance, seek to shorten wolf seasons and lower harvest limits for wolves in Unit 13D. Proposal WP10-41 was submitted by the Alaska Wildlife Alliance and seeks to close the Unit 14C wolf hunting season. |
| Proposed Regulation | |
| Proposal WP10-36 | Unit 13D—Wolf Trapping <i>No limit</i> <i>Nov. 1–Mar. 31</i> <i>Oct. 15–April 30</i> |
| Proposal WP10-37 | Unit 13D—Wolf Hunting <i>105 Wolves</i> <i>Nov. 1–Mar. 31</i> <i>Aug. 10–April 30</i> |
| Proposal WP10-41 | Unit 14C—Wolf Hunting <i>5 Wolves</i> <i>No Federal open season</i> <i>Aug. 10–April 30</i> |
| OSM Preliminary Conclusion | Oppose |
| Southcentral Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | Oppose |
| Written Public Comments | 1 Oppose |

**DRAFT STAFF ANALYSIS
WP10-36, -37 AND -41**

ISSUES

Proposals WP10-36 and -37, submitted by the Defenders of Wildlife in conjunction with the Alaska Wildlife Alliance, seek to shorten wolf seasons and lower harvest limits for wolves in Unit 13D. Proposal WP10-41 was submitted by the Alaska Wildlife Alliance and seeks to close the Unit 14C wolf hunting season.

DISCUSSION

Proposal WP10-36 requests that the wolf trapping season in Unit 13D be changed from October 15–April 30 to November 1–March 31. Proposal WP10-37 requests that wolf hunting season in Unit 13D be changed from August 10–April 30 to November 1–March 31, and that the harvest limit be reduced from 10 wolves to five. The proponents note that by late April, in Units 13D, hides are rubbed and pregnant females are approaching full term. The proponents note that pups are only half grown at the start of the current wolf hunting seasons in Unit 13D and that in August, hides are not suitable for commercial sale or trophies.

Proposal WP10-41 requests that wolf hunting season be closed in Unit 14C to provide for more wildlife viewing opportunities.

Existing Federal Regulation

Unit 13D—Wolf Trapping

No limit

Oct. 15–April 30

Unit 13D—Wolf Hunting

10 Wolves

Aug. 10–April 30

Unit 14C—Wolf Hunting

5 Wolves

Aug. 10–April 30

Proposed Federal Regulation

Proposal WP10-36

Unit 13D—Wolf Trapping

No limit

Nov. 1–Mar. 31

~~Oct. 15–April 30~~

Proposal WP10-37

Unit 13D—Wolf Hunting

~~10~~ 5 Wolves

Nov. 1–Mar. 31

~~Aug. 10–April 30~~

Proposal WP10-41:**Unit 14C—Wolf Hunting**~~5 Wolves~~*No Federal open season*~~Aug. 10–April 30~~**Existing State Regulation****Unit 13D— Wolf Trapping***No limit**Oct. 15–April 30***Unit 13D—Hunting***10 Wolves per day**Aug. 10–April 30***Unit 14C remainder (outside special management areas)—Wolf Hunting***5 Wolves**Aug. 10–May 31***Extent of Federal Public Lands**

Federal public lands comprise approximately 8% of Unit 13D and consist of 86% U.S. Forest Service (USFS) and 14% Bureau of Land Management (BLM) lands (see Unit 13 Map). Federal public lands comprise approximately 17% of Unit 14C and consist of 75% USFS, 25% BLM and <0.1% U.S. Fish and Wildlife Service (FWS) lands (see Unit 14 Map).

Customary and Traditional Use Determinations

Rural residents of Units 6, 9, 10 (Unimak Island only), 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, and Chickaloon have a positive customary and traditional use determination to harvest wolves in Units 13D. All rural residents have a positive customary and traditional use determination to harvest wolves in Unit 14C.

Regulatory History

The Federal subsistence wolf trapping season in Unit 13D extended from November 1 to March 31 in regulatory years 1990/91 to 1993/94. Action taken on a proposal from ADF&G (Proposal 2) and supported by the Southcentral Alaska Subsistence Regional Advisory Council (Council) changed the season to November 10–March 31 beginning in regulatory year 1994/95. Action taken on a proposal from the Office of Subsistence Management (Proposal 2), and supported by the Council, changed the season to October 15–April 30 in regulatory year 2000/2001. There has been no harvest limit under wolf trapping regulations in Unit 13D since 1990.

The Federal subsistence wolf hunting season in Unit 13D has extended from August 10 to April 30 since 1990. There was no harvest limit for wolf hunters in Unit 13D in regulatory years 1990/91 and 1991/92. The harvest limit was reduced to ten wolves in regulatory year 1992/93. Action taken on a proposal from ADF&G (Proposal 2) and supported by the Council reduced the Unit 13D harvest limit to five wolves in regulatory year 1994/95. Action taken on a proposal from the Eastern Interior Alaska Subsistence Regional Advisory Council (Proposal 24) and supported by the Southcentral Alaska Subsistence Regional Advisory Council increased the harvest limit for hunters in Unit 13D to ten wolves in regulatory year 2000/01.

The Federal subsistence, Unit 14C, wolf hunting season has been August 10 to April 31 since 1990. The Unit 14C wolf hunting harvest limit was one wolf for regulatory years 1990/91 to 1993/94. Action taken on a proposal from ADF&G (Proposal 2) and supported by the Council changed this harvest limit to 5 wolves in regulatory year 1994/95.

Trappers may shoot a free ranging wolf on USFS, BLM and FWS lands in these units during trapping season. The Federal subsistence wolf trapping season in Unit 14C is November 10 to February 28. Hunters and trappers may harvest wolves under State regulations on USFS, BLM, and FWS lands in these units.

The proponent of WP10-41 is seeking to provide more wildlife viewing opportunities Unit 14C. The Federal Subsistence Board restricted subsistence to provide for wildlife viewing once before. In 1996, the U.S. Department of Agriculture, U.S. Forest Service submitted a proposal to close a portion of Anan Creek in Unit 1B to brown bear hunting and to modify a closure to black bear hunting to provide for wildlife viewing. The change was requested to align with State regulations and to address potential safety hazards of bear hunting near a viewing area. The Southeast Alaska Subsistence Regional Advisory Council supported that proposal and it was adopted by the Board in April 1997.

In 2004, Defenders of Wildlife submitted a proposal (WP05-02) requesting that wolf hunting seasons in Units 1, 3–4, 5A, 6–7, 9–13, 14C, 15–21, and 24–26 be closed until September 15. The Council opposed that proposal, as did seven other Regional Advisory Councils. Consistent with these Regional Advisory Council recommendations, the Federal Subsistence Board rejected proposal WP05-02. In its comments concerning WP05-02, the Council noted that there was no biological reason to reduce the wolf season (FSB 2005). At the Council's March 2005 meeting in Anchorage, it was noted that the Denali Subsistence Resource Commission had reported that early season wolf pelts have low commercial value but are a resource for local subsistence users making crafts and clothing for personal use (SCRAC 2005).

Biological Background

Wolves (*Canis lupus*) have probably been part of Alaska fauna since the Pleistocene glaciation (Murie 1944). Wolves are found throughout most of Units 13D and 14C. Prey species include caribou, moose, sheep, small mammals, snowshoe hare, beaver, and salmon. Murie (1944) noted that there are times of wolf scarcity and times of wolf abundance and suggested that food supply was probably an important factor affecting wolf abundance. Wolves first breed at age two to four and produce pups in dens during the spring (Mech et al. 1998). 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. Wolves live at low densities in a structured population of territorial packs (Mech and Boitani 2003). Meier et al. (2006) reported that 28% of the wolves leave their packs each year, and that most offspring eventually leave the pack. Dispersing wolves form new packs and territories when they locate dispersers of the opposite sex from another pack and an unoccupied territory (Rothman and Mech 1979). Meier et al. (2006) reported that wolves sometimes disperse great distances. Kelleyhouse (2006) noted that radio-collared wolves from the Kenai Peninsula, Denali National Park, and Units 20 and 12 have been observed or harvested in Unit 13.

The home range size is believed to be dependent on prey abundance, the activities of neighboring packs, and each pack's individual habits. Wolf pack territories overlap one another and change over time (Meier et al. 2006). As a pack makes its way around its territory, it may encounter and engage with 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. Meier et al. (2006) observed that at least 60% of the wolf deaths in Denali National Park and Preserve came from wolves being killed

by other wolf packs. With high reproductive capacity, good survival of young, and high dispersal rates, wolf populations are able to quickly respond to changes in prey abundance.

Unit 13D

Kelleyhouse (2006) presented the wolf population data for Unit 13 as a whole, and did not break out the information for Unit 13D. While information is limited, she estimated that in Unit 13 there were 220–520 wolves in 50–70 packs in regulatory years 1997/98 to 2004/2005. This represented a density of approximately 14–32 wolves/1000 mi.². Wolf territory, size and productivity are thought to be primarily a function of moose density (Kelleyhouse 2006).

Unit 14C

ADF&G (2010a) reported that based on an aerial survey in 1995 and anecdotal reports, Unit 14C has at least 25–30 wolves in 4–5 packs. One of these pack uses the Twentymile River drainage in the southeastern corner of the subunit, which is in the Chugach National Forest. ADF&G noted that a second pack from the Kenai Peninsula may occasionally include the Twentymile River drainage. Wolf hunting and trapping is prohibited in adjacent Chugach State Forest and on the local military reservations, which provide refugium for one of the subunit's packs and partial refugium for at least two other packs. Peltier (2006) noted that ADF&G's objective was to maintain a minimum population of 20 wolves in Unit 14C.

Harvest History

Stratton and Georgette (1984) provide some subsistence harvest information for communities in the Copper River Basin. Hunters occasionally take wolves opportunistically in the fall and early spring when they are hunting other species. Fur prices and snow and ice conditions affect wolf trapping effort in any given year. Once snow-cover and ice are adequate for snowmachine travel, trappers began establishing and maintaining trap lines. Wolf harvest by trappers is normally spread throughout the winter and declines as snow and ice conditions deteriorate.

Wolves harvested either by trapping or hunting 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.

Based on an analysis of information from North American wolf populations, Adams et al. (2008) concluded that wolf populations appear to be largely unaffected by human take of $\leq 29\%$ annually. Given the limited effects of moderate levels of human take, they concluded that the risks of reducing wolf populations through regulated harvest are low.

Unit 13D

From regulatory years 1999/2000 to 2008/09, the reported annual harvest of wolves in Unit 13D ranged from 7 to 22 wolves per year (**Table 1**). Of the 139 wolves harvested during these years, 88 were taken using traps or snares, and 51 were shot. Forty (29%) were taken during the months of August, September, October and April (**Table 1**). Since 2001, the estimated annual harvest of wolves in Unit 13D has been 9–38% (average 23%) (ADF&G 2010a). Wolf numbers in Unit 13D are stable (ADF&G 2010a).

Table 1. Reported wolf harvest and method of take for Unit 13D (ADF&G 2009 and 2010b).

| Regulatory | Reported Total | Aug.–Oct. & April | Method of take for total harvest from Unit 13D | | | | |
|------------|----------------|-------------------|--|-----|------|----|-----|
| Year | Harvest | Harvest | Trap/snare | (%) | Shot | % | Unk |
| 1999/2000 | 10 | 3 | 4 | 40 | 6 | 60 | 0 |
| 2000/01 | 8 | 2 | 6 | 75 | 2 | 25 | 0 |
| 2001/02 | 19 | 2 | 13 | 69 | 6 | 31 | 0 |
| 2002/03 | 13 | 3 | 7 | 54 | 6 | 46 | 0 |
| 2003/04 | 8 | 3 | 4 | 50 | 4 | 50 | 0 |
| 2004/05 | 7 | 4 | 3 | 43 | 5 | 57 | 0 |
| 2005/06 | 22 | 9 | 17 | 77 | 5 | 23 | 0 |
| 2006/07 | 19 | 4 | 10 | 53 | 9 | 47 | 0 |
| 2007/08 | 16 | 4 | 11 | 69 | 5 | 31 | 0 |
| 2008/09 | 17 | 6 | 13 | 76 | 4 | 24 | 0 |

Unit 14C

From regulatory years 1999/2000 to 2008/09, the reported annual harvest of wolves in Unit 14C ranged from 0 to 4 wolves per year (**Table 2**). Most of these wolves were shot. Peltier (2006) estimated that Unit 14 wolf harvest rates were approximately 22–35% in regulatory years 2002/03 to 2004/05. He observed that weather and trapping conditions can greatly affect the number that are taken with traps and snares, whereas the number shot is more dependent on travel conditions. In Unit 14, hunters take a significant portion of the annual wolf harvest incidental to hunting for other species. Peltier (2006) noted that an ADF&G primary goal for this species in Unit 14C is to provide opportunity people to view, photograph, and enjoy wolves.

Effects of the Proposal

If adopted, these proposals would decrease the opportunity to harvest wolves under Federal subsistence regulations in Units 13D and 14C.

If proposals WP 10-36 and -37 are adopted the Federal wolf trapping and hunting seasons in Unit 13D will be shortened and harvest limits will be reduced. If Proposal WP10-36 is adopted, it would close Federal wolf trapping October 15–31 and April 1–30 in Unit 13D, thereby shortening the existing season by 47 days. If Proposal WP10-37 is adopted, the Federal wolf hunting season in Unit 13D would be closed August 10 to October 31 and April 1–30 thereby shortening the existing season by 113 days. Between regulatory years 1999/2000 and 2008/09, 29% of the reported Unit 13D wolf harvest occurred in August, September, October and April (**Table 1**). Proposal WP10-37 would eliminate the opportunity for subsistence users to harvest wolves under Federal regulations during the fall and early spring when they are hunting other species.

If proposal WP10-41 is adopted, the Federal wolf hunting season in Unit 14C would be closed.

Proposals WP10-36 and -37 would make the Federal subsistence wolf hunting and trapping seasons shorter than the State seasons. WP10-37 would make the Federal subsistence wolf hunting harvest limit

Table 2. Reported wolf harvest and method of take for Unit 14C (ADF&G 2009 and 2010b).

| Regulatory | Reported Total | Method of take for total harvest from Unit 14C | | | | |
|------------|----------------|--|-----|------|-----|-----|
| Year | Harvest | Trap/snare | (%) | Shot | % | Unk |
| 1999/2000 | 1 | 0 | 0 | 0 | 0 | 1 |
| 2000/01 | 1 | 0 | 0 | 1 | 100 | 0 |
| 2001/02 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2002/03 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2003/04 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2004/05 | 2 | 1 | 100 | 0 | 0 | 1 |
| 2005/06 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2006/07 | 1 | 0 | 0 | 1 | 100 | 0 |
| 2007/08 | 4 | 0 | 0 | 4 | 100 | 0 |
| 2008/09 | 0 | 0 | 0 | 0 | 0 | 0 |

lower than the State regulations. The proposed closure of wolf hunting in Unit 14C would make the Federal subsistence regulations more restrictive than the State regulations.

OSM PRELIMINARY CONCLUSION

Oppose Proposals WP10-36, -37 and -41.

Justification

The wolf populations in Subunits 13D and 14C are thought to be healthy. Wolves are prolific and survival of young is generally high. Young wolves disperse from packs at high rates as yearlings and 2-year-olds; these individuals are abundant and available to be harvested. The wolf populations in these units are thought to be regulated more by natural factors than by hunters and trappers.

Wolves are an important subsistence resource in Units 13D and 14C. The harvest of wolves and the use, barter, and sale of wolf pelts is a long standing component of the subsistence economy.

Even if these proposals were adopted by the Federal Subsistence Board, hunters would still be able to take wolves under State regulations on USFS, BLM, and FWS lands in these two units. Therefore, adoption of these proposals by the Federal Subsistence Board would not have the effect sought by the proponents.

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Comments WP10-36, WP10-37, and WP10-41
January 29, 2010; Page 1 of 2

Alaska Department of Fish and Game
Comments to the Regional Advisory Council

Wildlife Proposal WP10-36: This proposal shortens the federal wolf trapping season in Unit 13D by 47 days with season dates changed from October 15 through April 30 to November 1 through March 31.

Wildlife Proposal WP10-37: This proposal shortens the federal subsistence wolf hunting season in Unit 13D by 113 days with season dates changed from August 10 through April 30 to November 1 through March 31.

Wildlife Proposal WP10-41: This proposal prohibits wolf hunting on federal public land, Chugach National Forest, located in the southwestern corner of Unit 14C.

Introduction: Contrary to the proponent's claim in proposal WP10-36, trapping is not an effective predator control method when the objective is to reduce wolves to low densities. Long seasons allow trappers to take wolves when they encounter them on their lines and to make sets when it is appropriate. The value of a hide depends on who the trapper intends to sell it to and what it is to be used for. Proposal WP10-37 incorrectly assumes federal subsistence wolf hunting seasons and bag limits were established to benefit prey species. The federal subsistence wolf hunting season opening and closure dates are traditional, allowing federal subsistence hunters the opportunity to take a wolf for subsistence on federal lands under ANILCA provisions, while hunting other big game in both the spring and fall. Hide value depends on what the wolf will be used for.

Based on an aerial survey in 1995 and anecdotal reports, the department estimates Unit 14C has at least 25-30 wolves in 4-5 packs. One pack uses the Twentymile River drainage in the southeastern corner of the subunit, which is in Chugach National Forest. The territory of a second pack from the Kenai Peninsula may occasionally include the Twentymile River drainage. Fur sealing records indicate 37 wolves were sealed from Unit 14C during 1984–2007. Eleven of these wolves were harvested in the Twentymile River drainage. Nearly half of the wolves (16/37) were taken by hunters and 6 of these wolves were shot in the Twentymile River drainage. Thus, in the past 24 years an average of 1.5 wolves per year were reported harvested by all methods, including 4 killed by vehicles, in Unit 14C. A wolf population of 25-30 individuals will not be reduced by annual harvest rates of 1.5 wolves (5-6%). Since statehood, there has been no effort to reduce wolf populations in Unit 14C under the state's predator control programs. Wolf hunting and trapping is prohibited in adjacent Chugach State Park and on the local military reservations, which provide a refugium for one of the subunit's packs and partial refugium for at least two other packs.

Impact on Subsistence Users: Adoption of proposal WP10-36 reduces federal subsistence opportunity to trap wolves. Proposal WP10-37 would shorten the wolf hunting season from 263 days to 150 days per year, reducing some opportunity for federal subsistence hunters. If adopted, the federal subsistence wolf bag limit would be reduced by 50% to five wolves. Regarding WP10-41, it is not clear how many of the 6 wolves shot in the Twentymile River drainage in the past 24 years were taken by subsistence hunters.

Comments WP10-36, WP10-37, and WP10-41
January 29, 2010; Page 2 of 2

Opportunity Provided by State: In Unit 13D, the state provides an October 15 through April 30 trapping season and harvest is not limited. The state provides an August 10 through April 30 hunting season and harvest is ten wolves. The state wolf hunting season for Unit 14C remainder, outside of more restrictive special management areas, is August 10 through April 30 with a harvest limit of five. The state wolf trapping season for Unit 14C remainder, outside of more restrictive special management areas, is November 10 through February 28, and harvest is unlimited. Most wolves are taken in the Peters Creek, Knik River, and Lake George areas.

Conservation Issues: Wolf numbers in 13D are not controlled under a predator management program and wolf numbers are stable. Unit 13D was not included in the predator program because it is heavily timbered which makes airplane based management very difficult. However, wolves are important predators in 13D, with sheep and moose numbers low enough to be impacted by wolf predation. Since 2001, the average annual take of wolves in 13D has been 23% (range = 9% – 38%). It is well documented that this range is sustainable. The long season dates provide maximum opportunity for trappers and have no impact on population health in 13D. At present harvest levels in Unit 14C and with the existing refugium provided by Chugach State Park, there are no conservation issues.

Enforcement Issues: Differences in federal and State regulations resulting from adoption of these proposals will create enforcement issues in areas with mixed land ownership. Enforcement of seasons along traplines running through both federal public lands and non-federal public lands by both federal subsistence and non-federal subsistence trappers would be very difficult.

Other Comments: It is unlikely that all adults would be taken out of a pack by the hunting or trapping addressed in these proposals. Adults have learned to avoid man through experience and are the most difficult pack members to take, while pups are the most vulnerable pack members to harvest. Pup starvation is unlikely even if some adults are taken. Wolves have evolved and thrived under natural conditions where adult mortality occurs regularly through intraspecific competition. Also, older adults kill large prey, thus are subject to injury and death. In cases of natural adult mortality, the pack social structure provides support to pups.

Subsistence trappers know their lines and wolf movements so should be allowed to choose the time to set the line provided there are no conservation concerns.

Recommendation: Oppose.

WRITTEN PUBLIC COMMENTS

Oppose. We have a very high level of respect for Alaska's wolf population and believe they are integral to the fabric of Alaska. However, they have to have population control measures that will enable prey species to live within balance of what their habitats will provide. Wolves have to be included into the management process in an active enough manner to provide maximum human benefit from the prey species. This type of management provides the best stewardship possible for the prey species as well as all people who depend upon or enjoy the benefit of high density population equilibriums. As the Federal Subsistence Board is mandated with providing important subsistence hunting opportunities and the scope of these proposals takes away from that objective, we encourage the Board not to pass these proposals.

Alaska Professional Hunters Association

| WP10-38 Executive Summary | |
|---|--|
| General Description | Proposal WP10-38 seeks to shorten wolf hunting seasons in Units 11 and 12. <i>Submitted by the Defenders of Wildlife and the Alaska Wildlife Alliance</i> |
| Proposed Regulation | <p>Unit 11—Wolf Hunting <i>10 Wolves</i> <i>Nov. 1-Mar. 31 Aug. 10-April 30</i></p> <p>Unit 12- Wolf Hunting <i>10 Wolves</i> <i>Nov. 1-Mar. 31-Aug. 10-April 30</i></p> |
| OSM Preliminary Conclusion | Oppose |
| Southcentral Regional Council Recommendation | |
| Eastern Interior Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | Oppose |
| Written Public Comments | 2 Oppose |

**DRAFT STAFF ANALYSIS
WP10-38**

ISSUES

Proposal WP10-38, submitted by the Defenders of Wildlife in conjunction with the Alaska Wildlife Alliance, seeks to shorten wolf hunting seasons in Units 11 and 12.

DISCUSSION

Proposal WP10-38 requests that wolf hunting not be allowed in Units 11 and 12 in the months of August, September, October, and April. The proponents wish to apply this restriction in the part of Unit 12 that is outside of the State’s predator control program (U.S. Fish and Wildlife Service (FWS) and National Park Service (NPS) lands). The proponents note that by late April, in Units 11 and 12, hides are rubbed and pregnant females are approaching full term. They note that pups are only half grown at the start of the current wolf hunting seasons in Units 11 and 12 and that in August, hides are not suitable for commercial sale or trophies.

Existing Federal Regulation

Unit 11—Wolf Hunting

10 Wolves

Aug. 10–April 30

Unit 12—Wolf Hunting

10 Wolves

Aug. 10–April 30

Proposed Federal Regulation

Unit 11—Wolf Hunting

10 Wolves

Nov. 1–Mar. 31 Aug. 10–April 30

Unit 12— Wolf Hunting

10 Wolves

Nov. 1–Mar. 31-Aug. 10–April 30

Existing State Regulation

Unit 11—Wolf Hunting

5 Wolves

Aug. 10–April 30

Unit 12—Wolf Hunting

5 Wolves

Aug. 10–May 31

Extent of Federal Public Lands

Federal public lands comprise approximately 81% of Unit 11 and consist of 97% National Park Service (NPS), 3% U.S. Forest Service (USFS) and <0.1% Bureau of Land Management (BLM) lands (see **Unit 11 Map**). Federal public lands comprise approximately 59% of Unit 12 and consist of 82% National Park Service (NPS) and 18% U.S. Fish and Wildlife Service (FWS) lands (see **Unit 12 Map**).

Customary and Traditional Use Determinations

Rural residents of Units 6, 9, 10 (Unimak Island only), 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, and Chickaloon have a positive customary and traditional use determination to harvest wolves in Units 11 and 12. In order to engage in subsistence in Wrangell St. Elias National Park, the National Park Service requires that subsistence users either live within the park's resident zone (36 CFR 13.430, 36 CFR 13.1902) or have a subsistence permit (36 CFR 13.440) issued by the park superintendent.

Regulatory History

The Federal subsistence wolf hunting seasons in Unit 11 and 12 have been from August 10 to April 30 since 1990. The harvest limit in both Units 11 and 12 was 10 wolves in regulatory year 1990/91. This was reduced to five wolves from regulatory years 1992/93 to 1998/99. In regulatory year 1999/2000, the Federal Subsistence Board changed the harvest limits in Units 11 and 12 to 10 wolves based on recommendations from the Eastern Interior Alaska Subsistence Regional Advisory Council and the Southcentral Alaska Subsistence Regional Advisory Council.

In 2004, Defenders of Wildlife submitted a proposal (WP05-02) requesting that wolf hunting seasons in Units 1, 3–4, 5A, 6–7, 9–13, 14C, 15–21, and 24–26 be closed until September 15. The Southcentral Alaska Subsistence Regional Advisory Council and Eastern Interior Alaska Subsistence Regional Advisory Council both opposed that proposal, as did six other Regional Advisory Councils. Consistent with these Regional Advisory Council recommendations, the Federal Subsistence Board rejected proposal WP05-02. In its comments concerning WP05-02, the Southcentral Alaska Subsistence Regional Advisory Council noted that there was no biological reason to reduce the wolf season (FSB 2005). At the Southcentral Alaska Subsistence Regional Advisory Council's March 2005 meeting, it was noted that the Denali Subsistence Resource Commission had reported that early season wolf pelts have low commercial value but are a resource for local subsistence users making crafts and clothing for personal use (SCRAC 2005). At its March 2005 meeting, Eastern Interior Alaska Subsistence Regional Advisory Council member Entsminger noted that, as a skin sewer, she has seen wolf hides from August and September and spring. She noted that in August and September wolf's hair tends to be shorter and is more useful for making hats and other things. She noted that while few wolves are taken in the fall, when they are harvested by subsistence users their hides are used (EIRAC 2005).

Biological Background

Wolves (*Canis lupus*) have probably been part of Alaska fauna since the Pleistocene glaciation (Murie 1944). Wolves are found throughout most of Units 11 and 12. Prey species include caribou, moose, sheep, small mammals, snowshoe hare, and beaver. Murie (1944) noted that there are times of wolf scarcity and times of wolf abundance and suggested that food supply was probably an important factor affecting wolf abundance. Wolves first breed at age two to four and produce pups in dens during the spring (Mech et al. 1998). 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. Wolves live at low densities in a structured population of territorial packs (Mech and Boitani 2003). Meier et al. (2006) reported that 28% of the wolves leave their packs each year, and that most offspring eventually leave the pack. 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). Meier et al. (2006) reported that wolves sometimes disperse great distances. The longest documented dispersal of a Denali National Park and Preserve wolf was 435 miles.

The size of the home range is believed to be dependent on prey abundance, the activities of neighboring packs, and each pack's individual habits. Wolf pack territories overlap one another and change over time (Meier et al. 2006). As a pack makes its way around its territory, it may encounter and engage with 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. Meier et al. (2006) observed that at least 60% of the wolf deaths in Denali National Park and Preserve came from wolves being killed by other wolf packs. With high reproductive capacity, good survival of young, and high dispersal rates, wolf populations are able to quickly respond to changes in prey abundance.

Unit 11

In the early 1970s, McIlroy (1975) estimated that the wolf density in Unit 11 was 12/1000 mi². Kelleyhouse (2006) estimated that there were 10 to 20 wolf packs in regulatory years 1997/98 to 2004/2005. She estimated that there were 70-130 wolves during that time-period and observed that wolf numbers were higher in the northern portions of the unit because of the higher density of caribou, moose and sheep. In 2008, the spring density of wolves in Unit 11 was approximately 6 wolves/mi² (ADF&G 2010).

Unit 12

Hollis (2006) estimated that there were 240-255 wolves in Unit 12. Wolf density estimates for 2001 to 2004 ranged from 14 to 50/1000 mi² (Hollis 2006). Hollis (2006) estimated that, in regulatory year 2002/03, there were a total of 31 packs in Unit 12 with an average pack size of 7.0-7.4 wolves. The current fall wolf population estimate for Unit 12 is 179-192 wolves (18 to 19/1000 mi²) (ADF&G 2010). The Unit 12 wolf population has benefited from high numbers of caribou since 1997 and from the snowshoe hare cycle highs in 1998-2001 and 2007-2009 (ADF&G 2010). The Chisana caribou herd has been a reliable food source for wolves in eastern Unit 12. Caribou from the Mentasta, Nelchina, and Macomb herds also have used portions of the unit and provide a food source for wolves (Hollis 2006)

Harvest History

Halpin (1987) and Stratton and Georgette (1984) provide some subsistence harvest information for communities in Units 11 and 12. Hunters occasionally take wolves in the fall and early spring when they are hunting other species. Once snow-cover and ice are adequate for snowmachine travel, trappers begin establishing and maintaining trap lines. Wolf harvest is spread throughout the winter. Wolf harvest declines in April as snow and ice conditions deteriorate with the spring melt. Fur prices and snow and ice conditions affect wolf trapping effort in any given year. Hollis (2006) observed that in Unit 12, few trappers specifically target wolves, but noted that during years when marten and lynx pelt prices are low and wolf prices are adequate, more trappers concentrate on wolves. Harvest rates in remote areas are dependent on fur prices and weather conditions. Trapping pressure is high along the road system and around communities in Units 11 and 12 (Kelleyhouse 2006, Hollis 2006).

Wolves harvested either by trapping or hunting 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. Kelleyhouse (2006) observed that in Unit 11, illegal and unreported wolf harvest was probably minimal.

There have been a number of wolf control programs in Units 11 and 12 since the 1940s (Kelleyhouse 2006, Hollis 2006). The Alaska Board of Game authorized aerial wolf control in northern Unit 12 in 2004 (Hollis 2006).

Based on an analysis of information from North American wolf populations, Adams et al. (2008) concluded that wolf populations appear to be largely unaffected by human take of $\leq 29\%$ annually. Given the limited effects of moderate levels of human take, they concluded that the risks of reducing wolf populations through regulated harvest are quite low.

Unit 11

From regulatory years 1999/2000 to 2008/09, the reported annual harvest of wolves in Unit 11 ranged from 15 to 35 wolves per year (Table 1). Most of the wolves were taken using traps or snares. Kelleyhouse (2006) observed that the reported harvest was relatively low when compared to the estimated Unit 11 wolf population size. She estimated that the annual harvest rate averaged about 14% for regulatory years 2002/03 to 2004/05.

Of a total of 212 wolves taken in Unit 11 during regulatory years 1999/2000 to 2008/09, 20 were shot during the months of August, September, October and April (**Table 1**).

Table 1. Reported wolf harvest and method of take for Unit 11 (ADF&G 2009).

| Regulatory Year | Reported Total Harvest | Shot Aug.–Oct. & April Harvest | Method of take for total harvest from Unit 11 | | | | |
|--------------------|------------------------------|--------------------------------------|---|-----|------|----|-----|
| | | | Trap/ snare | (%) | Shot | % | Unk |
| 1999/2000 | 23 | 2 | 21 | 91 | 2 | 9 | 0 |
| 2000/01 | 35 | 4 | 31 | 89 | 4 | 11 | 0 |
| 2001/02 | 23 | 1 | 21 | 91 | 2 | 9 | 0 |
| 2002/03 | 19 | 1 | 18 | 95 | 1 | 5 | 0 |
| 2003/04 | 15 | 2 | 11 | 73 | 3 | 20 | 1 |
| 2004/05 | 15 | 3 | 12 | 80 | 3 | 20 | 0 |
| 2005/06 | 26 | 2 | 22 | 85 | 4 | 15 | 0 |
| 2006/07 | 15 | 1 | 14 | 93 | 1 | 7 | 0 |
| 2007/08 | 23 | 3 | 19 | 83 | 4 | 17 | 0 |
| 2008/09 | 18 | 1 | 17 | 94 | 1 | 6 | 0 |

Unit 12

From regulatory years 1999/2000 to 2008/09, the reported annual harvest of wolves in Unit 12 ranged from 25 to 58 wolves per year (Table 2). Most of the wolves were taken using traps or snares. The harvest was relatively low when compared to the estimated Unit 12 wolf population size.

Of a total of 415 wolves taken in Unit 12 during regulatory years 1999/2000 to 2008/09, 42 were shot during the months of August, September, October and April (**Table 2**).

Effects of the Proposal

If Proposal WP10-38 is adopted, the Federal wolf hunting seasons in Units 11 and 12 will be shortened. The proposals seek to close the Federal wolf hunting seasons in these units from August 10–October 31 and April 1-30, thereby shortening the existing season by 113 days. Between regulatory years 1999/2000 and 2008/09, in both Unit 11 and Unit 12, 10% of the reported wolf harvest occurred in the months

Table 2. Reported wolf harvest and method of take for Unit 12 (ADF&G 2009).

| Regulatory Year | Reported Total Harvest | Shot Aug.-Oct. & April Harvest | Method of take for total harvest from Unit 12 | | | | |
|-----------------|------------------------|--------------------------------|---|-----|------|----|-----|
| | | | Trap/snare | (%) | Shot | % | Unk |
| 1999/2000 | 54 | 11 | 40 | 74 | 13 | 24 | 1 |
| 2000/01 | 58 | 2 | 51 | 88 | 7 | 12 | 0 |
| 2001/02 | 39 | 4 | 32 | 82 | 7 | 18 | 0 |
| 2002/03 | 53 | 2 | 49 | 92 | 4 | 8 | 0 |
| 2003/04 | 25 | 2 | 23 | 92 | 2 | 8 | 0 |
| 2004/05 | 29 | 1 | 27 | 93 | 2 | 7 | 0 |
| 2005/06 | 39 | 8 | 22 | 56 | 15 | 38 | 2 |
| 2006/07 | 30 | 2 | 24 | 80 | 6 | 20 | 0 |
| 2007/08 | 49 | 5 | 40 | 82 | 9 | 18 | 0 |
| 2008/09 | 39 | 3 | 29 | 74 | 7 | 18 | 3 |

of August, September, October and April (Tables 1 and 2). Proposal WP10-38 would eliminate the opportunity for Federally qualified subsistence users to harvest wolves under Federal regulations during the fall and spring when they are hunting other species. This proposal would make the Federal subsistence wolf hunting season in Unit 11 shorter than the State season. The Federal hunting season for wolves in Unit 12 is already shorter than the State season; this proposal seeks to make it even shorter.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP10-38.

Justification

The wolf populations in Units 11 and 12 are thought to be healthy. Wolves are prolific and survival of young is generally high. Young wolves disperse from packs at high rates as yearlings and 2-year-olds; these individuals are abundant and available to be harvested. The wolf population in these units is thought to be regulated more by natural factors than by the harvest by hunters and trappers.

Wolves are an important subsistence resource in Units 11 and 12. The harvest of wolves and the use, barter, and sale of pelts is a long standing component of the subsistence economy. While only a small part of the wolf harvest occurs in the months of August, September, October and April, the opportunity for hunters to take wolves in these months is important to Federally qualified subsistence users.

Even if this proposal were adopted by the Federal Subsistence Board, hunters would still be able to take wolves under State regulations on FWS, BLM, USFS and Wrangell-St. Elias Preserve lands in these two units. Therefore, adoption of this proposal by the Federal Subsistence Board would not have the effect sought by the proponents.

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Comments WP10-38
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Alaska Department of Fish and Game
Comments to the Regional Advisory Council

Wildlife Proposal WP10-38: This proposal would shorten the federal subsistence wolf hunting season in Units 11 and 12 by 113 days with season dates changed from August 10 through April 30 to November 1 through March 31.

Introduction: This proposal incorrectly assumes federal subsistence wolf hunting seasons opening August 10 are solely for predator control. August openings are traditional, allowing federal subsistence hunters the opportunity to take a wolf while hunting other big game. Hide value depends on what the wolf will be used for.

Impact on Subsistence Users: Adoption of this proposal would unnecessarily restrict the opportunity to take a wolf for subsistence while big game hunting.

Opportunity Provided by State: The state provides an August 1 through April 30 hunting season with a bag limit of 10 wolves.

Conservation Issues: Current season and bag limits for wolf hunting in Unit 11 have virtually no impact on wolf numbers. Since 1999, an average of 2 wolves per year have been taken. Hunting usually accounts for 10–20% of the total wolf take in Unit 11. Wolf numbers and total harvests have been relatively stable in Unit 11 for many years, and there are no current conservation concerns.

Fall wolf population estimates in Unit 11 ranged from 78 to 122 since the mid 1990s. For the size of the unit, this represents a very low natural density of wolves. The annual harvest rate since 2001 has averaged 19% (range = 12-24%), well within the range of sustainability regardless of the long hunting and trapping seasons. This stable low density pattern is due to the low density dynamic equilibrium predator/prey situation among wolves, moose, caribou, and sheep in the area.

The proposer incorrectly suggests that adjacent Unit 13 has a very low wolf density due to active predator management. While wolves have been reduced in Unit 13 in recent years, it was not by 80% as the proposer suggests. For comparison, the controlled wolf density in Unit 13 is actually higher than the current Unit 11 density. The most recent spring density of wolves in Unit 11 in 2008 was 2.2 wolves/1,000 km², considerably lower than in adjacent Unit 13 (3.8 wolves/1,000 km²). Shortening the wolf hunting or trapping season in Unit 11 at this time would have no effect on the conservation of wolves.

Enforcement Issues: Differences in federal and state regulations resulting from adoption of this proposal will create enforcement issues in areas with mixed land ownership.

Other Comments: It is unlikely that all adults would be taken out of a pack by the hunting addressed in this proposal. Adults have learned to avoid man through experience and are the most difficult pack members to take, while pups are the most vulnerable pack members to harvest. Pup starvation is unlikely even if some adults are taken. Wolves have evolved and

Comments WP10-38
January 29, 2010; Page 1 of 2

thrived under natural conditions where adult mortality occurs regularly through intraspecific competition. Also, older adults kill large prey, thus are subject to injury and death. In cases of natural adult mortality, the pack social structure provides support to pups.

Recommendation: Oppose

WRITTEN PUBLIC COMMENTS

Oppose. Please do not shorten wolf hunting season. I live in McCarthy and utilize subsistence resources. Wolves prey heavily on moose and sheep in my area, leaving less opportunity for local residents. Please keep wolf hunting as liberal as possible. (Airplanes or helicopters, anyone?)

Kieth Rowland, McCarthy

Oppose. We have a very high level of respect for Alaska's wolf population and believe they are integral to the fabric of Alaska. However, they have to have population control measures that will enable prey species to live within balance of what their habitats will provide. Wolves have to be included into the management process in an active enough manner to provide maximum human benefit from the prey species. This type of management provides the best stewardship possible for the prey species as well as all people who depend upon or enjoy the benefit of high density population equilibriums. As the Federal Subsistence Board is mandated with providing important subsistence hunting opportunities and the scope of these proposals takes away from that objective, we encourage the Board not to pass these proposals.

Alaska Professional Hunters Association

| WP10-39 Executive Summary | |
|---|--|
| General Description | Proposal WP10-39 requests that Federal subsistence regulations be clarified to show the requirements for harvest salvage, reporting and sealing for Dall sheep in Units 11 and 12. <i>Submitted by the Alaska Department of Fish and Game</i> |
| Proposed Regulation | <p>§ __.26 Subsistence taking of wildlife.</p> <p><i>(k) Sealing of beaver, lynx, marten, otter, sheep, wolf and wolverine. No person may possess or transport from Alaska the untanned skin of a marten taken in Units 1, 2, 3, 4, 5, 7, 13E, 14, 15 and 16 or the untanned skin of a beaver, lynx, otter, wolf or wolverine, whether taken inside or outside the State, unless the skin has been sealed by an authorized representative.</i></p> <p><i>(3) A person may not possess, transport, or export from the state, the horns of a Dall sheep ram taken in Units 11 and 12 unless the horns have been permanently sealed by an authorized ADF&G representative within 30 days of harvest.</i></p> |
| OSM Preliminary Conclusion | Take no action |
| Southcentral Regional Council Recommendation | |
| Eastern Interior Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS WP10-39

ISSUES

Proposal WP10-39, submitted by the Alaska Department of Fish and Game, requests that Federal subsistence regulations be clarified to show the requirements for harvest salvage, reporting and sealing for Dall sheep in Units 11 and 12.

DISCUSSION

The proponent requests that Federal subsistence regulations specifically state that horns of a Dall sheep must be salvaged, and that a person may not possess, transport, or export from the state, the horns of a Dall sheep ram taken in any hunt where there is a horn configuration bag limit or a ram-only bag limit in Units 11 and 12, unless the horns have been permanently sealed by a department representative within 30 days of taking. The proponent suggests that this requirement will lead to improved conservation and management of Dall sheep.

The proponent states that a most of the Dall sheep harvested in Units 11 and 12 under Federal subsistence regulations are taken under the State harvest ticket system, with the exception of a small number of rams taken under elder permit hunts. Given the lack of clarity, sealing requirements have not been enforced against federal subsistence hunters, and wildlife managers cannot easily check to see if a hunter is abiding by the State salvage and sealing regulations. The proponent also states that, if these rams are not brought in to be sealed, valuable information, such as detailed size measurements, age, and genetic material is not collected. These data are used to assess population health and dynamics through monitoring of the age structure of the harvest and, as well as to support ongoing genetic research in the Wrangell St. Elias Park and Preserve. The proponent states that the USGS Biological Science Center is conducting research to assess genetic patterns, distribution, and variability within the park and preserve. This study will help give managers a better understanding of sheep movements and the ability the population to recover from severe declines or die-offs should disease become a problem in the future.

Existing Federal Regulations

§_.6 Licenses, permits harvest tickets, tags, and reports.

(3) Possess and comply with the provisions of any pertinent permits, harvest tickets, or tags required by the State unless any of these documents or individual provisions in them are superseded by the requirements in subpart D of this part

§_.26 Subsistence taking of wildlife.

(g) Evidence of sex and identity. (1) If subsistence take of Dall sheep is restricted to a ram, you may not possess or transport a harvested sheep unless both horns accompany the animal.

(k) Sealing of beaver, lynx, marten, otter, wolf, and wolverine. No person may possess or transport from Alaska the untanned skin of a marten taken in Units 1, 2, 3, 4, 5, 7, 13E, 14, 15 and 16 or the untanned skin of a beaver, lynx, otter, wolf or wolverine, whether taken inside or outside the State, unless the skin has been sealed by an authorized representative.

Proposed Federal Regulations

§__.26 Subsistence taking of wildlife.

(k) Sealing of beaver, lynx, marten, otter, sheep, wolf and wolverine. No person may possess or transport from Alaska the untanned skin of a marten taken in Units 1, 2, 3, 4, 5, 7, 13E, 14, 15 and 16 or the untanned skin of a beaver, lynx, otter, wolf or wolverine, whether taken inside or outside the State, unless the skin has been sealed by an authorized representative.

(3) A person may not possess, transport, or export from the state, the horns of a Dall sheep ram taken in Units 11 and 12 unless the horns have been permanently sealed by an authorized ADF&G representative within 30 days of harvest.

Existing State Regulations

5 AAC 92.150. Evidence of sex and identity.

(a) Horns of a Dall sheep must be salvaged.

5 AAC 92.171. Sealing of Dall sheep horns.

A person may not possess, transport, or export from the state, the horns of a Dall sheep ram taken in any hunt where there is a horn configuration bag limit, unless the horns have been permanently sealed by a department representative within 30 days after the taking, or lesser time if designated by the department.

Regulatory History

The Federal regulations, that have dealt with Dall sheep harvest and reporting requirements, §__.6 (Licenses, permits harvest tickets, tags, and reports) and §__.26 (Subsistence taking of wildlife) have been in effect since 1992. However, they have not been consolidated into one location within the public booklet of Federal regulations which may make it difficult for Federally qualified subsistence users to know the requirements.

Effects of the Proposal

Federal regulation §__.6 states that any Federally qualified subsistence user must “Possess and comply with the provisions of any pertinent permits, harvest tickets, or tags required by the State unless any of these documents or individual provisions in them are superseded by the requirements in subpart D of this part”. As part of the State harvest reporting for sheep, sealing is required for sheep rams from areas with horn restrictions (Units 7, 9, 11-16, 19, 20, and 23-26), which is applicable to Federally qualified subsistence users using a harvest ticket. Federal regulation §__.26 also already states that “If subsistence take of Dall sheep is restricted to a ram, you may not possess or transport a harvested sheep unless both horns accompany the animal.” Therefore, changing Federal regulation to incorporate additional language would be redundant and would not provide additional clarification to the Federal subsistence user. However, it would be helpful to the Federally qualified subsistence users to add a sentence in the public booklet that states that Dall sheep horns must be sealed unless not required through unit specific regulation.

OSM PRELIMINARY CONCLUSION

Take no action on proposal WP10-39

Justification

Federal regulation §__.6 states that any Federally qualified subsistence user must *“Possess and comply with the provisions of any pertinent permits, harvest tickets, or tags required by the State unless any of these documents or individual provisions in them are superseded by the requirements in subpart D of this part”*. As part of the State harvest reporting for sheep, sealing is required for sheep rams from areas with horn restrictions (Units 7, 9, 11-16, 19, 20, and 23-26), which is applicable to Federally qualified subsistence users using a harvest ticket. Federal regulation §__.26 already states that *“If subsistence take of Dall sheep is restricted to a ram, you may not possess or transport a harvested sheep unless both horns accompany the animal.”*

The sealing requirement is not stated specifically in the Federal regulation public booklet which makes it difficult for the Federally qualified subsistence user to know their responsibilities. Adding this to the Federal regulation public booklet accordingly will give clarity to Federal subsistence regulations for sealing requirements of Dall sheep horns in all relevant Units, including Units 11 and 12. The recommended text addition in the public booklet would read as follows: *“A person who takes a Dall sheep ram under these regulations in Units 7, 9, 11-16, 19, 20, and 23-26 must possess a State harvest ticket and comply with the requirements of that ticket, including any sealing requirement.*

DRAFT STAFF ANALYSIS WP10-40

ISSUES

Proposal WP10-40, submitted by the Alaska Department of Fish and Game (ADF&G), requests that the wolverine trapping season in Unit 14C be changed from November 10 – February 28 to November 10 – January 31 and that the harvest limit be changed to 2 wolverines.

DISCUSSION

In 2009, the Alaska Board of Game closed wolverine trapping in the Chugach State Park and returned the trapping season to November 10 – January 31 from December 15 – January 31 due to increasingly successful harvests and reduced wolverine refugiums in the area. Due to concerns over the population, the proponent believes that the Federal subsistence trapping season and harvest limit should be aligned with the State trapping season (November 10 – January 31) and harvest limit of two wolverines.

Existing Federal Regulation

Unit 14C — Wolverine

No limit

Nov. 10 – Feb. 28

Proposed Federal Regulation

Unit 14C — Wolverine

No limit 2 wolverines

Nov. 10 – Feb. 28 Jan. 31

Existing State Regulation

Unit 14C — Wolverine

2 wolverines

Nov. 10 – Jan. 31

Extent of Federal Public Lands

Federal public lands comprise approximately 17% of Unit 14C and consist of 13% of U.S. Forest Service lands, 4% Bureau of Land Management, and less than 1% U.S. Fish and Wildlife Service (**Map 1**).

Customary and Traditional Use Determinations

No specific determination has been made; therefore all rural residents have a positive customary and traditional use determination for wolverines in Unit 14C.

Regulatory History

Under current Federal subsistence regulations, wolverine trapping has a month longer season than the State season, and there is no limit on the number of wolverines that can be trapped in Unit 14C. Since its

inception, the Federal trapping season for wolverine in Unit 14C has been from November 10 to February 28 with no harvest limit.

Wolverine sealing became a mandatory State requirement in 1971 and it serves as the primary means of attaining harvest information. ADF&G requires anyone who harvests a wolverine to have the pelt sealed with a locking metal tag and report when, where, and how the animal was harvested. Therefore, harvest reporting only indicates successful harvest, not harvest attempts or harvest effort.

The Chugach State Park (Unit 14C) was open to wolverine trapping in 2007 and 2008 with a six week season from Dec. 15 to Jan. 31 and a harvest limit of two wolverines. In July 2009, the Alaska Board of Game closed wolverine trapping in the Chugach State Park and returned the trapping season to Nov. 10 – Jan. 31 due to increasing harvests and reduced wolverine refugiums in the area.

Biological Background

Wolverines have a polygamous mating system with males overlapping territories with several females (Hedmark et al 2007). Low reproductive potential of two to four kits born in late winter or early spring (Rausch and Pearson 1972) has been documented, but more recent studies have shown the reproductive rate for wolverines is much lower than expected due to delayed maturity and frequent recruitment failure (Persson 2006). In addition, wolverines typically occur in relative low densities compared to other furbearer species (Golden et al 2007a). The potential rate of increase for untrapped wolverine populations is estimated at 6.4% throughout North America (Krebs et al. 2004). Functional refugia are critical in maintaining source populations to repopulate areas where trapping occurs and must be adequate in size and suitable habitat to support reproductive females to den and rear kits without moving into trapping areas (Magoun and Copeland 1998, Krebs et al 2004, Golden et al 2007b).

Dens sites for wolverines in Alaska are primarily in higher elevations of alpine, subalpine, taiga, or tundra habitat with few exceptions in low elevation, densely forested habitats (Magoun and Copeland 1998) although wolverines occupy the lower elevations in smaller numbers. Predictably as with other species, the main component of viable wolverine populations is the survival of reproductive females (Persson et al. 2003), therefore maintaining enough suitable habitat for refugia for reproductive females to successfully den and rear kits without having to make excursions into trapping areas is paramount (Magoun et al. 2008). The peak of parturition for wolverines in Alaska and the Yukon occurs predominantly from mid-February through March (Rausch and Pearson 1972). Some adult females may not be active prior to parturition and subsequently the likelihood of being trapped remains small during certain times of the year (Golden et al. 2007b). However, parturient females will often move from sites used for parturition (natal dens) to sites use to rear kits (maternal dens) and continue to forage over long distances (Magoun and Copeland 1998) which may increase the number of harvests during February if parturition occurred in January. Females have moved their young to maternal dens when the kits have been as young as 13 days old (Magoun and Copeland 1998). Male wolverines range widely throughout their home ranges most of the year (Golden 1997) and typically have territories within home-ranges of several females (Hedmark 2007).

ADF&G completed two aerial surveys to estimate densities of wolverine in Unit 14C and estimated 4.8 and 4.9 wolverines/1,000 km² in 1995 and 2008, respectively (**Table 1**). By adding the harvest for that winter, the wolverine population for the entire unit was estimated at 18 wolverines in 1994 and 22 wolverines in 2007 which are similar densities in the Kenai Peninsula and Nelchina Basin (ADF&G 2008).

Table 1. Wolverine density in Alaska and Yukon (ADF&G 2008)

| Survey Area | Date | Density ¹ | 90% C.I. ² | CV (%) | Reference |
|--------------------------|------------|----------------------|-------------------------|--------|---------------------|
| Talkeetna Mts. (GMU 13A) | Feb. 1991 | 4.7 | 3.5 – 5.9 ³ | 13.0 | Becker et al. 2004 |
| Chugach Mts. (GMU 13D) | March 1988 | 5.2 | 2.7 – 7.7 ⁴ | 20.3 | Becker 1991 |
| Chugach Mts. (GMU 14C) | Feb. 1995 | 4.8 | 2.7 – 5.9 ⁵ | 20.1 | ADF&G 2000 |
| Chugach Mts. (GMU 14C) | April 2008 | 4.9 | 4.1 – 5.7 ⁶ | 8.9 | ADF&G 2008 |
| Kenai Mts. (GMU 7/15) | March 2004 | 3.0 | 2.5 – 3.6 ⁷ | 12.0 | Golden et al.2007a |
| Yukon, Canada | March 2004 | 9.7 | 8.7 – 11.0 ⁸ | 6.5 | Golden et al. 2007a |

1 Density is number of wolverines/1000km²).

2 C.I. denotes the statistical confidence interval for wolverine density; the lower limits are not adjusted for the known minimum number of wolverines encountered during the survey.

Management Direction

The management goals for ADF&G for furbearers in Unit 14 are to provide an opportunity to trap and hunt furbearers, maintain an optimal sustained harvest of furbearers, and develop measurable population objectives for all fur species. ADF&G objectives to accomplish this goal are to monitor annual harvest of furbearers using sealing forms, questionnaires, and trapper interviews, and implement track counts to form a long-term population index.

Harvest History

From 1979-1993, the mean annual harvest was 1.1 wolverines with 25% females which increased to 3.5 wolverines with 44% females from 1994-2008 (ADF&G 2008). From 2006-2008, eight out of the ten wolverines harvested in Unit 14C were females (ADF&G 2008). While the annual number of wolverines harvested within Unit 14C is small, it represents a substantial proportion of the population within the Unit. Golden et al. (2007b) found the highest wolverine harvests per unit area in Southcentral Alaska (Kenai Peninsula, Nelchina Basin, and West Cook Inlet) which is not surprising, given the highest human density in the State occurs within this area. However, despite high human activity levels in the Kenai Peninsula, there were higher and more consistent areas without wolverine harvest than in West Cook Inlet which suggests a substantial potential for refugia in Kenai Peninsula and not West Cook Inlet (Golden et al. 2007b).

From 2000-2007, Federally qualified subsistence users (n=20) have not harvested more than two wolverines per person (FWS 2009), although in 2008, one individual did harvest three males out of the Twentymile drainage (ADF&G 2008). In February 2008, two female wolverines were trapped by a Federal subsistence user and for a nineteen year period (1985-2004) the Federal harvest has been primarily in the months of December (35%) and January (49%) (FWS 2009).

Effects of the Proposal

If this proposal is adopted, it would reduce the Federal wolverine trapping season by one month and reduce the harvest limit to two wolverines. The harvest limit of two wolverines and the shortened season should not have significant effects on Federally qualified users since the majority of trappers (n=20) harvested only one to two wolverines (1 trapper harvested 3 wolverines in 2008) despite there being no harvest limit on wolverines for Federally qualified subsistence users. The shortened season would allow higher likelihood of suitable refugia which allows females to successfully den and rear kits without having to make excursions into trapping areas. Allowing the harvest through February puts

female wolverines, in denning areas, at risk of harvest. In addition, the high harvest of females in recent years (eight of ten wolverines trapped between 2006 and 2008 were females), coupled with the low reproductive rate of wolverines due to delayed maturity and frequent recruitment failure could be critical to the recruitment rate for the wolverine population in Unit 14C.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-40

Justification

From 1985-2004, wolverine trapping by Federally qualified subsistence users has mainly occurred in December (35%) and January (49%), however there has been some harvest in February. Allowing the harvest through February puts female wolverines at risk of harvest in denning areas. Maintaining enough suitable habitat for refugia for reproductive females to successfully den and rear kits without having to make excursions into trapping areas is paramount (Magoun et al. 2008). General conservation concern exists due to the estimated annual harvest averaging 15.9% (3.5 of 22 wolverines) between 1994 and 2008 (ADF&G 2008), and the potential to increase the harvest due to no harvest limit for the Federal season, especially considering that eight of ten wolverines trapped between 2006 and 2008 were females which is a high proportion of the potential breeding population within Unit 14C (ADF&G 2008). Since harvest primarily occurs during December and January, the shortened season and harvest limit of two wolverines will result in few Federally qualified trappers being affected, while protecting the population of wolverines in Unit 14C.

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| WP10-87 Executive Summary | |
|---|---|
| General Description | Proposal WP10-87 requests black bear be added to the species list for furbearers for Units 12, 20, and 25. <i>Submitted by the Eastern Interior Regional Advisory Council</i> |
| Proposed Regulation | <i>See analysis for regulation language.</i> |
| OSM Preliminary Conclusion | Oppose |
| Eastern Interior Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | Oppose |
| Written Public Comments | |

DRAFT STAFF ANALYSIS WP10-87

ISSUES

Proposal WP10-87, submitted by the Eastern Interior Regional Advisory Council (Council), requests black bear be added to the species list for furbearers for Units 12, 20, and 25.

DISCUSSION

The proponent states that this action was submitted for a number of reasons, including:

- currently there is a loss of opportunity to harvest black bear in Units 12, 20, and 25 because trapping black bear is not legal;
- trapping black bear was a traditional harvest practice across a wide area of Alaska;
- being listed as a furbearer will allow harvesters to sell the hide and will provide income that will help cover the costs associated with other subsistence activities;
- adopting the proposal will provide additional opportunity for subsistence uses and once again permit people to use traditional trapping methods for black bear; and
- adopting the proposal will decrease the high rate of bear predation that currently limits moose and caribou populations in important hunting areas in the Eastern Interior Council Region.

Concerning the proponent's request to allow trapping for the purpose of predator control, the Federal Subsistence Management Program's policy is to not validate proposals for the stated purpose of predator control. However, the proposal also requests that trapping of black bear be legalized.

It is important to note that Federal subsistence regulations specifically do not allow the harvest of bear with a trap (§____.(26)(b)(10)). If this proposal is adopted, Federally qualified users would not be allowed to harvest black bear with a trap on Federal public lands unless the proposed regulation was added to unit-specific provisions for Units 12, 20, and 25 and unless a black bear trapping season and trapping harvest limit were adopted for Units 12, 20, and 25.

The Alaska Board of Game will be considering a statewide proposal at its January 2010 meeting, submitted by the Fairbanks Fish and Game Advisory Committee, to legalize the sale or barter of tanned bear hides (ADF&G 2009a:45). Additionally, the Council submitted a proposal parallel to Federal Proposal WP10-87 to the Alaska Board of Game to be considered at its February 26–March 7, 2010, Interior Region meeting (ADF&G 2009b:6–7; EIRAC 2009:196–199). The proposal to the Alaska Board of Game additionally requests that the sale of the hides of black bear harvested in Units 12, 20, and 25 be allowed.

The proponent states that it seeks the proposed change in Federal subsistence regulations whether or not the Alaska Board of Game adopts the parallel proposal from the Council.

Existing Federal Regulation

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

(a) Definitions

Furbearer means a beaver, coyote, arctic fox, red fox, lynx, marten, mink, weasel, muskrat, river (land) otter, red squirrel, flying squirrel, ground squirrel, marmot, wolf, or wolverine.

Trapping means the taking of furbearers within established trapping seasons and with a required trapping license.

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

(2) *If you take wildlife for subsistence, you must salvage the following parts for human use:*

(iii) *The hide and edible meat of a black bear.*

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

(8) *If you are a Federally qualified subsistence user, you may sell the raw fur or tanned pelt with or without claws attached from legally harvested furbearers.*

§____.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.*

(17) *Taking a bear cub or a sow accompanied by cub(s).*

Proposed Federal Regulation

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

*Furbearer means a beaver, coyote, arctic fox, red fox, lynx, marten, mink, weasel, muskrat, river (land) otter, red squirrel, flying squirrel, ground squirrel, marmot, wolf, ~~or~~ wolverine, **or black bear in Units 12, 20, and 25.***

Trapping means the taking of furbearers within established trapping seasons and with a required trapping license.

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

(2) *If you take wildlife for subsistence, you must salvage the following parts for human use:*

(iii) *The hide and edible meat of a black bear.*

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

(8) *If you are a Federally qualified subsistence user, you may sell the raw fur or tanned pelt with or without claws attached from legally harvested furbearers.*

§ ____ .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.

(17) Taking a bear cub or a sow accompanied by cub(s). Existing State Regulation

Existing State Regulation

5 AAC 92.990 Definitions

(a) (20) "Furbearer" means a beaver, coyote, arctic fox, red fox, lynx, marten, mink, least weasel, short-tailed weasel, muskrat, land otter, red squirrel, flying squirrel, ground squirrel, Alaskan marmot, hoary marmot, woodchuck, wolf, or wolverine; "furbearer" is a classification of animals subject to taking with a trapping license.

5 AAC 92.200. Purchase and sale of game

(b) Except as provided in 5 AAC 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.

Additionally, sealing is required for black bear taken in Units 12 and 20. Beginning in 2009, in Units 12 and 20, a black bear harvest ticket is required to hunt black bear.

Extent of Federal Public Land

Federal public land comprises approximately 58% of Unit 12 and consists of 82% National Park Service and 18% Fish and Wildlife Service lands (see **Unit 12 map**). The Federal public lands are primarily within the boundaries of Wrangell-St. Elias National Park and Preserve and Tetlin National Wildlife Refuge.

Federal public land comprises approximately 19% of Unit 20 and consists of 78% National Park Service, 21% Bureau of Land Management, and less than 1% Fish and Wildlife Service lands (see **Unit 20 map**). Unit 20 includes the Fairbanks North Star Borough. Federal public lands are primarily within Denali National Park and Preserve and Yukon-Charley Rivers National Preserve. Approximately half of the National Park land in Unit 20 is closed to subsistence uses.

Federal public land comprises approximately 55% of Unit 25 and consists of 68% Fish and Wildlife Service, 29% Bureau of Land Management, and less than 4% National Park Service lands (see **Unit 25 Map**). Federal public lands exist primarily within the Arctic National Wildlife Refuge, Yukon Flats National Wildlife Refuge, White Mountains National Recreation Area, and Steese National Conservation Area.

Customary and Traditional Use Determination

In Unit 12 all rural residents are eligible to harvest black bear under Federal subsistence regulations.

In Unit 20, except Unit 20F, all Federally qualified rural residents are eligible to harvest black bear. Rural residents of Unit 20F, Stevens Village, and Manley, only, have recognized customary and traditional uses of black bear in Unit 20F.

Only rural residents of Unit 25D have recognized customary and traditional uses of black bear in Unit 25D. For the remainder of Unit 25, all rural residents are eligible to harvest black bear.

In order to engage in subsistence on lands designated as a national park, the National Park Service additionally requires that subsistence users live within the park's resident zone (36 CFR 13.430) or have been issued a subsistence permit (36 CFR 13.440) by the park superintendent.

Regulatory History

While a more detailed history of regulations regarding the trapping of bears, and more specifically the purchase and selling of black bear hides is in **Appendix A**, a few key points are covered below.

In 1908 it became illegal for the hide of animals classified as "game" to be purchased or sold in the Alaska Territory. However, black bear were not classified in harvest regulations until 1925 when they were added to the "land fur bearing animal" category. This is probably because black bear were valued for their hides as well as for food.

- 1935—black bear re-classified as a "fur-bearing animal," no restrictions on the purchase or selling of hides.
- 1938—black bear re-classified as a "game animal," hides cannot be purchased or sold.
- 1939—black bear hides can be purchased and sold.
- 1949—black bear re-classified as a "big game animal," hides cannot be purchased or sold.
- 1960—Statehood, black bear remains a "big game animal," but no specific prohibition against purchasing and selling of big game animal hides carries over from Federal to State law.
- 1971—black bear hides cannot be purchased or sold.
- 1998—black bear hides cannot be purchased or sold except as an article of handicraft made from the fur of a bear (5 AAC 92.200).

In 1994, a provision was added to Federal regulations making it illegal to use a trap to harvest ungulates or bear (§__25(b)(1)(x); 59 Fed. Reg. 29034 [June 3, 1994]).¹

In 2002, Proposal WP02-01 requested that both black bear and brown bear be included in the definition of furbearer in Federal regulations. The Board rejected the proposal because "most of the cultural resource use information compiled during proposal analysis, the potential adverse biological impacts, most Regional Council recommendations, and the public comments did not support the request" (67 Fed.

¹ In 2001, this regulation was moved to §__26.(b)(10) (66 Fed. Reg. 33759 [June 25, 2001]).

Reg. 125. 43711 [June 28, 2002]. In 2002, the Board adopted a regulation allowing the sale of handicrafts made from the fur of a black bear (§___.25(j)(6); 67 Fed. Reg. 125. 43711 [June 28, 2002]), and in 2004, the Board adopted a regulation allowing the sale of handicrafts made from the skin, hide, pelt, or fur, including claws, of a black bear (§___.25(j)(6); 69 Fed. Reg. 126. 40175 [July 1, 2004]).

At present, for black bears taken in any wolf control area, ADF&G will issue permits allowing hunters to sell untanned hides (with claws attached) and skulls, after sealing (ADF&G 2009e; 5 AAC 92.100, 5 AAC 92.115, and 5 AAC 92.125). The Wolf Control Program boundaries include portions of Units 12, 20, and 25. The area is described as Upper Yukon/Tanana and is that portion of Unit 12 north of the Alaska Highway; that portion of Unit 20D within the Goodpaster drainage upstream from and including the South Fork Goodpaster River drainage and within the Healy River, and Billy and Sand Creek drainages; that portion of Unit 20B within the Salcha River drainage upstream from and including the Goose Creek drainage and within the Middle Fork of the Chena River drainage; all of Unit 20E; and that portion of Unit 25C within the Birch Creek drainage upstream from the Steese Highway bridge and within the area drained into the south and west bank of the Yukon River upstream from the community of Circle. Federal public lands are not included in the State's wolf control area.

In 2009, the Federal and State black bear hunting seasons in Units 12, 20, and 25 were open year round, and the harvest limit was 3 black bear per person each regulatory year.

Background

Andersen (1993) discusses the history of trapping in the Interior Region of Alaska (based on ethnographic work conducted by Clark [1974]; Janes [1974]; Morlan [1973]; Tanner [1966]; VanStone [1974]; and Webb [1985]). Andersen summarized that the material culture of Interior Alaska Athabascans included a variety of deadfalls and snares for harvesting furbearing animals. Used for food and clothing, furs were a commodity for trade between Athabascans and neighboring Eskimo groups. Russian and other Euroamericans established the first fur trading posts in the Interior before 1850. For example, the Hudson Bay Fort Yukon trading post was built in 1847. By about 1885, trapping had become the distinguishing characteristic of Interior Alaska Athabaskan culture. When the economic shift to primarily gold occurred, many fur trading posts were abandoned and centers of trade shifted to mining communities, such as, Circle and Fairbanks. Traditional trapping methods using snares and deadfalls persisted in many areas of the Interior until steel traps became more common in the first decade of the 20th century. Between 1868 and 1898, trapping of furbearers for trade in Alaska was restricted by law to Alaska Natives (Andersen 1993).

For more on the background of harvesting black bear and trapping furbearers in Units 12, 20, and 25 see **Appendix B**.

Biological Background

Black bears have low productive rates. The age of first reproduction for black bears has been documented at 5–7 years of age (Miller 1994), recruitment interval (time taken for separation of cubs from female) 2.0–2.7 years, and a reproductive interval of 1–4 years (Bertram and Vivion 2002; Miller 1994). Although black bears often have 2 cubs (Miller 1994), cub survival has been documented to be 45%–50% (Bertram and Vivion 2002; Miller 1994).

Black bears were monitored on the western Yukon Flats in Unit 25 between 1995 and 2001. Five female bears produced 10 litters between 1996 and 2001 and the survival rate estimate for cubs weaned to one year was 45% (Bertram and Vivion 2002). One adult female was documented giving birth to cubs during

three consecutive years and losing her first 2 litters, but successfully raising the third litter to one year of age. Although mortality sources were largely unknown, Bertram and Vivion (2002) documented brown bear (grizzly) predation on two denned female black bears with cubs. In one case a brown bear killed an adult male black bear (Bertram and Vivion 2002).

For more on the biology of black bear in Units 12, 20, and 25 see **Appendix C**.

Harvest History

One source of black bear harvest information in Units 12, 20, and 25 is the State's sealing records. Until 2009, residents of Alaska were not required to obtain a harvest ticket in order to hunt black bear in these units. Instead, black bear were sealed (5 AAC 92.165). Sealing means taking the skull and skin (with claws and evidence of sex attached) of a black bear to an officially designated sealing officer. A metal or plastic seal is locked on the hide and on the skull. The seal must remain on the skin until the tanning process begins and on the skull unless it is cleaned for display. Another source of harvest information is data obtained during household harvest surveys recorded in the Community Subsistence Information System (ADF&G 2009c). Data from both sources are described below.

Unit 12

According to ADF&G in Bentzen 2008,

In Unit 12 most black bears are taken by local residents in the spring and are an important meat source. It is estimated that meat is salvaged from over 90% of all black bears harvested by local residents. In the fall most black bears are harvested incidentally during hunts for other species (Bentzen 2008).

Based on sealing records, ADF&G reported that from 1995 to 2006 in Unit 12, a low of 22 black bear were harvested in 2003 and a high of 50 in 2006 (Bentzen 2008). From 1990 to 2006, unit residents including residents of Chisana, Northway, Tanacross, Tetlin, and Tok harvested a low of 10 black bear in 1991 and a high of 32 in 1996; in 2006, unit residents harvested 21 black bear.

Additionally, residents of Unit 12 reported harvesting black bear during household harvest surveys (ADF&G 2009c). During selected years between 1987 and 2004, the estimated harvest was a low of no black bear harvested in 1987 in Chisana and Tetlin and in 2004 in Tetlin, to a high of 42 black bear harvested in 2004 in Tok.

Units 20A, 20B, 20C, and 20F

According to ADF&G (Seaton 2008), from 2004 to 2006 in Units 20A, 20B, 20C, and 20F

Most black bear taken in Units 20A, 20B, 20C, and 20F were taken in spring within the road-accessible portions of Unit 20B, an area that includes portions of the North Star Borough. Bait stations were more prevalent along the road system because of the difficulty of transporting heavy, bulky bait . . . Other trends in harvest included hunters traveling farther away from the road system and from Fairbanks to hunt black bears, possibly to avoid crowding by other hunters (Seaton 2008).

In 2006, a reported 34 black bear were harvested in Unit 20A, 141 in Unit 20B, 31 in Unit 20C, and 40 in Unit 20F (Seaton 2008).

Additionally, residents of Units 20A, 20B, and 20F reported harvesting black bear during household harvest surveys (ADF&G 2009c) including residents of Anderson, Nenana, Manley, Minto, Rampart, and Tanana. During selected years between 1984 and 2004, the estimated harvest was a low of no black bear in 2004 in Manley to a high of 38 black bear harvested in 1987 in Tanana.

Unit 20D

In Unit 20D, ADF&G reported in Dubois 2008 that 56% of black bear killed by hunters from 2004 to 2006 were taken at bait stations. The reported harvest of black bear in Unit 22D, from 1994 to 2006, ranged from a low of 14 in 1995 to a high of 39 in 2000. From 1994 to 2006, unit residents including residents of Delta Junction, Dot Lake, and Healy harvested a low of 10 black bear in 1991 and a high of 32 in 1996; in 2006, unit residents harvested 11 black bear.

Additionally, based on household harvest surveys (ADF&G 2009c), residents of Unit 20D reported harvesting black bear. Based on these surveys, the estimated harvest in Dot Lake in 1987 was one black bear and in 2004, 4 black bear. In Healy the estimated harvest was 7 black bear in 1987.

Unit 20E

In Unit 20E from 1999 to 2006, ADF&G reported in Gross 2004 that the reported harvest of black bear ranged from a low of 7 black bear in 2003 and 2006 to a high of 28 in 2004. Unit residents including residents of Eagle harvested a low of 10 black bear in 1991 and a high of 32 in 1996; in 2006, unit residents harvested 2 black bear.

Additionally, based on a household harvest survey (ADF&G 2009c), residents of the Unit 20E community of Eagle harvested an estimated 11 black bear in 2004.

Unit 25

The State does not require black bear harvested in Unit 25 to be sealed. Based on household harvest surveys (ADF&G 2009c), residents of Unit 25 communities including Circle, Beaver, Birch Creek, Chalkyitsik, Fort Yukon, and Stevens Village, during selected years between 1984 and 1997, harvested an estimated low of one black bear in Beaver in both 1995 and 1996, Chalkyitsik in both 1993 and 1997, Fort Yukon in 1995, and Stevens Village in 1997. The highest estimated harvest was 150 black bear in 1987 in Fort Yukon.²

Effects of the Proposal

If Proposal WP10-87 is adopted, Federally qualified users would be allowed to sell the raw fur or tanned pelt of black bear legally harvested on Federal public lands in Units 12, 20, and 25. Nonsubsistence uses would not be affected.

If Proposal WP10-87 is adopted and also added to regulations that are specific to Units 12, 20, and 25, traps would become a legal harvest method for black bear; however, this proposal did not include a trapping season and harvest limit. In the future, if the Board adopted a black bear trapping season and harvest limit, black bear harvests could increase. The harvest of cubs, sows with cubs, and ungulates could occur, which are not allowed under Federal regulations. Additionally, under Federal regulations the meat and hide must be salvaged for human use.

² Sumida and Andersen (1990) reported that not all were used for food and some were fed to dogs.

If this proposal is not adopted, no effects are anticipated because Federally qualified users would continue to harvest black bear under Federal hunting regulations, which have year-round seasons and liberal harvest limits (3 bears), and black bear appear to be underutilized.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP10-87.

Justification

The proponent states that opportunity to harvest black bear in Units 12, 20, and 25 is lost because trapping black bear is illegal. However, current regulations provide significant opportunity to harvest black bear in Units 12, 20, and 25. The hunting season is year round and the harvest limit is 3 black bear per person per regulatory year. Based on the ADF&G sealing records, it does not appear that those limits are being reached, therefore, the addition of trapping as a method of harvesting black bear does not appear necessary to increase harvest levels at this time. The proponent further states that trapping black bear was a traditional harvest method. Ethnographic descriptions of Athabascan harvesting activities reveal that black bear were commonly harvested by plunging a spear into the flesh of an animal.

Black bears have low reproductive rates when compared to the other furbearing animals, and use of a trap to harvest black bear is a highly efficient harvesting method. Black bear populations in Units 12, 20, and 25 have not been well monitored and population estimates, if they exist at all, are based on inexact data and in-season observations. Using the larger traps and snares necessary to harvest black bear would also allow the harvest of sows, cubs, and unglates. Factors such as these have led to black bear being classified as “big game” in both Federal and State regulations, limiting the harvesting method to firearms.

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APPENDIX A: REGULATORY HISTORY

This section describes the regulatory history of both brown and black bear regulations in Alaska, with an emphasis on black bear. A 1908 Alaska game law defined brown bear (but not grizzly bear) as “game” (Title X, Chapter 1, Sec. 330 [Joint Committee on Territories of the Senate and House of Representatives 1913]). But most significantly, this regulation made it unlawful for a person to sell hides or heads of “game” animals (Sherwood 1981). Concurrently, conservation measures were interspersed with periodic campaigns to exterminate bears in certain areas (Sherwood 1981, Thornton 1992). A 1925 game law established the Alaska Game Commission and among other things it clarified the definition of “game animals” to include both “brown and grizzly bears” (Chapter III, Sec. 41 & 43 [Law Revision Board 1933]). It also specifically defined “black bear” as “land fur bearing animals.” Under the auspices of the Alaska Game Commission 1925-59, regulations became more consistent and effective.

Statewide regulations issued in 1935 identified black bears as “fur-bearing animals” and provided a trapping season for this species. At that time, there was “no restriction on the sale of prime skins of fur animals” (Alaska Game Commission 1935). In 1938, black bears were reclassified as “game animals” (Sherwood 1981). The 1939 regulations allowed the purchase and sale of “hides or parts of hides . . . and articles manufactured from black bear . . . and the parka hood trimmings cut from the hides of grizzly bears into strips not to exceed 4 inches in width in fur districts 5 and 8 (Arctic Coast, Kotzebue, and Y-K Delta areas)” (Alaska Game Commission 1939). Regulations issued in 1949 identified black and brown bears as “big game animals”(Alaska Game Commission 1949). The 1949 regulatory requirements concerning this issue remained in place through June 30, 1960 (Alaska Game Commission 1959).

Prior to 1960, a number of areas had been established as bear reserves (e.g., Thayer Mountain, Anan Creek, McNeil River and Pack Creek). A number of National Wildlife Refuges, National Monuments and National Parks had been established to conserve and preserve bears and other wildlife (e.g., Kodiak NWR, Katmai National Monument, McKinley National Park).

The State of Alaska was established and in 1960 the State listed both black and brown bears as “big game animals.” However, prior Alaska Game Commission stipulations concerning the sale of bear hides were not addressed in the very first state regulations (State of Alaska 1960).

In 1961, the “purchase, sale and barter of grizzly and brown bears” were prohibited (State of Alaska 1961). In 1964, the “purchase, sale and barter of blue or glacier bears” (color phase of the black bear) were prohibited (State of Alaska 1964). In 1971, the “purchase, sale and barter of black bears and its various color phases” were prohibited (State of Alaska 1971). In 1985, the “purchase, sale, or barter of skin or any other part of black bear, in various color phases, the skin or any other part of brown or grizzly bear” were prohibited (State of Alaska 1985). In 1998 (State of Alaska 1998; 5 AAC 92.200(b)(2) and 92.990(57)), the sale of “an article of handicraft made from the fur of black bear” was allowed with “handicraft” defined as: “a finished product in which the shape and appearance of the natural material has been substantially changed by skillful use of hands, such as sewing, carving, etching, scrimshawing, painting, or other means and which has substantially greater monetary, and aesthetic value than the unaltered natural material alone.”

APPENDIX B: BACKGROUND

According to Bockstoe (2009:49), during Russian colonization of Alaska beginning in the early 19th century, the Russia America Company exported bear skins harvested from Interior Alaska to St. Petersburg. He describes:

Visitors from the nations of the interior brought products that the coastal dwellers required: caribou and Dall sheep hides, furs (marmot, ground squirrel, beaver, black and brown bear skins In return, the Asian traders [Russians and Kamchatkans] mostly bartered for furs for the Asian markets but also for dried fish (Bockstoe 2009:153).

Several ethnographers describe black bear harvest and use by the people of Interior Alaska. Nelson (1983:175) described Koyukon people as superior bear hunters, very knowledgeable about black bear, using complex hunting methods. Black and brown bears are treated similarly by the Koyukon, however, the black bear are more significant in the subsistence economy, harvested for food and a ceremonial delicacy. Additionally, “Taking the animal is far more than just a way of getting food—it is a quest for prestige and a high expression of manhood” (Nelson 1983:173). Nelson describes the complicated task of harvesting denned black bear, steps necessary to prepare the food and fur, and death ceremonies and rituals (Nelson 1983:175–184).

In 1932, Osgood (1970) stayed with Gwich'in people and observed:

The Indians either shoot them with bows and arrows as the occasion offers, pull them out of their holds in winter and club them to death, snare them, or in times of rare courage, spear them Naturally the killing of black bears most frequently occurs as they are less ferocious and more numerous than either the brown bear or the grizzly (Osgood 1970: 27).

Also, pitfalls were dug usually around permanent camps, “where the locations are known even to the children,” four feet in diameter and five feet deep. “Sharp-pointed bones about eight inches long are tied to stakes which are thrust into the ground at the bottom of the pitfall to make the points standup solidly” (Osgood 1970: 33). In addition to clothing, bear skins were also used as door coverings (Osgood 1970:54).

Up to at least the 1930s, snares were also used to harvest caribou and less often moose and mountain sheep, as well as furbearing animals (Osgood 1970:26–27). The more common method used to harvest black bear by both Gwich'in and Han Athabaskan people was to use a birch pole about 6-foot long and inserting a point of stone or bone (Osgood 1970:68, 1971).

While information is scattered, early reports from fur dealers' and agencies clearly document the sale of black bear hides (Alaska Game Commission 1942, 1948, 1954; Fish and Wildlife Service 1950). Rural residents sold black bear hides along with the other furs taken on their trap lines (BIA 1949).

Many people in the rural areas of Units 12, 20, and 25 continue to trap furbearers. Household harvest surveys conducted between 1984 and 2004 indicate the estimated total harvest of furbearers during selected study years (ADF&G 2009c). Harvests ranged from an estimated one animal reported harvested in Arctic Village in 1997 to an estimated 14,637 animals harvested by Fort Yukon residents in 1987. During some surveys and study years, residents were asked if they attempted to harvest furbearers. Responses ranged from only 15% of households attempting to harvest furbearers in Andersen in 1987 to a high of 87% in Northway in 1987.

APPENDIX C: BIOLOGICAL BACKGROUND

Unit 12

According to Bentzen 2008, the State management objective for black bear in Unit 12 is to manage for a harvest of black bear that maintains 55% or more males in the combined harvests during the most recent 3 years. Based on limited radiotelemetry data collected in Unit 12 and on more rigorous data collected in Unit 20A, estimated black bear density in Unit 12 was 16–22 bears/100 mi² of black bear habitat, and the estimated population was 700–1,000 bears in 2007. Few data were available on the composition of the population. Productivity appeared adequate based on the animals harvested and on numerous sightings of sows with cubs. Approximately one half of Unit 12 is suitable black bear habitat, and black bear are distributed throughout these forested areas, approximately 4,500 mi². In 2004 wildfires burned 434 mi² of black bear habitat in Unit 12. These fires initially reduced habitat availability, but likely will result in long-term positive effects on black bear habitat.

Units 20A, 20B, 20C, and 20F

According to Seaton 2008, the State management objectives for black bear in Unit 20A, 20B, 20C, and 20F are to (1) maintain a black bear population that sustains a harvest of at least 55% males in the combined harvests for the most recent 3 years in all units, and (2) minimize human-bear conflicts by providing information and assistance to the public and to agencies. The most current estimates (2007) for the number of black bear in the area include 500–700 bears in the Tanana Flats in Unit 20A, 750–1,200 bears in Unit 20B, 700–1,000 in the portion of Unit 20C outside Denali National Park, and 400–700 in Unit 20F. Estimates are based on a density estimate of 12–18 black bears/100 mi². No composition estimates are available.

Unit 20D

According to Dubois 2008, the State management objective for black bear in Unit 20D is for a sustained yield of black bears with harvest not to exceed 15 black bears south of the Tanana River and 35 black bears north of the Tanana River. The estimated population of black bear was 750 animals based on a density estimate of 17.5 adult black bears/100 mi² in adjacent Unit 20A. In 2007 black bears were assumed to be numerous throughout the area. Black bears are distributed throughout Unit 20D except in the most heavily human populated areas and in treeless alpine habitat.

Unit 20E

According to Gross 2008, the State management objective for black bear in Unit 20E is for a harvest of black bear that maintains 55% or more males in the combined harvests of the most recent 3 years. The black bear population in 2007 was estimated to be 1,000–1,500 animals based on population data collected in adjacent Unit 12 during the early 1980s. The composition of the population is unknown. Black bear habitat is extensive in Unit 20E. Only treeless habitat, generally above elevations of 4,000 feet, is not black bear habitat. Berries are widely available.

Unit 25

According to ADF&G 2002 and Bertram and Vivion 2002, black bear are abundant in Unit 25 but there is uncertainty over accurate population numbers for much of the unit. Based on high capture rates and low hunting pressure, black bear densities are suspected to be within the range of 0.2–0.7/mi² (86–265/1,000

km²), which has been previously reported in Alaska (Hechtel 1991; Schwartz and Franzmann 1991; and Miller 1994 cited in Bertram and Vivion 2002). The total population of black bear in Unit 25D, based on an assumed density of 1 black bear per 5–10 square miles, is 1,750–3,500 black bear (ADF&G 2002).

Alaska Department of Fish and Game
Comments to the Regional Advisory Council

Wildlife Proposal WP10-87: This proposal requests that black bears be added to the list of animals defined as furbearers in Units 12, 20, and 25 to allow black bears to be trapped and sale of their parts.

Introduction: The proponent requests black bears be listed as trappable furbearers in federal subsistence trapping regulations for Units 12, 20, and 25 to allow for continuation of traditional harvest practices, assist in area reduction of predation on local prey species, and allow the federal subsistence users to sell the hides from harvested animals.

Impact on Subsistence Users: If adopted, federal subsistence users could trap any sex or age black bear and sell their hides and claws from Units 12, 20, and 25.

Opportunity Provided by State: Black bears are not included under the definition of furbearer in state regulation, hence can be taken under hunting regulations, not trapping. Snaring black bears is allowed only under special permit in black bear predator control areas. The current hunting regulations for Units 12, 20, and 25 are no closed season and a bag limit of 3 (no cubs or females with cubs), with an additional provision for community harvest permits in Unit 25.

Conservation Issues: The use of trapping to take black bears under state regulations is restricted to control programs only. These programs are restricted to use of bucket-foot snares and other tightly-controlled guidelines (including provisions for releasing brown bears in one control area) for the purpose of being as selective as possible and to eliminate or diminish the likelihood of taking non-target species. In the absence of specific procedures required in control programs, general trapping of black bears could result in conservation concerns including non-target species. Also, under the proposed regulation, it would be necessary to allow the take of cubs and females with cubs, which would inevitably be taken with snares.

Enforcement Issues: The boundaries between federal and state lands are not marked and often difficult to locate on the ground. Additionally, regulations allowing sale of high value bear claws create a market for bear claws that is likely to mask illegal sales, thereby compounding problems with international trade of Endangered Species (CITES) and contribution to illegal harvest, over harvest, and waste of bears in other states and countries as well as Alaska. The Department requests no expansion of sale of bear parts be allowed until the workgroup completes its recommendations for regulations to protect legitimate subsistence users.

Other Comments: Adoption of this proposal is not necessary to provide the federal subsistence needs for use of black bear.

In addition, the state conducts snaring of black bears only in bear predation control areas under special permit and recommends that trapping of black bears not be expanded to general federal subsistence trapping regulations. The Alaska Department of Fish and Game will submit an Agenda Change Request to the Alaska Board of Game to accept a proposal requesting black bears be defined as trappable furbearers on a statewide basis. If the Board of Game adopts the

Comments WP10-87
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proposal, trapping and snaring of black bears will only be authorized in specific areas as identified by the Board under specific guidelines.

Recommendation: Oppose.

| WP10-90 Executive Summary | |
|---|--|
| General Description | <p>Proposal WP10-90 requests the addition of some of the residents of Unit 12: the Tok Cutoff Road, (mileposts 79-110 Mentasta Pass) to the list of those communities and residents with a customary and traditional use determination for caribou in Units 13B and 13C. <i>Submitted by the Eastern Interior Regional Subsistence Advisory Council</i></p> |
| Proposed Regulation | <p>Unit 13B—Caribou</p> <p><i>Residents of Units 11, 12 (along the Nabesna Road and Tok Cutoff Road, mileposts 79-110 Mentasta Pass), 13, residents of Unit 20 except Fort Greely, and the residents of Chickaloon.</i></p> <p>Unit 13C—Caribou</p> <p><i>Residents of Units 11, 12 (along the Nabesna Road and Tok Cutoff Road, mileposts 79-110 Mentasta Pass), 13, Chickaloon, Dot Lake and Healy Lake.</i></p> |
| OSM Preliminary Conclusion | Support |
| Eastern Interior Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | |
| Written Public Comments | |

DRAFT STAFF ANALYSIS WP10-90

ISSUES

Proposal WP10-90, submitted by the Eastern Interior Regional Subsistence Advisory Council, requests the addition of some of the residents of Unit 12: the Tok Cutoff Road, (mileposts 79-110 Mentasta Pass) to the list of those communities and residents with a customary and traditional use determination for caribou in Units 13B and 13C.

DISCUSSION

The proponent states that the subsistence patterns of the residents of Tok Cutoff Road (mileposts 79-110 Mentasta Pass, referred to in this analysis as the proposal area), have subsistence patterns similar to those of Slana and Mentasta Lake (see **Map 1**). Further, the proponent states that residents of this area harvest other subsistence resources in the Copper Basin and find it confusing to have a customary and traditional use determination for moose in this area, but not for caribou. The proponent also asserts that residents of the area in question were inadvertently omitted from the current customary and traditional use determination for caribou.

Existing Federal Regulation

Customary and Traditional Use Determination

Unit 13B—Caribou

Residents of Units 11, 12 (along the Nabesna Road), 13, residents of Unit 20 except Fort Greely, and the residents of Chickaloon.

Unit 13C—Caribou

Residents of Units 11, 12 (along the Nabesna Road), 13, Chickaloon, Dot Lake and Healy Lake.

Proposed Federal Regulation

Unit 13B—Caribou

*Residents of Units 11, 12 (along the Nabesna Road **and Tok Cutoff Road, mileposts 79-110 Mentasta Pass**), 13, residents of Unit 20 except Fort Greely, and the residents of Chickaloon.*

Unit 13C—Caribou

*Residents of Units 11, 12 (along the Nabesna Road **and Tok Cutoff Road, mileposts 79-110 Mentasta Pass**), 13, Chickaloon, Dot Lake and Healy Lake.*

Extent of Federal Public Lands/Waters

Federal public lands comprise approximately 7% of Unit 13B, managed by the Bureau of Land Management, primarily the Delta and Gulkana Wild and Scenic Rivers.

Federal public lands comprise less than 1% of Unit 13C, managed by the National Park Service, Wrangell St. Elias National Preserve.

Regulatory History

When the Federal Subsistence Board (Board) assumed management of subsistence wildlife resources on Federal public lands in 1990, it adopted State of Alaska customary and traditional use determinations which had been made by herd, rather than by Unit. When the Board was subsequently asked to revise its customary and traditional use determinations for caribou, it based its customary and traditional use determinations on Unit, rather than on herd, with the rationale that caribou herds move across Units (FWS 1997:99; FSB 1997:45; SCSRAC 1997:86).

To explain, the State of Alaska customary and traditional use determination for Units 13 and 14B was for the Nelchina Caribou Herd and those eligible to hunt caribou under State subsistence regulations were the residents of Unit 11, Unit 12 [only those] along the Nabesna Road, and Unit 13. The Federal subsistence program adopted this same determination by herd for Units 13 and 14B. However, in 1997, the Board revised the customary and traditional use determination to reflect use of caribou by Unit so that the revised determination for caribou in Units 13B and 13C include the same group of residents, with a few additions, from the original determinations: residents of Unit 11, Unit 12 [only those] along the Nabesna Road, and Unit 13.

In 1997, research was conducted by the National Park Service to address numerous backlogged and new customary and traditional use proposals for Units 11, 12, 13 and 20 (FWS 1997:36-158, NPS 1995, NPS 1994). There were eight proposals for customary and traditional use of caribou in these units (FWS 1997:81-39). Proposal WP97-24A requested revision of the customary and traditional use determination for caribou in Units 11, 12, 13 to make them consistent in the three units (FWS 1997:84). This proposal was rejected by the Board (FSB 1997:49) because the Board did not find evidence to support the proposal.

In 1998, the Board adopted Proposals 34 and 35 with modification to include Dot Lake and Healy Lake (both in Unit 20 D) to the list of residents with customary and traditional uses of caribou in Units 13B and 13C (FSB 1998:251, 257). The inclusion of these communities was based on harvest history in and kinship ties with Unit 13B and 13C communities (FWS 1998:182; SCSRAC 1998:143, 148).

Community Characteristics

The settlement patterns of the Upper Tanana and Copper Basin areas are diverse; some residents live in “recognized” communities and many households are dispersed along the road system between communities (Cellarius 2010, pers. comm.). It is difficult to describe the community characteristics of Tok Cutoff Road (Mentasta Pass) because it is not a community per se. It is not listed in the State of Alaska Division of Community and Regional Affairs community database. It is not a census designated places (US Census 2000). Additionally, it is difficult to determine harvest estimates based on the ADF&G harvest ticket data because residents can get their mail at one of several post offices in the area and their mailing address does not necessarily indicate where they actually live.¹

¹ For example: Nabesna Road residents are on a rural delivery route that have a Gakona Address and a Gakona zip code. The same zip code is also used to deliver mail to the Slana post office although mail for Slana has “Slana” on the address rather than “Gakona” (Cellarius 2010, pers. comm.).

Tok Cutoff Road or Mentasta Pass

For the purposes of this analysis, the area of milepost 79-110 of the Tok Cutoff Road was designated by the proponent because this segment of the road extends north from the boundary of Units 12 and 13. The Mentasta Pass area of the Tok Cutoff Road was described as “homesites along the Tok Cutoff from milepost 79-110” (McMillan and Cuccarese 1988:127; NPS 1995:323).

According to ADF&G Subsistence Division surveys conducted in 1987, there were approximately 11 households in the Tok Cutoff area with an estimated population of 26 people (ADF&G 2010).² In 1987, these households harvested an estimated 187 pounds of subsistence resources per person or approximately 4,962 pounds for the Tok Cutoff Road area (ADF&G 2010). At the Fall 2009 EISRAC meeting, one member stated, “...the community around the Tok Cutoff, it is where I live, I know, but I can tell you that the surrounding area from Mentasta on the Tok Cutoff Road and Nabesna Road, we’re like all one. We all kind of do the same thing. So I just wanted to align the people where we live” (EISRAC 2009:322). No ADF&G Subsistence Division studies have been conducted on Mentasta Pass since 1987 and there is no specific census data for this area, thus it is unknown how many residents live in this area today nor what their subsistence uses are.

Mentasta Lake

The proponent stated that the subsistence harvest patterns of the residents of the Tok Cutoff Road (mileposts 79-110, Mentasta Pass), located in Unit 12, is similar to those of Mentasta Lake and Slana, both located in Unit 13. For this reason, the characteristics of these two communities are reviewed here.

Not to be confused with Mentasta Pass, Mentasta Lake, also referred to as Mentasta, is a distinct community and a census designated place located in Unit 13. According to the Alaska Division of Community and Regional Affairs Community database, the current 2010 population is approximately 112 and it is located 6 miles off the Tok Cutoff Road on the west side of Mentasta Pass. Mentasta Lake is further described as “primarily Athabascan and subsistence activities are important...the families in Mentasta Lake come from Nabesna, Suslota, Slana and other villages with the area” (DCRA 2009). According to ADF&G Subsistence Division surveys conducted in 1987, there were approximately 25 households in this area with an approximate population of 77 people (ADF&G 2010). In 1987, these households harvested approximately 125 pounds of subsistence resources per person or a total community harvest of 9,672 pounds (ADF&G 2010). Mentasta Lake is situated on the northern border between the Ahtna Athabascan (Copper Basin) communities or territory and the Upper Tanana Athabascan communities or territory (Map in Haynes and Simeone 2007:9). This border also bisects the Nabesna Road as does the border between Units 11 and 12.

Slana

Slana, according to DCRA, has a current 2010 population of 107 people, “the community is comprised primarily of homesteaders...it stretches along the Nabesna Road” (to approximately mile 4) (DCRA 2009). Slana has also been described as “a dispersed community that is centered on the intersection of the Tok Cutoff and Nabesna roads (McMillan and Cuccarese 1988:142). According to ADF&G Subsistence Division surveys, conducted in 1987, there were approximately 25 households in this area with an approximate population of 57 people (ADF&G 2010). In 1987, these households harvested approximately

²The Mentasta Pass or Tok Cutoff Road survey unit for the 1987 study was the area between mileposts 79-110 (McMillan and Cuccarese 1988:127).

249 pounds of subsistence resources per person or a total community harvest of 14,185 pounds (ADF&G 2010).

Eight Factors for Determining Customary and Traditional Uses

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

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

Specific information on each of the eight factors is not required because a community or area seeking a customary and traditional use determination only has to "generally exhibit" the eight factors (50 CFR 100.16(b) and 36 CFR 242.16(b)).

The Board previously determined that the residents of Unit 12 generally exhibit the eight factors for caribou and has made positive customary and traditional use determinations for the residents of Unit 12—which includes the residents of the proposal area—for caribou in Unit 12, Unit 11 north of the Sanford River, and Units 20D and 20E. The question for this analysis is not whether a customary and traditional pattern of use of caribou occurred, but rather whether or not the residents of the proposal area have a pattern of use harvesting caribou in Units 13B and 13C as well. As such, it is a question of where the use occurs, not if the use occurs. Thus a full analysis of the eight factors is not necessary because an analysis of the eight factors has been conducted previously (FWS 1997 36-261; FSB 1997, FWS 1998:182, 192, 196; SCSRAC 1998:144, 148; FSB 1998:252; NPS 1994, NPS 1995).

Mentasta Lake and Slana, in Unit 13, are in close proximity to the proposal area (**Map 1**). Menatasta Lake is located only 6 miles to the west of the Tok Cutoff Road. Slana is a dispersed community that is centered on the intersection of the Tok Cutoff and Nabesna roads. Slana is in Unit 13 on the border between Units 11 and 13 and close to the border of Unit 12. Mentasta Lake also is in Unit 13, but close to the border of Unit 12. The proposal area of the Tok Cutoff Road is in Unit 12. The proponent states that the residents of the proposal area share similar subsistence patterns with the residents of Slana and Mentasta (Unit 13), which are both included in the positive customary and traditional use determinations for caribou in Units

13B and 13C. In addition, the residents of Nabsena Road in Unit 12 are included in the caribou customary and traditional use determinations for Units 13B and 13C. The Nabesna Road also is in close proximity to the Tok Cutoff Road (see **Map 1**).

The record indicates that when the Board was addressing customary and traditional uses of Unit 12 residents, it carefully reviewed the information provided in staff analyses, council recommendations, and public comment (FWS 1997 36-261; FSB 1997, FWS 1998:182, 192, 196; SCSRAC 1998:144, 148; FSB 1998:252; NPS 1994, NPS 1995). However, the Board did not specifically discuss the uses of the residents residing along the Tok Cutoff Road (mileposts 79-110, Mentasta Pass). Because the Board looked at Unit 12 in a holistic manner and did not distinguish the pattern of use of the residents of the proposal area from the Upper Tanana region, it did not specifically address the pattern of use of the residents of the Tok Cutoff Road, concluding that the information available did not indicate a customary and traditional use of caribou in Unit 13B and 13C by Unit 12 residents. The Board's decision was based on the premise that the Unit 12 boundary is not only a boundary of management units, but also a boundary between Native cultures and harvest areas.

Unit 12 residents, however, are not limited to Athabascan residents. In the early 1980s, Reckord noted:

Subsistence resources have played a major role in the history of white people in the Copper River Valley. From the very first visit of Russian-Aleut explorers in 1848 through the gold rush and mining period at the turn of the century and into the present, subsistence resources have contributed to the diet of the residents of the valley... Over the years an indigenous white culture developed which highly valued the use of subsistence foods such as moose, caribou, sheep and fish. At first some of the white settlers learned from the Native people; they were educated by young Natives in the local species and where these species could be taken... the use of subsistence resources by white people in the region extends beyond mere recreation (1983:166).

Further, Reckord described the Tok Cutoff area:

The people living along the Tok Cutoff often live several miles from their nearest neighbors... The Tok Cutoff people are often oriented to businesses serving the tourists and hunters who regularly travel this route between the Copper River Valley and the Alaska Highway. Homesteaders, retired people, and guides are also found living along the road. Some of these residents have lived here for 20 or 30 years and suddenly find the area developing around them... Most of the permanent residents along the Tok Cutoff utilize a number of subsistence species each year. Most people are oriented to the highway... It is obvious when talking to the Tok Cutoff residents that it is the bush lifestyle that has brought them to this place (1983:256-257).

There is no new information on caribou harvests by residents of the proposal area in Units 13B and 13C. The ADF&G harvest ticket database was searched for new harvest information for the proposal area, but the database does not accurately reflect harvests for the areas of consideration in this proposal because of the difficulties in identifying location of hunter residence by mailing address. Residents in the proposal area get their mail in communities near the area, so there is no way to distinguish their harvests from others in these communities. Queries conducted in 2010 of the ADF&G Subsistence Division's Community Subsistence Information System (ADF&G 2010) also did not reveal any new information regarding the caribou harvests of residents of the proposal area in Unit 13B or 13C.

The people living in proposal area in close proximity to Slana and Mentasta Lake should not be excluded from being eligible to hunt in the same hunt areas that Slana and Mentasta Lake use just because they live along a road and not in Slana or Mentasta Lake. Therefore, the residents of the proposal area should be

included in the customary and traditional use determination for caribou for Unit 13B and 13C, the same as Slana and Mentasta.

Effects of the Proposal

If this proposal is adopted, the Unit 12 residents of the Tok Cutoff Road (mileposts 79-110, Mentasta Pass), would have a customary and traditional use determination for caribou in Units 13B and 13C. This would allow the residents of the proposal area to hunt for caribou while also hunting for moose in Unit 13B. The effect of adopting the proposal is expected to be minimal on other subsistence users or on caribou because the number of people who would be added to the pool of users is anticipated to be quite small as there are only an estimated eleven households. In addition, only 7% of Unit 13B has Federal public lands and less than 1% of Unit 13C has Federal public lands. The only area where residents of the proposed area would be likely to hunt for caribou would be in the Delta and Gulkana Wild and Scenic Rivers in Unit 13B.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-90.

Justification

The Federal Subsistence Board previously determined that the residents of Unit 12 generally exhibit the eight factors for caribou and made positive customary and traditional use determinations for the residents of Unit 12—which includes the residents of the Tok Cutoff Road (mileposts 79 -110, Mentasta Pass) — for caribou in Unit 12, Unit 11 north of the Sanford River, and Units 20D and 20E. The Federal Subsistence Board also has previously addressed the customary and traditional use determinations for caribou in Units 13B and 13C, however, the Board has not specifically addressed the Tok Cutoff Road in Unit 12.

The proponent states that the residents of the proposal area have subsistence use patterns similar to those of Slana and Mentasta. While there is no new information regarding the customary and traditional uses of the residents of the proposal area, this area is in close proximity to Slana and Mentasta Lake, which are included in the customary and traditional use determinations for caribou in Units 13B and 13C. People living along a road close to a community should be included in the customary and traditional use determinations of the closest community or communities.

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| WP10-97/98/99/100 Executive Summary | |
|---|--|
| General Description | Proposals WP10-97, -98, -99 and -100 seek to shorten wolf seasons and/or lower harvest limits for wolves in Units 20A, 12 and 25A. <i>Submitted by the Defenders of Wildlife and the Alaska Wildlife Alliance</i> |
| Proposed Regulation | <p><u>Proposal WP10-97</u> Unit 20A—Wolf Trapping <i>No limit</i> <i>Nov. 1– Mar. 31</i> <i>April 30</i></p> <p><u>Proposal WP10-98:</u> Unit 20A—Wolf Hunting <i>10-5 Wolves</i> <i>Nov. 1–Mar. 31</i> <i>Aug. 10–April 30</i></p> <p><u>Proposal WP10-99</u> Unit 12—Wolf Trapping <i>No limit</i> <i>Nov. 1–Mar. 31</i> <i>Oct. 1–April 30</i></p> <p><u>Proposal WP10-100:</u> Unit 25A—Wolf Hunting <i>No limit 10 Wolves</i> <i>Aug. 10 –April 30</i></p> |
| OSM Preliminary Conclusion | Oppose Proposals WP10-97, -98, -99, and -100. |
| Eastern Interior Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | Oppose |
| Written Public Comments | 3 Oppose Proposal WP10-97 and 98 2 Oppose Proposal WP10-99 1 Oppose Proposal WP10-100 |

**DRAFT STAFF ANALYSIS
WP10-97, -98, -99, AND -100**

ISSUES

Proposals WP10-97, -98, -99 and -100 were submitted by the Defenders of Wildlife in conjunction with the Alaska Wildlife Alliance and seek to shorten wolf seasons and/or lower harvest limits for wolves in Units 20A, 12 and 25A.

DISCUSSION

WP10-97 requests that trapping not be allowed in Unit 20A in the month of April. WP10-98 requests that hunting not be allowed in Unit 20A in the months of August, September, October, and April and that the harvest limit be reduced from 10 wolves to five.

WP10-99 requests that trapping not be allowed in October and April in Unit 12. The proponent wishes to apply this restriction in the part of Unit 12 that is outside of the State’s predator control program (U.S. Fish and Wildlife Service (FWS) and National Park Service (NPS) lands).

WP10-100 requests that the harvest limit for wolf hunting in Unit 25A be reduced from no limit to 10 wolves.

The proponents note that in Unit 12, wolf hides are not fully prime by October 1, and trappers generally do not begin trapping until later when snow and ice conditions permit. The proponents note that in late April, in Units 20A and 12, hides are rubbed and that pregnant females are approaching full term. The proponents note that pups are only half grown at the start of the current wolf hunting seasons in 20A and 25A and that in August hides are not suitable for commercial sale or trophies. The proponents states that “hunters shooting wolves in August would likely discard the low-quality hide or leave the intact carcass in the field.”

Existing Federal Regulation

Unit 20A—Wolf Trapping

No limit

Nov. 1–April 30

Unit 20A—Wolf Hunting

10 Wolves

Aug. 10–April 30

Unit 12—Wolf Trapping

No limit

Oct. 1–April 30

Unit 25A—Wolf Hunting

No limit

Aug. 10–April 30

Proposed Federal Regulation

Proposal WP10-97

Unit 20A—Wolf Trapping

No limit

Nov. 1–~~Mar. 31~~April 30

Proposal WP10-98:

Unit 20A—Wolf Hunting

10-5 Wolves

Nov. 1–Mar. 31 ~~Aug. 10–April 30~~

Proposal WP10-99

Unit 12—Wolf Trapping

No limit

Nov. 1–Mar. 31 ~~Oct. 1–April 30~~

Proposal WP10-100:

Unit 25A—Wolf Hunting

No limit 10 Wolves

Aug. 10 –April 30

Existing State Regulation

Unit 20A—Wolf Trapping

No limit

Nov. 1 –April 30

Unit 20A—Hunting

5 Wolves

Aug. 10 – May 31

Unit 12—Wolf Trapping

No limit

Oct. 15 –April 30

Unit 25A—Wolf Hunting

10 Wolves

Aug. 10 – May 31

Extent of Federal Public Lands

Federal public lands comprise approximately 59% of Unit 12 and consist of 82% NPS lands and 18% FWS lands (see **Unit 12 Map**). Federal public lands comprise approximately 1% of Unit 20A and are all Bureau of Land Management (BLM) lands (see **Unit 20 Map**). Federal public lands comprise approximately 76% of Unit 25A and consist of 97% FWS lands and 3% BLM lands (see **Unit 25 Map**).

Customary and Traditional Use Determinations

Rural residents of Units 6, 9, 10 (Unimak Island only), 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, and Chickaloon have a positive customary and traditional use determination to harvest wolves in Units 12, 20A and 25A. In order to engage in subsistence in Wrangell St. Elias National Park, the National Park Service requires that subsistence users either live within the park’s resident zone (36 CFR 13.430, 36 CFR 13.1902) or have a subsistence permit (36 CFR 13.440) issued by the park superintendent.

Regulatory History

The Federal subsistence wolf hunting season in Unit 20A has been August 10 to April 30 since 1990. There was no harvest limit for wolf hunters in Unit 20A in regulatory year 1990/91; the harvest limit was reduced to 10 wolves in 1991/92 and has remained at that level since then. The Federal subsistence wolf trapping season in Unit 20A has been November 1 to April 30 since 1990.

The Federal subsistence wolf trapping season for Unit 12 has been October 1 to April 30 since 1990.

There has been no harvest limit for wolf hunting in Unit 25A since 1990. Units 25A and 22 are the only units in Alaska that have no harvest limit for wolf in the Federal hunting regulations.

In 2004, Defenders of Wildlife submitted a Proposal (WP05-02) requesting that wolf hunting seasons in Units 1, 3–4, 5A, 6–7, 9–13, 14C, 15–21, and 24–26 be closed until September 15. The Eastern Interior Alaska Subsistence Regional Advisory Council (Council) opposed that proposal, as did seven other Regional Advisory Councils. Consistent with these Regional Advisory Council recommendations, the Federal Subsistence Board rejected Proposal WP05-02. At its March 2005 meeting, Council member Entsminger noted that, as a skin sewer, she has seen wolf hides from August and September and spring. She noted that in August and September wolf's hair tends to be shorter and is more useful for making hats and other things. She noted that while few wolves are taken in the fall, when they are harvested by subsistence users their hides are used (EIRAC 2005).

Biological Background

Wolves (*Canis lupus*) have probably been part of Alaska fauna since the Pleistocene glaciation (Murie 1944). Wolves are found throughout most of Units 12, 20A and 25A and are well adapted to living in the interior Alaska boreal forests, river valleys and mountains. Prey species include caribou, moose, sheep, small mammals, snowshoe hare, and beaver. Murie (1944) noted that there are times of wolf scarcity and times of wolf abundance and suggested that food supply was probably an important factor affecting wolf abundance. Wolves first breed at age two to four and produce pups in dens during the spring (Mech et al. 1998). 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. Wolves live at low densities in a structured population of territorial packs (Mech and Boitani 2003). Meier et al. (2006) reported that 28% of the wolves leave their packs each year, and that most offspring eventually leave the pack. 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). Meier et al. (2006) reported that wolves sometimes disperse great distances. The longest documented dispersal of a Denali National Park and Preserve wolf was 435 miles. With high reproductive capacity, good survival of young, and high dispersal rates, wolf populations are able to quickly respond to changes in prey abundance.

The size of the home range is believed to be dependant on prey abundance, the activities of neighboring packs, and each pack's individual habits. Wolf pack territories overlap one another and change over time (Meier et al. 2006). 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. Meier et al. (2006) observed that at least 60% of the wolf deaths in Denali National Park and Preserve came from wolves being killed by other wolf packs. ADF&G (2010) observed that wolves have evolved and thrived under natural conditions where adult mortality occurs regularly through interspecific competition. It is the adults, including pregnant and lactating females, that do the killing of large prey. Thus the adults are subject to injury and death during attempted predation. In cases of natural adult mortality, the pack social structure provides a continuation of normal pack behavior and support of pups (ADF&G 2010).

Unit 12

While information is limited, Hollis (2006) estimated that there were 240–255 wolves in Unit 12. Wolf density estimates for 2001 to 2004 ranged from 16 to 50/1000 mi² (Hollis 2006). Hollis (2006) estimated that in regulatory year 2002/03 that there were a total of 31 packs with an average pack size of 7.0–7.4 wolves. The current fall wolf population estimate for Unit 12 is 179–192 wolves (18 to 19/1000 mi²)

(ADF&G 2010). The Unit 12 wolf population has benefited from high numbers of caribou since 1997 and from the snowshoe hare cycle highs in 1998–2001 and 2007–2009 (ADF&G 2010). The Chisana caribou herd has been a reliable food source for wolves in eastern Unit 12. Caribou from the Mentasta, Nelchina, and Macomb herds also have used portions of the unit and are a food source for wolves (Hollis 2006).

Unit 20A

While information is limited, Young (2006) estimated that there were 200–250 wolves and 20–25 packs in Unit 20A. ADF&G (2009a) reported that there were 224–229 wolves in Unit 20A in fall 2008. The current Unit 20A fall wolf density estimate is 36/1000 mi²; this is the highest density in interior Alaska (ADF&G 2010).

Unit 25A

The current fall wolf population density estimate for Unit 25A is 230–277 wolves (11–13/1000 mi²) (ADF&G 2010). Wolf population numbers have been relatively stable in Unit 25A for many years (ADF&G 2010).

Harvest History

Fur prices and snow conditions affect wolf trapping effort in any given year. Hollis (2006) observed that few trappers selected for wolves, but noted that during years when martin and lynx pelt prices are low and wolf prices are adequate, more trappers concentrate on wolves. Harvest rates in remote areas are dependent on fur prices and weather conditions. Trapping pressure is high along the road system, especially around communities (Hollis 2006). Hunters occasionally take wolves opportunistically in the fall and early spring when they are hunting other species. During the early winter period, conditions are inadequate for travel. Once snow-cover and ice are adequate for snowmachine travel, trappers began establishing and maintaining trap lines. In these interior Alaska units, wolf harvest is spread throughout the winter. Wolf harvest declines in April as snow and ice conditions deteriorate with the spring melt. ADF&G (2010) observed that adult wolves learn to avoid humans through experience and are the most difficult pack members to take; pups are the most vulnerable pack members to harvest.

Wolves harvested either by trapping or hunting 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.

There have been a number of wolf control programs in these units over the years (Young 2006, Hollis 2006). The Alaska Board of Game authorized aerial wolf control in northern Unit 12 in 2004 (Hollis 2006).

Based on an analysis of information from North American wolf populations, Adams et al. (2008) concluded that wolf populations appear to be largely unaffected by human take of $\leq 29\%$ annually. Given the limited effects of moderate levels of human take, they concluded that the risks of reducing wolf populations through regulated harvest are quite low.

Unit 12

From regulatory years 1999/2000 to 2007/08, the reported annual harvest of wolves in Unit 12 ranged from 25–58/year (**Table 1**). Most of the wolves were taken using traps or snares. Harvest rates in Unit 12 have been $< 24\%$ since 1998 (ADF&G 2010).

Table 1. Reported wolf harvest and method of take for Unit 12 (ADF&G 2009b).

| Regulatory Year | Reported Total Harvest | Oct. & April Harvest | Method of take for total harvest from Unit 12 | | | | |
|-----------------|------------------------|----------------------|---|-----|------|----|-----|
| | | | Trap/snare | (%) | Shot | % | Unk |
| 1999/2000 | 54 | 3 | 40 | 74 | 13 | 24 | 1 |
| 2000/01 | 58 | 1 | 51 | 88 | 7 | 12 | 0 |
| 2001/02 | 39 | 2 | 32 | 82 | 7 | 18 | 0 |
| 2002/03 | 53 | 2 | 49 | 92 | 4 | 8 | 0 |
| 2003/04 | 25 | 5 | 23 | 92 | 2 | 8 | 0 |
| 2004/05 | 29 | 2 | 27 | 93 | 2 | 7 | 0 |
| 2005/06 | 39 | 3 | 22 | 56 | 15 | 38 | 2 |
| 2006/07 | 30 | 1 | 24 | 80 | 6 | 20 | 0 |
| 2007/08 | 49 | 9 | 36 | 73 | 9 | 18 | 4 |
| 2008/09 | | | | | | | |

Of a total of 376 wolves taken Unit 12 for regulatory years 1999/2000 to 2007/08, 16 were trapped or snared during the months of October and April (**Table 1**). Seven wolves were shot in October and April; it isn't clear whether the seven wolves that were shot were taken under hunting or trapping regulations. With a trapping license, during trapping season, a trapper may take free ranging wolves with a firearm on FWS lands in Unit 12.

Unit 20A

From regulatory years 1999/2000 to 2007/08, the reported annual harvest of wolves in Unit 20A ranged from 33–98/year (**Table 2**). Most were taken with traps or snares (**Table 2**). Of the total Unit 20A wolf harvest, from 3 to 11 wolves/year were taken in August, September, October, and April. The harvest rate of wolves in Unit 20A is higher than in some other areas.

Unit 25A

From regulatory years 1999/2000 to 2007/08, the reported annual harvest of wolves in Unit 25A ranged from 12–24/year (**Table 3**). Most were taken with traps or snares (**Table 3**). Stephenson (2006) estimated that the reported harvest accounted for a maximum of 8 to 10% of the estimated wolf population in Unit 25A.

Effects of the Proposal

If adopted, these proposals would decrease opportunity for Federally qualified subsistence users to harvest wolves in Units 12, 20A, and 25A. The harvest of wolves and the use, barter, and sale of pelts has long been very important for subsistence uses in Units 12, 20A and 25A (Halpin 1987; Andrews 1988; Caulfield 1983).

If Proposal WP10-97 is adopted, the Federal wolf trapping season in Unit 20A would be closed during April, thereby shortening the season by 30 days. If Proposal WP10-98 is adopted, the Federal wolf hunting season in Unit 20A would be closed August 10–October 31 and April 1–30 thereby shortening the season by 113 days. Between regulatory years 1999/2000 and 2007/08, 14% of the reported Unit 20A wolf harvest occurred in August, September, October and April (**Table 1**). Federal subsistence wolf

Table 2. Reported wolf harvest and method of take for Unit 20A (ADF&G 2009b).

| Regulatory Year | Reported Total Harvest | Aug.–Oct. & April Harvest | Method of take for total harvest in Unit 20A | | | | |
|-----------------|------------------------|---------------------------|--|-----|------|----|-----|
| | | | Trap/snare | (%) | Shot | % | Unk |
| 1999/2000 | 67 | 11 | 53 | 79 | 14 | 21 | 0 |
| 2000/01 | 95 | 10 | 79 | 83 | 12 | 13 | 4 |
| 2001/02 | 98 | 10 | 90 | 92 | 8 | 8 | 0 |
| 2002/03 | 82 | 11 | 70 | 85 | 12 | 15 | 0 |
| 2003/04 | 61 | 3 | 52 | 85 | 2 | 3 | 7 |
| 2004/05 | 54 | 9 | 44 | 81 | 8 | 15 | 2 |
| 2005/06 | 33 | 7 | 28 | 85 | 5 | 15 | 0 |
| 2006/07 | 67 | 10 | 55 | 82 | 11 | 16 | 1 |
| 2007/08 | 42 | 11 | 27 | 64 | 13 | 31 | 2 |
| 2008/09 | | | | | | | |

Table 3. Reported wolf harvest and method of take for Unit 25A (ADF&G 2009b).

| Regulatory Year | Reported Total Harvest | Aug.–Oct. & April Harvest | Method of take for total harvest in Unit 25A | | | | |
|-----------------|------------------------|---------------------------|--|-----|------|----|-----|
| | | | Trap/snare | (%) | Shot | % | Unk |
| 1999/2000 | 13 | 4 | 8 | 62 | 5 | 38 | 0 |
| 2000/01 | 24 | 4 | 13 | 54 | 11 | 46 | 0 |
| 2001/02 | 13 | 5 | 5 | 38 | 8 | 62 | 0 |
| 2002/03 | 12 | 3 | 9 | 75 | 3 | 25 | 0 |
| 2003/04 | 18 | 4 | 12 | 67 | 6 | 33 | 0 |
| 2004/05 | 15 | 5 | 12 | 80 | 3 | 20 | 0 |
| 2005/06 | 21 | 5 | 14 | 67 | 6 | 29 | 1 |
| 2006/07 | 24 | 9 | 14 | 58 | 10 | 42 | 0 |
| 2007/08 | 15 | 6 | 7 | 47 | 8 | 53 | 0 |
| 2008/09 | | | | | | | |

hunting and trapping in Unit 20A have little impact on wolf numbers; Federal public lands comprise a small part of Unit 20A (approximately 1%).

If proposal WP10-99 is adopted, the Federal wolf trapping season in Unit 12 would be closed in October and April, thereby shortening the season by 61 days. This would restrict subsistence opportunity to take a wolf while trapping other species such as muskrat or beaver in the spring. The wolf harvest in the months of October and April in Unit 12 was relatively small in regulatory years 1999/2000 to 2007/08.

Currently, there is no limit on the number of wolves that can be taken by hunters under Federal regulations in Unit 25A. If proposal WP10-100 is adopted, the Federal wolf harvest limit for hunters would be reduced to 10 wolves. This change would have a limited affect on subsistence users since the number of wolves harvested by an individual hunter is typically lower than that.

WP10-98 and WP10-99 would eliminate the opportunity for subsistence users to harvest wolves under Federal regulations during the fall and spring when they are hunting other species.

Proposals WP10-97, -98 and -99 would make the Federal subsistence wolf seasons shorter than the State seasons. Proposal WP10-100 would align the Federal subsistence wolf hunting harvest limit with the State harvest limit.

OSM PRELIMINARY CONCLUSION

Oppose Proposals WP10-97, -98, -99, and -100.

Justification

The wolf populations in Units 12, 20A and 25A are considered healthy. Wolves are prolific and survival of young is generally high. Young wolves disperse from packs at high rates as yearlings and 2-year-olds; these individuals are abundant and available to be harvested. The wolf population in these units is thought to be regulated more by natural factors than by the harvest by hunters and trappers.

Wolves are a very important subsistence resource in Units 12, 20A and 25A. The harvest of wolves and the use, barter, and sale of pelts is a long standing component of the subsistence economy.

While less than 1% of the Unit 12 wolf harvest occurred in the months of October and April over the past decade, the opportunity for trappers to take wolves in these two months is important to those that participate in the harvest.

Over the past decade, 14% of the reported, Unit 20A wolf harvest has occurred in the months of August, September, October and April. In the fall, the wolves have shorter hair and their hides are used primarily for personal use to make clothing and handicrafts.

Even if these proposals were adopted by the Federal Subsistence Board, hunters and trappers would still be able to take wolves under State regulations on FWS, BLM, and Wrangell-St. Elias Preserve lands in Units 12, 20A and 25A. As such, adoption of these proposals by the Federal Subsistence Board would not have the effect sought by the proponents.

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Alaska Department of Fish and Game
Comments to the Regional Advisory Council

Wildlife Proposals WP10-97, 98, 99, and 100: These proposals would reduce the federal subsistence wolf trapping seasons in Units 12 and 20A by 61 days and 30 days, respectively; reduce the wolf hunting season in Unit 20A by 112 days and bag limit from 10 wolves to 5 wolves; and reduce the wolf hunting bag limit in Unit 25A from no limit to 10 wolves.

Introduction: These proposals incorrectly assume federal subsistence wolf hunting and trapping bag limits and season lengths are part of a predator control program. Predator and prey management is the responsibility of the State of Alaska. Federal subsistence regulations are authorized by ANILCA for the purpose of providing a continued customary and traditional subsistence use by rural residents on federal lands. The federal subsistence regulations provide August openings for wolf hunting and trapping that are traditional, allowing federal subsistence hunters the opportunity to take a wolf while hunting for other big game in the fall and closing April 30 after mild spring weather that made travel conditions easier. In fact, April seasons are traditional, allowing federal subsistence users the opportunity to take a wolf while trapping for other furbearers. These proposals fail to recognize that hide value depends on intended use; e.g., hides taken in early fall and late spring are suitable for making warm items for personal use, consistent with subsistence use of this species.

Impact on Subsistence Users: Proposal 99 would restrict the subsistence opportunity to take a wolf in Unit 12 while trapping other species, such as muskrat and beaver in the spring. Proposal 97 would reduce the federal subsistence user opportunity in Unit 20A to take a wolf while trapping other species in the spring, and proposal 98 would reduce federal subsistence user opportunity to hunt wolves by 113 days, about a 40% reduction of the season, and reduce the bag limit by 50%. Proposal 100 would reduce federal subsistence hunters' opportunity in Unit 25A to take an unlimited number to 10 wolves.

Opportunity Provided by State: In Unit 12, the state provides an October 15 through April 30 trapping season with no harvest limit. In Unit 20A, the state trapping season is November 1 through April 30 with no harvest limit and the state hunting season is August 10 through May 31 with a 5 wolf bag limit. The state wolf hunting season in Unit 25A is August 10 through May 31, with a bag limit of ten wolves.

Conservation Issues: None, as described for each unit below.

Unit 12: The current federal subsistence season and bag limits for wolf trapping in Unit 12 have virtually no impact on wolf numbers. Wolf numbers and total harvests have been relatively stable in Unit 12 for many years, and there are no current conservation concerns. Since 1999, an average of 41 wolves per year have been harvested by all methods in Unit 12, including a total of 4 wolves that were taken in the Upper Yukon–Tanana predation control area in northern Unit 12. The current fall wolf population estimate in Unit 12 is 179–192 wolves (7–7.5 wolves/1,000 km²). Despite active wolf reduction efforts in a portion of northern Unit 12 and in neighboring Units 13 and 20E, the minimum fall population of wolves residing entirely within Unit 12 has changed little since 1998. Harvest rates in Unit 12 have been ≤24% since 1998, well below annual harvest rates of more than 30% needed to preclude wolf population growth. Wolf

Comments WP10-97, WP10-98, WP10-99, and WP10-100
January 29, 2010; Page 2 of 2

numbers, particularly in northern Unit 12, have benefited from high numbers of caribou since 1997 and from the snowshoe hare cycle highs in 1998–2001 and 2007–2009.

The proposer suggests that adjacent Units 13 and 20E have very low wolf densities due to active predator management. While wolves have been reduced in these units in recent years, it was not by 80% as the proposer suggests. The Unit 12 wolf density estimate of 7–7.5 wolves/1,000 km² indicates that this population was unaffected by wolf control in adjacent units. Shortening the wolf trapping season in Unit 12 at this time would have no effect on the conservation of wolves.

Unit 20A: Current season and bag limits for federal subsistence wolf hunting and trapping in Unit 20A have little impact on wolf numbers in Unit 20A. While annual harvest by all methods averaged 50 wolves during 2004–2008, Alaska Department of Fish and Game research indicates that interspecific competition is a substantial cause of mortality in this wolf population. Shortening the federal subsistence season to end on the proposed date of March 30 is not warranted.

The proposer cites wolf control during 1976 through 1983 as a reason to restrict current seasons and bag limits in Unit 20A. However, as the proposer points out, moose responded to reduced wolf numbers and are now abundant throughout Unit 20A. Wolf numbers have also recovered in Unit 20A, reaching current fall densities of 14 wolves/1,000 km², the highest wolf density in Interior Alaska, indicating that previous wolf control in Unit 20A has benefited the wolf population as well as the moose population and federal subsistence hunters. The proposer suggests that density-dependent effects in the moose population cannot be reduced without increasing the wolf population. On the contrary, the department is managing hunter numbers in Unit 20A in order to effectively manage this moose population.

Unit 25A: Wolf population numbers and total harvests have been relatively stable in Unit 25A for many years. Current federal subsistence and state bag limits for wolf hunting in Unit 25A have virtually no impact on wolf numbers. There is no danger of overharvest, and there are no current conservation concerns. The current fall wolf population density estimate in Unit 25A is 230–277 wolves (4.2–5.0 wolves/1,000 km²). Since 1999, an average of 7 wolves per year have been shot in Unit 25A, and the harvest rate by all methods is less than 9% of the population, well below a level needed to preclude wolf population growth. Decreasing the wolf hunting bag limit in Unit 25A at this time would have no beneficial effect on the conservation of wolves in Unit 25A.

Other Comments: It is unlikely that all adult wolves would be taken out of a pack by the federal subsistence hunting and or trapping seasons and bag limits addressed in these proposals. Adults have learned to avoid man through experience and are the most difficult pack members to take, while pups are the most vulnerable pack members to harvest. Pup starvation is unlikely even if some adults are taken. Wolves have evolved and thrived under natural conditions where adult mortality occurs regularly through intraspecific competition. Also, it is the older adults, including pregnant and lactating females, that do the killing of large prey, thus are subject to injury and death during attempted predation. In cases of natural adult mortality, the pack social structure provides support to pups.

Recommendation: Oppose.

WRITTEN PUBLIC COMMENTS

Oppose Proposal 99. Please keep wolf trapping season open in Unit 12 from Oct. 1–Apr. 30. Wolves prey heavily on moose, sheep, and caribou in this area, leaving less opportunity for subsistence users. Let's give trappers plenty of opportunity to harvest wolves.

Kieth Rowland, McCarthy

Oppose Proposals WP10-97 and 98. Wolves in GMU 20A are not in jeopardy. The current trapping and hunting seasons for wolves has contributed to the increased numbers of moose for human consumption as intended through Intensive Management. Hunters are reducing the numbers of moose in this subunit as intended.

Don Quarberg, Delta Junction

Oppose Proposals WP10-97 and 98. Delta Junction Advisory Committee members feel that the wolf trapping and hunting season should left to the current time frames. This is needed to help maintain game populations and help control wolf populations in this intensive management area as it is now. No change needed.

Delta Junction Advisory Committee

Oppose Proposals WP10-97, 98, 99, and 100. We have a very high level of respect for Alaska's wolf population and believe they are integral to the fabric of Alaska. However, they have to have population control measures that will enable prey species to live within balance of what their habitats will provide. Wolves have to be included into the management process in an active enough manner to provide maximum human benefit from the prey species. This type of management provides the best stewardship possible for the prey species as well as all people who depend upon or enjoy the benefit of high density population equilibriums. As the Federal Subsistence Board is mandated with providing important subsistence hunting opportunities and the scope of these proposals takes away from that objective, we encourage the Board not to pass these proposals.

Alaska Professional Hunters Association

| WP10-102 Executive Summary | |
|---|--|
| General Description | Proposal WP10-102 requests the Unit 12 remainder harvest limit for caribou during the winter season (October 1 –April 30) be increased from one caribou to two caribou. The sex of the animals allowed to be taken would continue to be announced by the Tetlin National Wildlife Refuge Manager in consultation with other State and Federal agencies involved in Nelchina Caribou Herd (NCH) management. <i>Submitted by Terry Brigner on behalf of the Upper Tanana/40 Mile Advisory Committee</i> |
| Proposed Regulation | <p>Unit 12–Caribou</p> <p><i>Unit 12, that portion of the Nabesna River drainage within the Wrangell-St. Elias National Park and Preserve and all Federal Public lands south of the Winter Trail running southeast from Pickerel Lake to the Canadian border— The taking of caribou is prohibited on Federal public lands.</i></p> <p><i>Unit 12 remainder—1 bull</i> <i>No Federal open season.</i></p> <p><i>Unit 12 remainder— ± 1 caribou may be taken by a Federal registration permit during a winter season. A hunter who harvested 1 bull during the fall season in this hunt area may also harvest 1 additional caribou during the winter season. A hunter who did not take 1 bull in the fall season in this hunt area may take 2 caribou in the winter season. Hunters may not harvest more than 2 caribou in this hunt area per regulatory year. (Dates for a winter season to occur between Oct. 1–Apr. 30 and sex of animal to be taken will be announced by Tetlin National Wildlife Refuge Manager in consultation with Wrangell-St. Elias National Park and Preserve Superintendent, ADF&G Area Biologists and Chairs of the Eastern Interior Alaska Subsistence Regional Advisory Council and Upper Tanana/Fortymile Fish and Game Advisory Committee.)</i></p> <p style="text-align: right;"><i>Sept. 1– Sept. 20</i></p> <p style="text-align: right;"><i>Winter season to be announced.</i></p> |
| OSM Preliminary Conclusion | Support |
| Eastern Interior Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | Oppose |
| Written Public Comments | None |

**DRAFT STAFF ANALYSIS
WP10-102**

ISSUES

Proposal WP10-102 submitted by Terry Brigner on behalf of the Upper Tanana/40 Mile Advisory Committee, requests the Unit 12 remainder harvest limit for caribou during the winter season (October 1 –April 30) be increased from one caribou to two caribou. The sex of the animals allowed to be taken would continue to be announced by the Tetlin National Wildlife Refuge Manager in consultation with other State and Federal agencies involved in Nelchina Caribou Herd (NCH) management.

DISCUSSION

The proponent requests the harvest quota be increased to two caribou to match the harvest limits in the Federal subsistence hunts in Units 13 A and 13B. The Federal subsistence hunt in Unit 12 remainder (RC412) and the Federal subsistence hunts in Units 13A and 13B (RC513 & 514) both harvest caribou from the NCH. Currently in Units 13A and 13B, 2 caribou may be taken by Federal registration permit.

Existing Federal Regulation

Unit 12—Caribou

| | |
|---|-------------------------------|
| <i>Unit 12, that portion of the Nabesna River drainage within the Wrangell-St. Elias National Park and Preserve and all Federal public lands south of the Winter Trail running southeast from Pickerel Lake to the Canadian border—The taking of caribou is prohibited on Federal public lands.</i> | <i>No Federal open season</i> |
|---|-------------------------------|

| | |
|---------------------------------|--------------------------|
| <i>Unit 12 remainder—1 bull</i> | <i>Sept. 1– Sept. 20</i> |
|---------------------------------|--------------------------|

| | |
|---|--------------------------------------|
| <i>Unit 12 remainder—1 caribou may be taken by a Federal registration permit during a winter season to be announced. Dates for a winter season to occur between Oct. 1–Apr. 30 and sex of animal to be taken will be announced by Tetlin National Wildlife Refuge Manager in consultation with Wrangell-St. Elias National Park and Preserve Superintendent, ADF&G Area Biologists and Chairs of the Eastern Interior Alaska Subsistence Regional Advisory Council and Upper Tanana/Fortymile Fish and Game Advisory Committee.</i> | <i>Winter season to be announced</i> |
|---|--------------------------------------|

Proposed Federal Regulation

Unit 12—Caribou

| | |
|--|--------------------------------|
| <i>Unit 12, that portion of the Nabesna River drainage within the Wrangell-St. Elias National Park and Preserve and all Federal Public lands south of the Winter Trail running southeast from Pickerel Lake to the Canadian border— The taking of caribou is prohibited on Federal public lands.</i> | <i>No Federal open season.</i> |
|--|--------------------------------|

| | |
|---------------------------------|--------------------------|
| <i>Unit 12 remainder—1 bull</i> | <i>Sept. 1– Sept. 20</i> |
|---------------------------------|--------------------------|

Unit 12 remainder— **± 2 caribou may be taken by a Federal registration permit during a winter season. A hunter who harvested 1 bull during the fall season in this hunt area may also harvest 1 additional caribou during the winter season. A hunter who did not take 1 bull in the fall season in this hunt area may take 2 caribou in the winter season. Hunters may not harvest more than 2 caribou in this hunt area per regulatory year.** (Dates for a winter season to occur between Oct. 1–Apr. 30 and sex of animal to be taken will be announced by Tetlin National Wildlife Refuge Manager in consultation with Wrangell-St. Elias National Park and Preserve Superintendent, ADF&G Area Biologists and Chairs of the Eastern Interior Alaska Subsistence Regional Advisory Council and Upper Tanana/Fortymile Fish and Game Advisory Committee.) *Winter season to be announced.*

Existing State Regulation

Unit12—Caribou

| | | |
|--|----------------|-------------------------|
| <i>West of the Glenn Highway (Tok Cutoff) and south of the Alaska Highway within the Tok River—one bull</i> | <i>Harvest</i> | <i>Sept. 1–Sept. 20</i> |
| <i>West of the Glenn Highway (Tok Cutoff) and south of the Alaska Highway excluding Tok River drainage (Macomb Herd) (RC835)</i> | <i>(RC835)</i> | <i>Aug. 10–Aug. 27</i> |
| <i>Remainder</i> | | <i>No open season</i> |

Extent of Federal Public Lands

Federal public lands comprise approximately 58.4% of Unit 12 and consist of 10.7% Tetlin National Wildlife Refuge managed by the US Fish and Wildlife Service and 47.7% Wrangell-St. Elias National Park and Preserve managed by the National Park Service (**Unit 12 Map**).

Customary and Traditional Use Determinations

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

Regulatory History

The NCH is an important resource in Alaska due to its proximity to Anchorage and Fairbanks and its distribution within Units 11, 12, 13, and 20 E (Tobey 2003). The majority of the animals harvested from the NCH are harvested in State and Federal hunts in Unit 13. For the 2009–2010 regulatory season, the State Nelchina caribou Tier II subsistence hunt was eliminated. Two hunts were added: a Tier I, Alaska resident only hunt, and a community harvest hunt for residents of Gulkana, Cantwell, Chistochina, Gakona, Mentasta, Tazlina, Chitina, and Copper Center. The harvest limit for each hunt is one caribou (sex to be announced annually) with season dates of Aug. 10–Sept. 20 and Oct. 21–Mar. 31. The Federal registration hunts (RC513 & RC514) in Unit 13 are for residents of Units 11, 13, and residents along the Nabesna Road in Unit 12 and Delta Junction in Unit 20. In 2005, Federal regulations for Unit 13A and

13B changed to allow the sex of the animals allowed to be harvested to be determined by the Glennallen Field Office Manager (Bureau of Land Management) in consultation with the Alaska Department of Fish and Game area biologist and Chairs of the Eastern Interior Regional Advisory Council and the Southcentral Regional Advisory Council for the entire season (Aug. 10–Sept. 30 and Oct. 21–Mar. 31). Since then, the managers of the State and Federal hunts have coordinated their announcement as to whether bulls and/or cows could be taken in a given year. The Federal harvest limit in Unit 13A and 13B is two caribou.

A smaller number of NCH caribou are harvested in the Federal subsistence hunt in Unit 12. Since 1998, a Federal registration hunt (RC412) has been opened to residents of Unit 12, Dot Lake, Healy Lake and Mentasta between October and April when the NCH migrate through the Tetlin National Wildlife Refuge. The harvest limit is one caribou and the season dates and sex of the caribou are announced by the Tetlin National Wildlife Refuge Manager.

Biological Background

The NCH has remained relatively stable since 2001. The fall population estimates for the NCH have remained between 30,000–39,000 animals (**Table 1**). In June 2007, a post-calving census estimated the NCH to be approximately 32,569 caribou (ADFG 2008) and in June 2009, the census showed approximately 33,146 caribou (ADFG 2009a). Currently the herd size is a little below the management objective of 35,000–40,000 caribou for the fall population. The bull:cow ratio has been below the management objective of 40 bulls:100 cows since 1998 and has averaged 32 bulls:100 cows since 2001 with the lowest ratio of 23 bulls:100 cows in 2006–2007 (**Table 1**). Hunters harvested primarily bulls in the Tier II and subsistence registration hunts despite the hunts being open for either sex (ADF&G 2009b). There was an overall reduction in bulls harvested from 2001 to 2004, then an increase in the bull harvest again in the 2005–2006 regulatory year. With the exception of 2009, the calf to cow ratio has remain at 35 calves:100 cows which is slightly below the management objective of 40 calves:100 cows. In 2009, the calf to cow ratio dipped to 29 calves:100 cows (**Table 1**).

Table 1. Nelchina caribou herd fall composition counts and estimabed herd size, regulatory uears 2001-2009 (Modified from Tobey and Kelleyhouse 2007, ADF&G 2008, Schwanke 2009 pers. comm.)

| Regulatory Year | Total | | Composition | | | Sample Size | Estimate of herd size | Postcalving ^a count |
|-----------------|----------------|-----------------|-------------|----------|-----------|-------------|-----------------------|--------------------------------|
| | Bulls:100 Cows | Calves:100 Cows | Calves (%) | Cows (%) | Bulls (%) | | | |
| 2001-2002 | 37 | 40 | 22 | 57 | 21 | 3949 | 33,745 | 33,745 |
| 2002-2003 | 31 | 48 | 27 | 56 | 17 | 1710 | 34,380 | 34,380 |
| 2003-2004 | 31 | 35 | 21 | 60 | 19 | 3140 | 30,141 | 30,141 |
| 2004-2005 | 31 | 45 | 26 | 57 | 17 | 1640 | 36,677 | 36,677 |
| 2005-2006 | 36 | 41 | 23 | 57 | 20 | 3263 | 36,428 | 36,428 |
| 2006-2007 | 24 | 48 | 25 | 61 | 14 | 33300 | N/A | N/A |
| 2007-2008 | 34 | 35 | 21 | 59 | 20 | 3027 | 32,569 | 32,569 |
| 2008-2009 | 39 | 40 | 22 | 56 | 22 | 3378 | N/A | N/A |
| 2009-2010 | 42 | 29 | 17 | 58 | 25 | 3076 | 33,835 | 33,835 |

^a Spring census

Harvest History

The State Tier II subsistence hunt (TC566) was the primary source for harvest of the NCH and accounted for 78% of the overall harvest from 2005–2008. The Federal registration hunt (RC513/514) in Units 13A and 13B, administered by the BLM, comprised 21% of the harvest from 2005–2008 and the Federal

registration hunt (RC412) in Unit 12 remainder administered by the Tetlin National Wildlife Refuge, comprised 1% of the overall harvest from 2005–2008 (**Table 2**).

The fall caribou season in Unit 13 is the most popular and successful time to hunt. Bulls become more vulnerable to harvest because of the rut (Tobey 2005) and proximity to the road system. The successful harvests in the fall make the winter season more susceptible to emergency closures when the harvest quota may be reached before the end of the season on March 31. A large percentage of NCH typically migrates out of Unit 13 in October and winters in Units 11, 12 and 20E until April. Success during the winter season in Unit 13 is largely dependent upon the number of caribou that remain in the unit (Tobey and Kelleyhouse 2007). The Federal registration hunt in Unit 13 has remained relatively consistent with the average annual harvest of 460 caribou from 2005 to 2008 (**Table 2**). Between 2003 and 2007, the average number of successful hunters taking one caribou was 138, while an average of 165 hunters reported taking 2 caribou (Schwanke 2009, Pers. Comm.). In Unit 12 remainder the average harvest has remained small. The Federal registration hunt on Tetlin National Wildlife Refuge has taken an average of 20 animals annually from 2005–2008.

Effects of the Proposal

If adopted, the harvest limit for Unit 12 remainder (Tetlin National Wildlife Refuge) would be increased from one caribou to two caribou. Given the small number of Nelchina caribou harvested in Unit 12 remainder (3–28 caribou) since 2002, the overall increase in harvest would likely be small. The additional harvest is unlikely to have any biological affect on the NCH. Increasing the harvest limit to two caribou would provide the same harvest opportunity to Federal users in Unit 12 that is provided to Federal users Unit 13A and 13B.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-102

Justification

Currently the harvest of Nelchina caribou by Federal registration hunt (RC412) in Unit 12 remainder is less than 1% of the total NCH harvest. This hunt takes place on the Tetlin National Wildlife Refuge and has resulted in a yearly harvest of 3–28 Nelchina Caribou since 2002. Most of the Nelchina caribou (99%) are harvested in Unit 13 State and Federal hunts. Increasing the harvest limit to two caribou on the Tetlin National Wildlife Refuge would allow Federal subsistence hunters additional opportunity. The increased harvest limit may increase the Federal subsistence harvest a small amount, but it is unlikely to increase to the level that would be an impact to the population.

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Table 2. Nelchina caribou herd harvest and hunter success, regulatory years 2002–2008. (ADF&G 2008, 2009a and 2009b, USFWS 2009, Tobey 2007)

| Hunt | Regulatory Year | Permits | | | | Reported Harvest | | | | Total Harvest |
|-------------------------------|---------------------------------|-----------|----------|--------------|------|------------------|-----|---------|-----|---------------|
| | | Issued | % Hunted | Successful % | Male | Female | Unk | Harvest | | |
| TC566 ^a State | 2002-2003 | 2003 | 80% | 48% | 965 | 1 | 0 | 966 | | |
| | 2003-2004 | 2005 | 83% | 38% | 746 | 3 | 3 | 752 | | |
| | 2004-2005 | 1869 | 74% | 48% | 884 | 5 | 5 | 894 | | |
| | 2005-2006 | 4001 | 78% | 65% | 1614 | 548 | 15 | 2177 | | |
| | 2006-2007 | 5494 | 83% | 59% | 1813 | 686 | 3 | 2502 | | |
| | 2007-2008 | 3003 | 78% | 32% | 693 | 272 | 1 | 966 | | |
| | 2008-2009 | 2500 | 68% | 54% | 787 | 262 | 0 | 1049 | | |
| | RC | 2002-2003 | 2552 | 58% | 14% | 349 | 2 | 12 | 363 | |
| | 513/514 ^b Federal | 2003-2004 | 2598 | 56% | 12% | 318 | 2 | 1 | 321 | |
| | 2004-2005 | 2558 | 48% | 13% | 250 | 86 | 1 | 337 | | |
| | 2005-2006 | 2570 | 52% | 24% | 369 | 239 | 7 | 615 | | |
| | 2006-2007 | 2641 | 59% | 17% | 319 | 239 | 8 | 566 | | |
| | 2007-2008 | 2408 | 45% | 15% | 259 | 120 | 5 | 384 | | |
| | 2008-2009 | 2569 | 49% | 22% | 180 | 89 | 4 | 273 | | |
| RC412 ^c Federal | 2002-2003 | 87 | NA | 15% | 13 | 0 | 0 | 13 | | |
| | 2003-2004 | 62 | NA | 21% | 13 | 0 | 0 | 13 | | |
| | 2004-2005 | 116 | 44% | 18% | 13 | 1 | 0 | 14 | | |
| | 2005-2006 | 78 | 50% | 21% | 18 | 1 | 0 | 19 | | |
| | 2006-2007 | 54 | 56% | 6% | 6 | 10 | 0 | 16 | | |
| | 2007-2008 | 98 | 35% | 18% | 11 | 5 | 2 | 18 | | |
| | 2008-2009 | 156 | 42% | 18% | 15 | 13 | 0 | 28 | | |

^a State Tier 2 subsistence drawing permit (Unit 13).

^b Subsistence registration permit administered by BLM (Unit 13).

^c Subsistence registration permit administered by USFWS (Unit 12).

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USFWS. 2009. Federal registration permit database. Microcomputer database, updated January 6, 2010.

Alaska Department of Fish and Game
Comments to the Regional Advisory Council

Wildlife Proposal WP10-102: Increase federal subsistence caribou bag limit from one caribou to two on federal public lands in Tetlin National Wildlife refuge in Game Management Unit 12.

Introduction: This proposal seeks to increase the federal subsistence caribou bag limit on federal public land in Tetlin National Wildlife refuge in Game Management Unit 12 from one to two caribou to match the two caribou bag limit on federal public land in Unit 13.

Impact on Subsistence Users: The federally qualified hunters in this area have the option of hunting the Fortymile caribou herd in Unit 20E as well as the Nelchina Herd in Unit 12. The reported caribou harvest on Tetlin National Wildlife refuge in Unit 12 during the past 5 years ranged from 3 to 28 annually and averaged 17 per year, suggesting low participation in this hunt. Federal subsistence regulations provide a widely used designated hunter option which allows one hunter to harvest caribou for several federally-qualified subsistence users. This proposal, if adopted, would not likely impact meeting subsistence needs.

Opportunity Provided by State: Within Unit 13, two subsistence hunts are offered for the Nelchina Caribou Herd. New this year, a community subsistence hunt for residents of Cantwell, Chistochina, Chitina, Kluti Kaah (Copper Center), Gakona, Gulkana, Mentasta, and Tazlina as well as any other Alaska resident with close ties to these communities was established. Up to 300 caribou can be taken by this community hunt. All other Alaska residents can apply for a registration permit (permittees are selected from the group with the highest points).

Local subsistence users can also participate in a state administered fall registration hunt for the Fortymile Caribou Herd in adjacent Unit 20E, as well as a winter hunt. State regulations limit caribou hunting in Unit 12 to one bull caribou west of the Glenn Hwy (Tok Cutoff), but provide no caribou hunting opportunity on Tetlin Wildlife Refuge.

Conservation Issues: The Nelchina Caribou Herd was estimated at 33,837 in 2009, which is below population objectives (35,000-40,000). The herd is already managed at maximum sustained yield. Interest in Nelchina caribou hunting has historically been high, and the hunts have been controversial. The Nelchina caribou harvest is managed closely. Since 2000, state subsistence hunts have been closed by emergency order 7 of 10 years prior to the scheduled 31 March closure. State managers must estimate potential take from long federal subsistence hunts both in Unit 13 as well as Unit 12, which is has proven very difficult given the potential for high harvests if caribou congregate on federal public lands. Many years the state winter hunt in Unit 13 is not opened because the harvest quota for the herd has been reached or is very close to being reached. Any additional harvest above the annual harvest quota would negatively affect the herd and would be expected to reduce opportunity for all Nelchina caribou subsistence hunters in the future.

During fall and spring migrations, the Nelchina and Mentasta caribou herds mix. Mentasta caribou winter along-side Nelchina caribou in Units 12 and 20E. Hunters cannot distinguish between the two, therefore any hunting during this period has the potential to further impact the

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severely depressed Mentasta Caribou Herd. Both the Mentasta Herd and the Nelchina Herd have declined in recent years. When caribou are available in Unit 12, they are migrating to or from their winter range. The spring is a particularly stressful time for these animals, and increased hunting pressure using snowmachines during this time would be expected to negatively affect the caribou, particularly late term cow caribou.

In recent years, large numbers of the Nelchina Caribou Herd have wintered in Unit 12 and 20E. When much of their primary winter range in the vicinity of the Taylor Highway burned, caribou began using adjacent areas, as they do not readily use burns that are less than 50 years old. Given lower than average fall female calf weights the last 2 years (2008 = 114 and 2009 = 112 lb; average 118 lb), it is possible these fires have forced caribou to use less than optimal habitat. Additional harvest at this time is not recommended.

Enforcement Issues: Federal law enforcement is minimal during this hunt, and any increased hunting effort would create additional enforcement issues for subsistence users and private landowners.

Other Comments: Large amounts of land are being conveyed from the Bureau of Land Management to Ahtna Native Corporation and the State of Alaska within Unit 12 and Unit 13. In Unit 12, recent conveyances to local Native corporations have removed most road accessible hunting areas from federal subsistence management.

Recommendation: Oppose.

| WP10-103 Executive Summary | | | |
|--|---|--|--|
| General Description | <p>Proposal WP10-103 requests the winter Federal caribou hunting season for Unit 12 remainder be opened by regulation October 21 and remain open until closed by the Tetlin National Wildlife Refuge manager in consultation with other Federal and State staff, councils and committees. The harvest limit is to stay at one caribou. <i>Submitted by Michael Cronk</i></p> | | |
| Proposed Regulation | <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; width: 65%;"> <p><i>Unit 12, that portion of the Nabesna River drainage within the Wrangell-St. Elias National Park and Preserve and all Federal public lands south of the Winter Trail running southeast from Pickerel Lake to the Canadian border— The taking of caribou is prohibited on Federal public lands.</i></p> <p><i>Unit 12 remainder—1 bull during the Sept. season. 1 caribou may be taken by a Federal registration permit during a winter season to be announced. Dates for a winter season to occur between Oct. 1 Oct. 21–Apr. 30. Closure date and sex of animal to be taken will be announced by Tetlin National Wildlife Refuge Manager in consultation with Wrangell-St. Elias National Park and Preserve Superintendent, ADF&G Area Biologists and Chairs of the Eastern Interior Alaska Subsistence Regional Advisory Council and Upper Tanana/Fortymile Fish and Game Advisory Committee.</i></p> </td> <td style="vertical-align: top; width: 35%;"> <p><i>No Federal open season</i></p> <p><i>Sept. 1– Sept. 20 Winter season to be announced. Oct 21.–Closure to be announced.</i></p> </td> </tr> </table> | <p><i>Unit 12, that portion of the Nabesna River drainage within the Wrangell-St. Elias National Park and Preserve and all Federal public lands south of the Winter Trail running southeast from Pickerel Lake to the Canadian border— The taking of caribou is prohibited on Federal public lands.</i></p> <p><i>Unit 12 remainder—1 bull during the Sept. season. 1 caribou may be taken by a Federal registration permit during a winter season to be announced. Dates for a winter season to occur between Oct. 1 Oct. 21–Apr. 30. Closure date and sex of animal to be taken will be announced by Tetlin National Wildlife Refuge Manager in consultation with Wrangell-St. Elias National Park and Preserve Superintendent, ADF&G Area Biologists and Chairs of the Eastern Interior Alaska Subsistence Regional Advisory Council and Upper Tanana/Fortymile Fish and Game Advisory Committee.</i></p> | <p><i>No Federal open season</i></p> <p><i>Sept. 1– Sept. 20 Winter season to be announced. Oct 21.–Closure to be announced.</i></p> |
| <p><i>Unit 12, that portion of the Nabesna River drainage within the Wrangell-St. Elias National Park and Preserve and all Federal public lands south of the Winter Trail running southeast from Pickerel Lake to the Canadian border— The taking of caribou is prohibited on Federal public lands.</i></p> <p><i>Unit 12 remainder—1 bull during the Sept. season. 1 caribou may be taken by a Federal registration permit during a winter season to be announced. Dates for a winter season to occur between Oct. 1 Oct. 21–Apr. 30. Closure date and sex of animal to be taken will be announced by Tetlin National Wildlife Refuge Manager in consultation with Wrangell-St. Elias National Park and Preserve Superintendent, ADF&G Area Biologists and Chairs of the Eastern Interior Alaska Subsistence Regional Advisory Council and Upper Tanana/Fortymile Fish and Game Advisory Committee.</i></p> | <p><i>No Federal open season</i></p> <p><i>Sept. 1– Sept. 20 Winter season to be announced. Oct 21.–Closure to be announced.</i></p> | | |
| OSM Preliminary Conclusion | Oppose | | |
| Eastern Interior Regional Council Recommendation | | | |
| Interagency Staff Committee Comments | | | |
| ADF&G Comments | Neutral | | |
| Written Public Comments | None | | |

DRAFT STAFF ANALYSIS WP10-103

ISSUES

Proposal WP10-103 submitted by Michael Cronk requests the winter Federal caribou hunting season for Unit 12 remainder be opened by regulation October 21 and remain open until closed by the Tetlin National Wildlife Refuge manager in consultation with other Federal and State staff, councils and committees. The harvest limit is to stay at one caribou.

DISCUSSION

The proponent requests the opening date of the winter Federal hunt be put into regulations to ensure the hunting season is open prior to the arrival of caribou on the Tetlin National Wildlife Refuge. This would give subsistence users a chance to harvest the earliest caribou arriving on the refuge. It would also align the opening date of the winter Federal hunting season in Unit 12 with the opening date of the winter Federal hunting season in Unit 13.

Existing Federal Regulation

Unit 12—Caribou

Unit 12, that portion of the Nabesna River drainage within the Wrangell-St. Elias National Park and Preserve and all Federal public lands south of the Winter Trail running southeast from Pickerel Lake to the Canadian border—The taking of caribou is prohibited on Federal public lands.

No Federal open season

Unit 12 remainder—1 bull during the Sept. season. 1 caribou may be taken by a Federal registration permit during a winter season to be announced. (Dates for a winter season to occur between Oct. 1–Apr. 30 and sex of animal to be taken will be announced by Tetlin National Wildlife Refuge Manager in consultation with Wrangell-St. Elias National Park and Preserve Superintendent, ADF&G Area Biologists and Chairs of the Eastern Interior Alaska Subsistence Regional Advisory Council and Upper Tanana/Fortymile Fish and Game Advisory Committee.)

*Sept. 1– Sept. 20
Winter season to be announced.*

Proposed Federal Regulation

Unit 12–Caribou

Unit 12, that portion of the Nabesna River drainage within the Wrangell-St. Elias National Park and Preserve and all Federal public lands south of the Winter Trail running southeast from Pickerel Lake to the Canadian border— The taking of caribou is prohibited on Federal public lands.

No Federal open season

Unit 12 remainder—1 bull during the Sept. season. 1 caribou may be taken by a Federal registration permit during a winter season to be announced. Dates for a winter season to occur between ~~Oct. 1~~ Oct. 21–Apr. 30. Closure date and sex of animal to be taken will be announced by Tetlin National Wildlife Refuge Manager in consultation with Wrangell-St. Elias National Park and Preserve Superintendent, ADF&G Area Biologists and Chairs of the Eastern Interior Alaska Subsistence Regional Advisory Council and Upper Tanana/Fortymile Fish and Game Advisory Committee.

*Sept. 1–Sept. 20
Winter season to be announced.
Oct 21.–Closure to be announced.*

Existing State Regulation

Unit12—Caribou

| | | |
|--|----------------|-------------------------|
| <i>West of the Glenn Highway (Tok Cutoff) and south of the Alaska Highway within the Tok River—one bull</i> | <i>Harvest</i> | <i>Sept. 1–Sept. 20</i> |
| <i>West of the Glenn Highway (Tok Cutoff) and south of the Alaska Highway excluding Tok River drainage (Macomb Herd) (RC835)</i> | <i>(RC835)</i> | <i>Aug. 10–Aug. 27</i> |
| <i>Remainder</i> | | <i>No open season</i> |

Extent of Federal Public Lands

Federal public lands comprise approximately 58.4% of Unit 12 and consist of 10.7% Tetlin National Wildlife Refuge managed by the US Fish and Wildlife Service and 47.7% Wrangell-St. Elias National Park and Preserve managed by the National Park Service (**Unit 12 Map**).

Customary and Traditional Use Determinations

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

Regulatory History

The NCH is an important resource in Alaska due to its proximity to Anchorage and Fairbanks and its distribution within Units 11, 12, 13, and 20 E (Tobey 2003). The majority of the animals harvested from the NCH are harvested in State and Federal hunts in Unit 13. For the 2009–2010 regulatory season, the State Nelchina caribou Tier II subsistence hunt was eliminated. Two hunts were added: a Tier I, Alaska resident only hunt, and a community harvest hunt for residents of Gulkana, Cantwell, Chistochina, Gakona, Mentasta, Tazlina, Chitina, and Copper Center. The harvest limit for each hunt is one caribou (sex to be announced annually) with season dates of Aug. 10 – Sept. 20 and Oct. 21 – Mar. 31. The Federal registration hunts (RC513 & RC514) in Unit 13 are for residents of Units 11, 13, and residents along the Nabesna Road in Unit 12 and Delta Junction in Unit 20. In 2005, Federal regulations for Unit 13A and 13B changed to allow the sex of the animals allowed to be harvested to be determined by the Glennallen Field Office Manager (Bureau of Land Management) in consultation with the Alaska

Department of Fish and Game area biologist and Chairs of the Eastern Interior Regional Advisory Council and the Southcentral Regional Advisory Council for the entire. Since then, the managers of the State and Federal hunts have coordinated their announcement as to whether bulls and/or cows could be taken in a given year. The Federal harvest limit in Unit 13A and 13B is two caribou.

A smaller number of NCH caribou are harvested in the Federal subsistence Unit 12 hunt. Since 1998, a Federal registration hunt (RC412) has been opened to residents of Unit 12, Dot Lake, Healy Lake and Mentasta between October and April when the NCH migrate through the Tetlin National Wildlife Refuge. The harvest limit is one caribou and the season dates and sex of the caribou are announced by the Tetlin National Wildlife Refuge Manager. The most popular method to hunt caribou on Tetlin National Wildlife Refuge is by snowmachine. Once the snow cover is adequate the refuge manager opens the refuge to use of snowmachines independent of the Federal subsistence hunt. If enough animals have accumulated to warrant a hunt before there is adequate snow cover the refuge manager may open the hunt while the refuge remains closed to snowmachines.

Biological Background

The biological background information for this analysis is the same as that presented in proposal WP10-102. Please refer to that analysis.

Harvest History

The harvest history information for this analysis is the same as that presented in proposal WP10-102. Please refer to that analysis.

Effects of the Proposal

Placing an opening date for the Federal winter subsistence hunt in regulation would limit the ability of the refuge manager to manage the hunt on the Tetlin National Wildlife Refuge. By the proposed opening date of October 21, very few caribou have usually migrated on to refuge lands. Delaying the hunt allows the refuge manager to wait until enough Nelchina caribou have migrated onto refuge lands to sustain a harvest (Risdaahl 2009 pers. comm.). In some other areas of the State, people try to avoid harvesting the first migrating caribou to not disrupt the migration of the herd, delaying the hunt would allow the first caribou to remain undisturbed. In addition, the current management authority also allows the refuge managers the flexibility to open or close the hunt in response to the presence of animals from the Mentasta caribou herd. The Nelchina and Mentasta caribou herds have been known to mix during migration to and from of the winter range in Unit 12, and the depressed Mentasta caribou herd can not support additional harvest (Booth 2009 pers. comm.). Finally, the refuge manager may delay the opening to ensure adequate snow for snowmachine use. Most of the caribou hunting on the refuge occurs by snowmachine and the refuge manager may delay opening the hunt until sufficient snow-cover is available to access to the animals with snowmachines.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP10-103

Justification

The Tetlin National Wildlife Refuge Manager needs the flexibility to open and close the hunting season to manage the winter Federal caribou hunt effectively. This includes the ability to open and close hunting

season to ensure proper management of the caribou herd. Maintaining the management authority allows the refuge manager to open the hunting season when caribou are present in adequate number for a sustainable harvest. It also allows the manager to adjust the season to accommodate snow conditions and delay an opening when there is a possible mixing with the Mentasta herd.

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Tobey, B. 2005. Units and 14B caribou management report. Pages 89–104 in C. Brown, editor. Caribou management report of survey and inventory activities 1 July 2002–30 June 2004. Alaska Department of Fish and Game. Juneau, Alaska.

Tobey B. and R. Kelleyhouse. 2007. Units 13 and 14B caribou management report. Pages 83–99 in P. Harper, editor. Caribou management report of survey and inventory activities, 1 July 2004–30 June 2006. Alaska Department of Fish and Game. Juneau, Alaska.

USFWS. 2009. Federal registration permit database. Microcomputer database, updated January 6, 2010.

Comments WP10-103
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Alaska Department of Fish and Game
Comments to the Regional Advisory Council

Wildlife Proposal WP10-103: The proposal would establish in regulation the federal subsistence winter caribou season opening date as October 21 on federal public land in Tetlin National Wildlife refuge in Game Management Unit 12.

Introduction: Currently, the opening date for hunting caribou on Tetlin National Wildlife Refuge is announced between October 1 and April 30 by the Refuge Manager in consultation with Wrangell-St. Elias National Park and Preserve Superintendent, Alaska Department of Fish and Game area biologists, and Chairs of the Eastern Interior Subsistence Regional Advisory Council and upper Tanana/Fortymile Fish and Game Advisory Committee. This allows the refuge manager to delay the hunt to protect Mentasta caribou if large numbers are present on the refuge when Nelchina caribou migrate on the refuge.

Impact on Subsistence Users: A set season opening date would presumably make it easier for federal subsistence users to plan their hunting activities and improve their ability to hunt Nelchina caribou while present in accessible areas of the refuge. However, the opening date would still not be firm because the refuge manager would need to delay opening the season if insufficient numbers of Nelchina caribou are present to sustain a harvest, to protect Mentasta caribou, and/or insufficient snow is present to protect refuge habitat.

Conservation Issues: There is significant hunting pressure on the Nelchina caribou herd, which forced the state to implement Tier II and community harvest regulations to limit harvest. If harvest of Nelchina caribou increases substantially in federal subsistence hunts in Units 12 and 13, steps may be necessary to keep harvest within sustainable levels.

Enforcement Issues: Adoption of this proposal would not reduce confusion over federal subsistence season opening dates because the refuge manager would still need to adjust the date to assure the presence of sufficient Nelchina caribou, protect Mentasta caribou, and authorize snowmachine use due to snowcover. In addition, adopting an opening date in regulation would increase the potential for early illegal harvest on non-federal lands where the hunt remains closed.

Other Comments: This proposed regulation change retains the Tetlin refuge manager authority to close the season if there are Mentasta caribou in the area. In recent years, few Mentasta caribou have been reported on Tetlin refuge, however radio-collars should continue to be used to identify when the Mentasta Herd is in accessible hunt areas

Recommendation: Neutral. This proposal is primarily a regulatory change with little substantive change in providing subsistence and some possible complications for administrators in assuring conservation and sustainability of Nelchina and Mentasta caribou.

| WP10-104 Executive Summary | |
|---|---|
| General Description | Proposal WP10-104 requests that a joint Federal-State draw permit hunt for the Chisana Caribou Herd be established in Unit 12 starting fall of 2011. The harvest quota would be in accordance with the recommendations of the Chisana Caribou Herd Management Plan, the harvest limit would be one bull and the hunting season would be September 1 through September 30. A portion of the permits would be issued to Federally qualified subsistence hunters for a Federal hunt and the rest of the permits would be issued to Alaska residents and nonresidents for a State hunt. <i>Submitted by Leif L. Wilson on behalf of the Upper Tanana/40 Mile Advisory Committee</i> |
| Proposed Regulation | <p>Unit 12—Caribou</p> <p><i>Unit 12, that portion of the Nabesna River drainage within the Wrangell-St. Elias National Park and Preserve and all Federal Public lands south of the Winter Trail running southeast from Pickerel Lake to the Canadian border— The taking of caribou is prohibited on Federal public lands. 1 bull by joint State-Federal drawing permit only.</i></p> <p><i>Unit 12 remainder—1 bull during the Sept. season. 1 caribou may be taken by a Federal registration permit during a winter season to be announced. Dates for a winter season to occur between Oct. 1–Apr. 30 and sex of animal to be taken will be announced by Tetlin National Wildlife Refuge Manager in consultation with Wrangell-St. Elias National Park and Preserve Superintendent, ADF&G Area Biologists and Chairs of the Eastern Interior Alaska Subsistence Regional Advisory Council and Upper Tanana/Fortymile Fish and Game Advisory Committee</i></p> <p style="text-align: right;"><i>No Federal open season Sept. 1–Sept. 30</i></p> <p style="text-align: right;"><i>Sept. 1– Sept. 20 Winter season to be announced.</i></p> |
| OSM Preliminary Conclusion | Defer |
| Eastern Interior Regional Council Recommendation | |
| Interagency Staff Committee Comments | |
| ADF&G Comments | Support following the guidelines for a limited harvest of Chisana, caribou shared between Alaska and Canada, as contained in the draft management plan and using a joint state/federal permit to monitor harvest in Alaska. |
| Written Public Comments | None |

DRAFT STAFF ANALYSIS WP10-104

ISSUES

Proposal WP10-104, submitted by Leif L. Wilson on behalf of the Upper Tanana/40 Mile Advisory Committee, requests that a joint Federal-State draw permit hunt for the Chisana Caribou Herd (CCH) be established in Unit 12 starting fall of 2011. The harvest quota would be in accordance with the recommendations of the Chisana Caribou Herd Management Plan, the harvest limit would be one bull and the hunting season would be September 1 through September 30. A portion of the permits would be issued to Federally qualified subsistence hunters for a Federal hunt and the rest of the permits would be issued to Alaska residents and nonresidents for a State hunt.

DISCUSSION

Since 2002 the CCH has recovered from a low of 315 animals (Gross 2007). Currently the population appears to be stabilized around 700 animals. If the herd size remains stable or increases, it is likely that the CCH could sustain a small annual harvest. The proponent recommends establishing a joint Federal-State hunt to take advantage of the harvestable surplus. The Federal-State hunt would be executed in accordance with the Chisana Caribou Herd Management Plan, which is currently being developed by a joint State, Federal and Canadian working group. The proponent requests that if the plan is not finalized by fall of 2011 a harvest quota of 2% of the annual minimum population, split evenly between Alaska and Yukon, be implemented with a harvest limit of one bull caribou. The proposed CCH hunt would be administered by a joint Federal-State draw permit, with the allocation of permits based on harvest records for the past 30 years.

Existing Federal Regulation

Unit 12—Caribou

Unit 12, that portion of the Nabesna River drainage within the Wrangell-St. Elias National Park and Preserve and all Federal Public lands south of the Winter Trail running southeast from Pickerel Lake to the Canadian border—The taking of caribou is prohibited on Federal public lands.

No Federal open season

Unit 12 remainder—1 bull during the Sept. season. 1 caribou may be taken by a Federal registration permit during a winter season to be announced. Dates for a winter season to occur between Oct. 1–Apr. 30 and sex of animal to be taken will be announced by Tetlin National Wildlife Refuge Manager in consultation with Wrangell-St. Elias National Park and Preserve Superintendent, ADF&G Area Biologists and Chairs of the Eastern Interior Alaska Subsistence Regional Advisory Council and Upper Tanana/Fortymile Fish and Game Advisory Committee.

*Sept. 1–Sept. 20
Winter season to be announced.*

Proposed Federal Regulation

Unit 12—Caribou

Unit 12, that portion of the Nabesna River drainage within the Wrangell-St. Elias National Park and Preserve and all Federal Public lands south of the Winter Trail running southeast from Pickerel Lake to the Canadian border— The taking of caribou is prohibited on Federal public lands. 1 bull by joint State-Federal drawing permit only. *No Federal open season
Sept. 1–Sept. 30*

Unit 12 remainder—1 bull during the Sept. season. 1 caribou may be taken by a Federal registration permit during a winter season to be announced. Dates for a winter season to occur between Oct. 1–Apr. 30 and sex of animal to be taken will be announced by Tetlin National Wildlife Refuge Manager in consultation with Wrangell-St. Elias National Park and Preserve Superintendent, ADF&G Area Biologists and Chairs of the Eastern Interior Alaska Subsistence Regional Advisory Council and Upper Tanana/Fortymile Fish and Game Advisory Committee *Sept. 1–Sept. 20
Winter season to be announced.*

Existing State Regulation

Unit 12—Caribou

Residents: West of the Glenn Highway (Tok Cutoff) and south of the Alaska Highway within the Tok River—one bull *Harvest Sept. 1–Sept. 20*

Residents: West of the Glenn Highway (Tok Cutoff) and south of the Alaska Highway excluding Tok River drainage (Macomb Herd) *RC835 Aug. 10–Aug. 27*

Residents and Non-residents: remainder *No open season*

Extent of Federal Public Lands

Federal public lands comprise 58.4% of Unit 12 and consist of 10.7% Tetlin National Wildlife Refuge managed by the US Fish and Wildlife Service and 47.7% Wrangell-St. Elias National Park and Preserve managed by the National Park Service (**Unit 12 Map**).

Customary and Traditional Use Determinations

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

Regulatory History

In 1994, due to conservation concerns all hunting of Chisana caribou was stopped in Alaska. There has been no legal harvest of Chisana caribou in Alaska since 1994 (Gross 2007).

Current Events Involving Species

In January 2009 a planning processes began to develop a five-year management plan for the CHH through a cooperative effort between Government of Yukon, Alaska Department of Fish and Game, White River First Nation, Kluane First Nation, National Park Service and US Fish and Wildlife Service. Diverse management mandates and interests for managing CCH were considered in development of the management plan. The management plan will include a comprehensive assessment of the existing data and knowledge about CCH. It will also include a recommended management strategy for use by management authorities. Once the plan is finalized it will provide management actions for maintaining a stable or increasing Chisana caribou population. The management plan will also provide guidelines for initiating a harvest for the CCH. In addition to the management plan, a 2010 population census will be completed by the Alaska Department of Fish and Game. Three censuses are usually required to estimate a trend. Based on census information from 2005 and 2007 the herd appears to be stable at 706 and 766 animals (Adams 2007). An additional survey would validate this trend. The management plan and population census will provide the framework needed for establishing an accurate harvest quota and developing harvest limits for managing a CCH hunt.

Biological Background

The CCH is a small, nonmigratory herd inhabiting eastcentral Alaska and southwest Yukon, Canada. Genetic analysis conducted by Zittlau et al. (2000) indicated that the herd is the only woodland caribou herd in Alaska. The CCH was first surveyed in 1977 and has been continually monitored since 1987. The CCH increased through the 1980's and reached a peak of 1,900 caribou in 1988 (Gross 2007). Beginning in 1990 the CCH experienced a decline in population size. An intensive captive rearing program was conducted from 2003 to 2006 by USGS and the Canadian Wildlife Service. The recovery effort was designed to increase recruitment and calf survival resulting in overall population growth. During calving, captured cows were held in pens where their offspring could be protected from wolves and bears. Surveys since 2003 reflect increased caribou numbers and the most recent census in 2007 established the herd at 766 animals (**Table 1**). Past declines were attributed to poor calf recruitment and high adult mortality

Table 1. Fall sex and age composition of the Chisana Caribou Herd, 1994–2009. (Modified from Adams 2007, Bentzen 2008, 2009 and Gross 2007).

| Date | Total | | | | | Composition Sample Size | Estimated Herd Size ^a |
|-------------------|----------------|-----------------|------------|----------|-----------|-------------------------|----------------------------------|
| | Bulls:100 Cows | Calves:100 Cows | Calves (%) | Cows (%) | Bulls (%) | | |
| 2000 | 20 | 6 | 5 | 80 | 15 | 412 | 425 |
| 2001 | 23 | 4 | 3 | 79 | 18 | 356 | 375 |
| 2002 | 25 | 13 | 10 | 72 | 18 | 258 | 315 |
| 2003 ^b | 37 | 25 | 15 | 62 | 23 | 603 | 720 |
| 2004 ^b | 38 | 21 | | | | 538 | |
| 2005 ^b | 46 | 23 | 14 | 59 | 27 | 599 | 706 |
| 2006 ^b | 48 | 21 | | | | 628 | |
| 2007 ^b | 50 | 13 | 8 | 61 | 31 | 719 | 766 |
| 2008 | 44 | 21 | 13 | 60 | 27 | 532 | |
| 2009 | 49 | 15 | 9 | 61 | 30 | 505 | |

^a Bases on population mode designed by P. Valkenburg and D. Reed (ADF&G).

^b Captive rearing efforts. Calf:cow ratios observed during survey are adjusted by extrapolating the calf:cow ratio for the wild population to a total estimate of wild cows and then adding the cows and calves from the captive rearing program.

associated with adverse weather conditions and predation. Research indicates predation caused 89% of the documented mortality among radio-collared cows greater than 4 months old (Gross 2007). While trends have been consistent since 2005, in 2009, the calf:cow ratio was lower than what was observed the previous year. This drop was only observed on the Yukon side of the border and may have been related to lower than usual numbers of caribou counted during the Yukon portion of the survey. However, the low ratio has also been observed in other Yukon caribou herds following severe winter conditions.

Harvest History

The CCH has historically been an important food source for the Athabascans of eastern Alaska and the first nations of Yukon (Gross 2007). During the early to mid 1900's CCH was used as a subsistence food source by the eastern Alaska Athabascans and although subsistence hunting has declined in recent years, CCH continues to be an important aspect of Ahtna and upper Tanana culture. Simeone (2006) documented the cultural significance of the CCH. In an interview with Simeone, Wilson Justin describes the Chisana caribou as highly prized, "...*But it's really, those caribou was really prized by the Indians of Canada all the way over here, it's kind of like a royalty, the royalty of caribou, not any Indian can hunt them, you have to be someone special...The 'alts'e'tnaey have a relationship with those caribou. No one should kill those caribou without our permission and in addition to that you have to be somebody to go out and kill those animals. Cannot just be anybody...*". Harvest by First Nation members in Yukon from 1975 to 1994 ranged between 0–18 animals.

In the late 1920s, Chisana caribou became economically important to local hunters as guided hunting became common in the Chisana area. The caribou from the Chisana herd were harvested by nonresident hunters guided by local guides through 1994. CCH bulls were desired by sport hunter because of their large stature. When hunting was allowed, nonresidents took the majority of the harvest. From 1990–1994, 43% of the hunters participated in hunting CCH were nonresidents, who took 58% of the harvest while local subsistence users took 9% of the harvest during that time period (Gross 2007). Between 1989 and 1994 under State and Federal regulations, the bag limit was 1 bull caribou and the annual harvest ranged between 16–34 animals (Gross 2007).

Effects of the Proposal

If the CCH continues to maintain constant population levels few animals will be available for harvest by either State or Federal hunters. Without the 2010 census it is impossible to know the exact current herd size, but composition data of marked and unmarked caribou observed during surveys in 2009 indicates the herd has been relatively stable since 2007 (Bentzen 2009, Pers. Comm.). If the population remains at about 700 animals a 2% harvest quota would result in approximately 14 animals being available for harvest. When split between Yukon and Alaska as few as seven animals could be available to harvest in Alaska. The Alaskan range of the CCH is contained within the Wrangell-St. Elias National Park and Preserve. The priority on Federal public lands is to provide for subsistence use for qualified rural residents. Since there has been no hunt on the CCH since 1994, the level of participation if a Federal subsistence hunt was allowed is unknown.

The proposal requests a Federal-State hunt modeled after the Cordova moose hunt in which participating subsistence hunters greatly exceed the harvestable moose quota. The Cordova Federal-State moose hunt is a unique Federal hunt that has evolved consistent with the recommendations of the Federal Southcentral Regional Advisory Council and support of the local subsistence community. To establish a similar Federal-State draw permit hunt for CCH, support would need to come from both the Regional Advisory Councils (Southcentral and Eastern Interior) and the subsistence community. Another possible approach to the Federal-State hunt would be to have an early (Aug 10–Aug 31) Federal subsistence hunt and a

later State (Sept. 15–Oct. 15) hunt. The portion of the Federal subsistence quota that was not harvested in the early hunt would be assigned to a State. While this scenario would not provide State-managed hunters with much planning time it may result in more animals available for a State harvest than could be available under a Federal-State draw permit.

OSM PRELIMINARY CONCLUSION

Defer Proposal WP10-104 until the Chisana Caribou Herd Management Planning is finalized and the 2010 census is complete.

Justification

Two key components are needed before a hunt can be established for the CCH. First, the Chisana Caribou Herd Management Plan needs to be finalized and supported by all the management agencies involved with the CCH. An approved management plan will establish the biological thresholds (e.g. herd size, sex ratio, cow-calf ratio) needed for evaluating herd stability before a harvest quota can be identified. Second, the 2010 CCH census needs to be completed to establish the current herd size. Once the management plan and census are completed, the framework will exist to establish an accurate harvestable quota. Until these two components are in place it is premature to create hunting regulations for the CCH. This proposal will be reconsidered by the Federal Subsistence Board once the management plan and the census are completed.

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Alaska Department of Fish and Game
Comments to the Regional Advisory Council

Wildlife Proposal WP10-104: Establishes a joint federal/state draw permit hunt for the Chisana caribou herd starting fall 2011, following recommendations in the Chisana Caribou herd management plan currently being drafted by Yukon Department of Environment, White River First Nation, Canadian Wildlife Service, National Park Service (Wrangell St. Elias), US Fish and Wildlife Service, and Alaska Department of Fish and Game. The management plans sets guidelines for opening a limited hunt on the herd while protecting the herd from overharvest.

Introduction: In the 1980s and early 1990s, an average of 29 Chisana caribou were harvested annually with about 60% of the harvest taken by Alaska residents. Following a decline in the herd in the early 1990s, hunting in Alaska and Canada was stopped. Between 2003 and 2006, a captive rearing program was conducted by Yukon Department of Environment which successfully increased the number of calves recruited into the population during the recovery effort. From 2004 through 2008, the population was stable and is estimated at 700-800 caribou.

The Chisana Caribou herd management plan is currently being drafted by Yukon Department of Environment, White River First Nation, Canadian Wildlife Service, National Park Service (Wrangell St. Elias), US Fish and Wildlife Service and Alaska Department of Fish and Game.

Impact on Subsistence Users: Access to the Chisana caribou herd is difficult and is mostly limited to aircraft. Harvest by federally-qualified subsistence users in Unit 12 averaged less than 2 caribou between 1981-1983 and 1990-1993. A joint federal/state drawing permit would ensure that a portion of the harvest is available for federal subsistence users on federal public lands.

Opportunity Provided by State: State regulations limit caribou hunting in Unit 12 to one bull caribou west of the Glenn Hwy (Tok Cutoff) and have not provided any opportunity for harvesting Chisana caribou since 1993.

Conservation Issues: The draft Chisana caribou management plan recommends a 2% bulls only harvest if the herd remains increasing or stable, the bull/cow ratio does not fall below 35/100, and calf recruitment remains above 15 calves/100 cows over a three year average. It is unlikely that this limited harvest would have any negative impact on the herd.

Other Comments: The guidelines establish a harvest in the draft management plan based on a proposed 2010 census in which the herd must meet the required population level and bull/cow and calf cow ratios. Based on results from this census, the earliest possible season opening for Chisana caribou would be 2011.

Recommendation: Support, following the guidelines for a limited harvest of Chisana caribou shared between Alaska and Canada, as contained in the draft management plan and using a joint state/federal permit to monitor harvest in Alaska.

Fall 2010 Regional Advisory Council Meeting Window

August 30–October 15, 2010 current as of 11/03/09

Meeting dates and locations are subject to change.

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|----------|----------------------------|------------|------------------|---------------------------|-----------------------------|----------|
| Aug. 22 | Aug. 23 | Aug. 24 | Aug. 25 | Aug. 26 | Aug. 27 | Aug. 28 |
| | | NS—Barrow | | | | |
| Aug. 29 | Aug. 30 WINDOW OPENS | Aug. 31 | Sept. 1 | Sept. 2 | Sept. 3 | Sept. 4 |
| | | | NWA— Kotzebue | | | |
| Sept. 5 | Sept. 6 HOLIDAY | 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 |
| | | KA—TBA | BB—Naknek | | | |
| Sept. 26 | Sept. 27 | Sept. 28 | Sept. 29 | Sept. 30 END OF FY2010 | Oct. 1 | Oct. 2 |
| | | SE—Sitka | | | YKD—TBA | |
| Oct. 3 | Oct. 4 | Oct. 5 | Oct. 6 | Oct. 7 | Oct. 8 | Oct. 9 |
| | | WI—McGrath | | | | |
| Oct. 10 | Oct. 11 HOLIDAY | Oct. 12 | Oct. 13 | Oct. 14 | Oct. 15 WINDOW CLOSES | Oct. 16 |
| | | | EI—Central | | | |
| | | | SC—Cordova | | | |
| | | | SP—Nome | | | |

Winter 2011 Regional Advisory Council Meeting Window

February 15–March 24, 2011

Meeting dates and locations are subject to change.

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|----------------|--------------------------------------|---|----------------|--|----------------|----------------|
| <i>Feb. 13</i> | <i>Feb. 14</i> | <i>Feb. 15</i> <i>Window Opens</i> | <i>Feb. 16</i> | <i>Feb. 17</i> | <i>Feb. 18</i> | <i>Feb. 19</i> |
| <i>Feb. 20</i> | <i>Feb. 21</i> HOLIDAY | <i>Feb. 22</i> | <i>Feb. 23</i> | <i>Feb. 24</i> | <i>Feb. 25</i> | <i>Feb. 26</i> |
| <i>Feb. 27</i> | <i>Feb. 28</i> | <i>Mar. 1</i> | <i>Mar. 2</i> | <i>Mar. 3</i> | <i>Mar. 4</i> | <i>Mar. 5</i> |
| <i>Mar. 6</i> | <i>Mar. 7</i> | <i>Mar. 8</i> | <i>Mar. 9</i> | <i>Mar. 10</i> | <i>Mar. 11</i> | <i>Mar. 12</i> |
| <i>Mar. 13</i> | <i>Mar. 14</i> | <i>Mar. 15</i> | <i>Mar. 16</i> | <i>Mar. 17</i> | <i>Mar. 18</i> | <i>Mar. 19</i> |
| <i>Mar. 20</i> | <i>Mar. 21</i> | <i>Mar. 22</i> | <i>Mar. 23</i> | <i>Mar. 24</i> <i>Window Closes</i> | <i>Mar. 25</i> | <i>Mar. 26</i> |