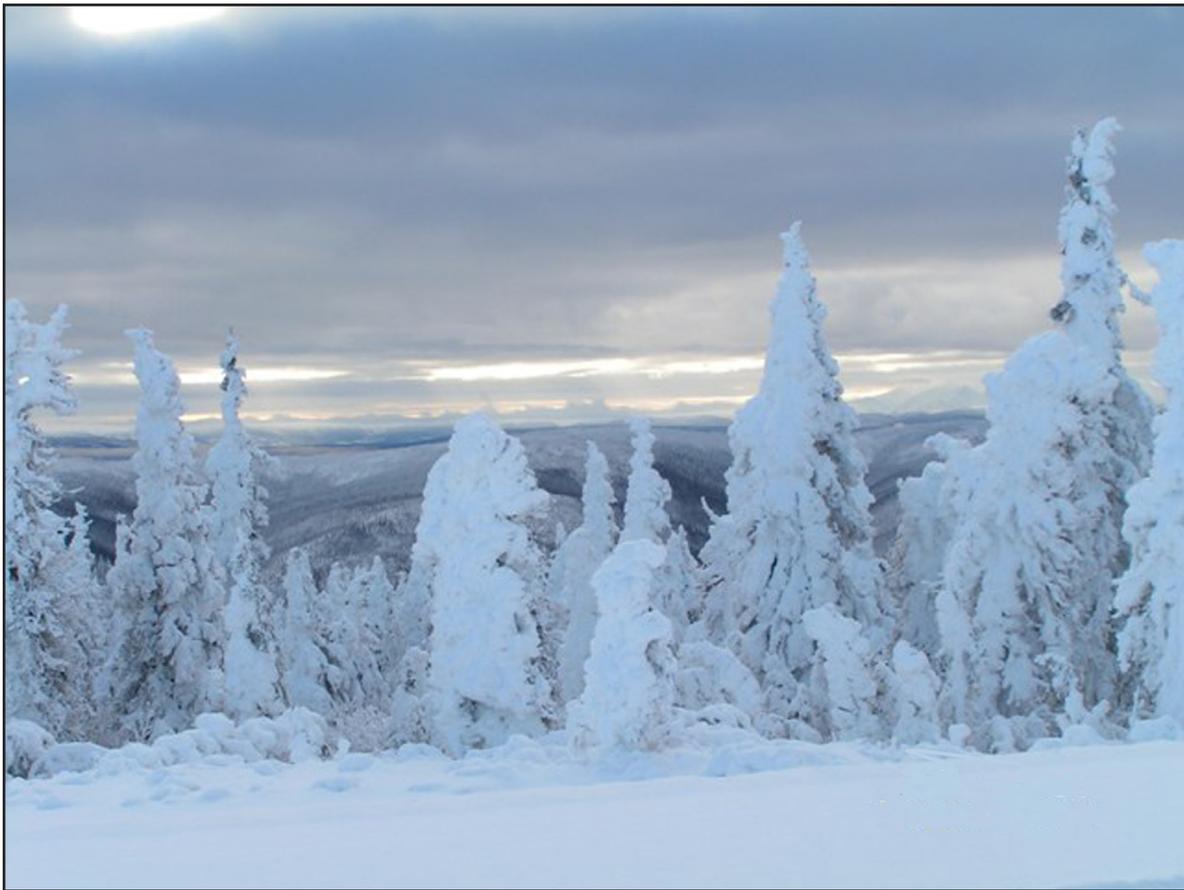


EASTERN INTERIOR Federal Subsistence Regional Advisory Council



USFWS

Snowy landscape view off the Dalton Highway.

Meeting Materials
February 23–26, 2010

What's Inside

Page		Page	
1	Joint Meeting Agenda	183	WP10-27
2	Eastern Interior's Meeting Agenda	196	WP10-28
5	Roster	206	WP10-29/30
6	Meeting Minutes	220	WP10-38
14	Unit Maps	227	WP10-39
19	WP10-01	231	Yukon Flats NWR Report
23	WP10-02	233	Meeting Calendars
24	WP10-03		
30	WP10-04		
44	WP10-05		
51	WP10-86		
59	WP10-87		
75	WP10-88		
81	WP10-89		
87	WP10-90		
96	WP10-91		
102	WP10-92		
107	WP10-93		
117	WP10-94		
123	WP10-95		
130	WP10-96		
134	WP10-97/98/99/100		
143	WP10-101		
153	WP10-102		
160	WP10-103		
165	WP10-104		
171	WP10-105		

**Western Interior Alaska Subsistence Regional Advisory Council
&
Eastern Interior Alaska Subsistence Regional Advisory Council
Joint Meeting**

February 23, 2010, 8:30 a.m. to 5:00 p.m.
Pike's Waterfront Lodge, Fairbanks

DRAFT AGENDA

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 (This meeting will be chaired jointly by chairs of both councils)**
 - a. Welcome and Opening Remarks
 - b. Invocation
2. **Roll Call and Establish Quorum**
3. **Review Staff Analyses and Make Recommendations on Yukon River Chinook Salmon Proposals WP09-12 and WP09-13 (Rich Cannon)**
4. **Customary Trade of Yukon River Salmon**
5. **Research North Report on the Use of Subsistence-caught Fish for Feeding Sled Dogs in the Yukon River Drainage (Dave Andersen)**
6. **Update on Issue of Salmon Bycatch in the Bering Sea/Aleutian Islands Pollock Fishery (OSM briefing)**
7. **Adjourn**

For **more information**, contact Ann Wilkinson, Council Coordination Division Chief, at 1800-478-1456, by fax at 907-786-3676, or email at ann_wilkinson@fws.gov. Also visit the Federal Subsistence Management Program's website at <http://alaska.fws.gov/asm/home.html>. For **special accommodations**, call 1800-478-1456 at least 72 hours prior to the meeting to arrange for special accommodations for persons with disabilities. **Teleconferencing** may be available. Call 1800-478-1456 at least 72 hours prior to the meeting to arrange.

EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

February 24, 25 and 26, 2010, 8:30 a.m. to 5:00 p.m.

Pike’s Waterfront Lodge, Fairbanks

DRAFT AGENDA

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** (*Sue Entsminger, Chair*)
 - a. Welcome and Opening Remarks
 - b. Invocation
- 2. **Roll Call and Establish Quorum**.....5
- 3. **Introduce Agency Staff and Honored Guests**
- 4. **Regional Council Member Concerns**
 - a. Chair’s Report
- 5. **Review and Adopt Agenda**.....2
- 6. **Approve Minutes of October 13–14, 2009 Meeting**.....6
- 7. **Review and Make Recommendations on Wildlife Proposals**
 - 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. Fish and Game Advisory Committee comments
 - 6. Subsistence Resource Commission Comments
 - 7. Summary of written public comments
 - 8. Public testimony
 - 9. Regional Council deliberation, recommendation, and justification
 - a. Statewide Proposals**
 - 1. WP10-01: Definition of a drawing permit..... 19
 - 2. WP10-02: Bear handicrafts (Deferred).....23
 - 3. WP10-03: Revise regulations on cultural/educational permits24
 - 4. WP10-04: Revise delegation of authority for lynx.....30
 - 5. WP10-05: Clarify regulations pertaining to accumulation of harvest limits.....44

b. Eastern Interior Proposals

1. WP10-86: Revise moose season in Unit 25C	51
2. WP10-87: Revise definition of “furbearer” for Units 25, 20, 12.....	59
3. WP10-88: Revise methods and means of moose hunt in Unit 25	75
4. WP10-89: Revise customary and traditional use determination for caribou and moose in Units 20D and 20E	81
5. WP10-90: Revise customary and traditional use determination for caribou in Units 13B and 13C	87
6. WP10-91: Revise brown bear harvest limit in Unit 25.....	96
7. WP10-92: Revise brown bear harvest limit in Unit 25.....	102
8. WP10-93: Revise moose season in Unit 25D remainder.....	107
9. WP10-94: Revise caribou season in Unit 25	117
10. WP10-95: Revise wolf season and harvest limit in Unit 20C	123
11. WP10-96: Open a hunting season for muskrat in Unit 20E	130
12. WP10-97/98/99/100: Revise wolf trapping seasons in Units 12 and 20A, revise wolf hunting season in Unit 20A and harvest limits in Units 20A and 25A.....	134
16. WP10-101: Revise moose season in Unit 20E	143
17. WP10-102: Revise caribou harvest limit in Unit 12.....	153
18. WP10-103: Revise caribou season in Unit 12	160
19. WP10-104: Revise caribou harvest limit and season in Unit 12	165
20. WP10-105: Delegation of authority for Fortymile Caribou Herd joint registration permits in Units 20B, 20C, 20D, and 20E.....	171

c. Crossover Proposals

1. WP10-27: Revise caribou harvest limit in Unit 13.....	183
2. WP10-28: Revise moose harvest limit and season in Unit 13B	196
3. WP10-29/30: Revise customary and traditional use determination for brown and black bear in Unit 11.....	206
5. WP10-38: Revise wolf harvest limit and season in Units 11 and 12.....	220
6. WP10-39: Revise Dall sheep methods and means in Units 11 and 12	227

8. Review and Approve Draft 2009 Annual Report

9. Call for 2010–2012 Fisheries Proposals

10. Review and Make Recommendations on Alaska Board of Game Proposals Numbers 1–25

11. Agency Reports

- a. Office of Subsistence Management
- b. Native organizations and tribal agencies
- c. Alaska Department of Fish and Game
- d. Fish and Wildlife Service
 - 1. Yukon Flats NWR Report231
- e. National Park Service
- f. Other agencies or organizations

12. Election of Officers

13. Next Meeting Dates and Locations233

- a. Confirm Date and Place for Fall 2010 Meeting
- b. Establish Date and Place for Winter 2011 Meeting

14. Closing Comments

15. Adjourn

For **more information**, contact Ann Wilkinson, Council Coordination Division Chief, at 1800-478-1456, by fax at 907-786-3676, or email at ann_wilkinson@fws.gov. Also visit the Federal Subsistence Management Program’s website at <http://alaska.fws.gov/asm/home.html>. For **special accommodations**, call 1800-478-1456 at least 72 hours prior to the meeting to arrange for special accommodations for persons with disabilities. **Teleconferencing** may be available. Call 1800-478-1456 at least 72 hours prior to the meeting to arrange.

REGION 9—Eastern Interior Alaska Regional Advisory Council

Seat	Yr Apptd Term Expires	Member Name & Address	Community
1	2001 2010	Susan Louise Entsminger Chair	Mentasta Pass
2	2007 2010	Andrew P. Firmin	Fort Yukon
3	2009 2010	Grafton H. Biederman	Venetie
4	2007 2010	Lester C. Erhart	Tanana
5	2002 2011	Andrew W. Bassich	Eagle
6	2005 2011	William L. Glanz	Central
7	2008 2011	Frank Gurtler	Manly Hot Springs
8	2006 2012	VACANT	
9	2009 2012	Donald A. Woodruff	Eagle
10	2001 2012	Virgil Umphenour Vice-chair	North Pole

EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL
MINUTES
October 13–14, 2009 Fort Yukon, Alaska

MEETING ATTENDANCE

COUNCIL MEMBERS PRESENT

Sue Entsminger, Andy Bassich, Andrew Firmin, Frank Gurtler, Virgil Umphenour, William Glanz. Excused Absence: Lester Erhart, Richard Carroll.

AGENCY REPRESENTATIVES PRESENT

NPS: Judy Putera, Nancy Swanton, Barbara Cellarius

BLM: Daniel Sharp, Jeanie Cole

FWS: Russ Holder, Vince Mathews, Chuck Ardizzone, Peter Keller, Fred Armstrong, Rich Cannon, Mark Bertram, Rob Jess

ADF&G: Audra Brase, Beth Lepart, Torston Bentzen, Steve Hayes

TCC: Brandi Berkbibler

GZGTG: Georgina Solomon, Robert Solomon, Shirley Fields, Adlai Alexander, Walter Peter, Michael Peter, Clayton Tackett

CATG: James Kelly, Nora Atienza

YRDFA: Rebecca Gisclair

BVC: Wilma Pitka

PUBLIC: Sam Roberts Jr., Anthony Shewpelt, Hannah Solomon, Mardow Solomon Jr., Michael Kack, Roland James III, Dallas Alexander, Isaiah Jackson, Kacee Coeeyate, Phillip Solomon, Ron Englishue, Joseph Solomon, Laurie Thomas, Debra VanDyke, Paul Sh(sic), Annie Peter, Robert Solomon, James Nathaniel Sr., Hannah James, Daphne Fields, John Hardy, Alfred W.

Court Reporter: Selena Hile, Computer Matrix

CALL TO ORDER

Sue Entsminger, chair, called the meeting to order at 9:00 a.m. October 13, 2009. A quorum was present for the meeting. Following introductions of council members and others attending the meeting, Council members briefly reported on matters of concern in their communities. The chair then reported on meetings she attended since the last Council meeting: Bear Claw Working Group, the State's Fortymile Fish and Game Advisory Committee, Wrangell-St. Elias Subsistence Resource Committee.

MINUTES AND AGENDA

The Council approved the minutes of its previous meeting with one change to page 5, paragraph 4, line 2: "restrict customary trade between rural and rural." should read "...between rural and nonrural." and approved the agenda with the additions of an update on the deferred Yukon fisheries proposals and time for discussions on the Southern Norton Sound Fish and Game Advisory Committee letter and the Fortymile Caribou Herd.

PUBLIC TESTIMONY

The Council heard comments and recommendations regarding enforcement of wildlife regulations and Yukon River fisheries concerns from local residents and tribal agency representatives at various times during the meeting.

FISHERIES RESOURCE MONITORING PROGRAM

Mr. Cannon, OSM staff, presented the Program's recommended proposed projects for the region. The Council **voted to support** the staff recommendation with modification to exclude Project 10-209 (whitefish study). The Council stated that this is a commercial fishery and, therefore, the study should be funded by the commercial fishing industry.

FISHERIES ISSUES

Refuge and ADF&G staff presented a post-season review of Yukon River subsistence fisheries before the Council considered the other agenda topics listed for fisheries.

RECOMMENDATIONS ON ALASKA BOARD OF FISHERIES PROPOSALS

The Council formed the following recommendations for the Alaska Board of Fisheries to consider at its January 2010 meeting in Fairbanks. The Council requested the coordinator to submit public testimony portions of this meeting's transcripts to the Board of Fisheries as public comment and to give to the Council's representative at the BOF meeting to use for testimony. The Council also directed Mr. Bassich to request BOF recording of 2001 meeting on Yukon River salmon management, those portions of the record regarding the windows schedules and mesh size, to be sent to the BOF and the Council members.

Proposal 63: Minto Flats Northern Pike Management Plan. Align areas in the Minto Flats Northern Pike Management Plan. **Council recommendation: Support.** **Justification:** This housekeeping proposal aligns the sport fisheries plan with the subsistence plan. Passage of this proposal would reduce confusion and make regulations for pike in the Minto Flats area more user friendly.

Proposal 64: Minto Flats Northern Pike Management Plan. Establish subsistence daily household limit of 25 and 50 in possession for winter pike fishery. **Council recommendation: Support.** **Justification:** Setting harvest and possession limits should eliminate abuse by fishermen that targeted and overharvested pike in their concentrated winter areas. The older and larger female pike need to be protected for healthy pike populations for future generations of fishermen.

Proposal 65: Minto Flats Northern Pike Management Plan. Require single hooks for summer sport and winter pike fishery in the Chatanika River, Minto Lakes, and Goldstream Creek. **Council recommendation: Support.** **Justification:** The use of single hooks will make it easier to release caught pike that are under the fisherman's desired size and may result in less fish mortality caused by catch and release.

Proposal 67: Gillnet specifications and operations. Change the maximum mesh size from 8 inches to 6 inches in the Kuskokwim River. **Council recommendation: Support.** **Justification:** This proposal parallels the Council's support for a 6-inch mesh size for the Yukon River. Various Council members have campaigned for years to have a net size restriction on the Yukon River for salmon stock

conservation. This proposal shows that a parallel conservation action (6-inch restriction) has been in effect for many years on the Kuskokwim River and the Kuskokwim River Salmon Management Working Group recognize the impact of 8-inch mesh size nets on spawning large female portion of the salmon run.

Proposal 81: Fishing seasons and periods. Clarify subsistence fishing schedule in subdistricts 4-B and 4-C. Clarify the subsistence fishing schedule in Subdistricts 4-B and 4-C during commercial fishing closures lasting longer than five days. **Council recommendation: Support. Justification:** This is a housekeeping proposal to put into regulation what ADF&G has been doing by issuing emergency orders.

Proposal 82: Fishing seasons and periods. Modify subsistence fishing schedule in subdistrict 4-A to allow subsistence fishing in subdistrict 4-A to be open for two 48-hour periods during the commercial fishing season. **Council recommendation: Support. Justification:** This is a house-keeping proposal to put into regulation what ADF&G has been doing by issuing emergency orders. It would also allow the entire Upper Yukon River to operate the same way.

Proposal 83: Subsistence fishing permits. Require recording subsistence harvest on catch calendars all harvested fish, in ink, before concealing the fish from view. If fish are shared outside the household, the number of fish shared and the name(s) of the person(s) shared with must be recorded on the catch calendar. The catch calendar must be available for inspection at any fish camp, fishing location, or primary residence of the calendar holder. **Council recommendation: Support. Justification:** The Council supports this mandatory reporting of fish harvested and shared for subsistence purposes because of the conservation concerns with the returning salmon stocks. Accurate and timely information is needed to monitor the runs and to reconstruct the runs for effective fisheries management. The mandatory will also reduce the abuse of the subsistence fishing privileges by helping law enforcement to enforce regulations on those clearly abusing these privileges. Adhering to these reporting requirements will also validate how many fish are actually harvested per household for subsistence needs. The data collected will provide more accurate accountability of the amount of fish needed to meet subsistence needs across the entire Yukon River drainage.

Proposal 86: Lawful gear and gear specifications. Allow set gillnets to be tied up during closures in Subdistrict 5-D in a manner to render the nets non-fishing and shall be marked with a black anchor float. **Council recommendation: Support. Justification:** Current conservation concerns for the salmon returns will require more management actions including closures. Closures cause a hardship and safety concerns for fishermen in Subdistrict 5-D. In this subdistrict, fishermen set their nets using small boats, often in areas with strong eddies. The setting and resetting of nets, which is presently required with closures, is a precarious and dangerous operation especially when a single fisherman is setting the anchor and net. It is common practice in this area for single fisherman to perform this task, many of them being fisherwomen. Management needs to be flexible to address safety concerns of its users. The black floats will allow law enforcement know that the net is tied up and non-fishing. The Council sees this proposal as a safety and flexibility solution.

Proposal 87: Yukon River King Salmon Management Plan. Review triggers, GHR, fishing schedule in king salmon management plan. **Council recommendation: Support with modification** to split District Y5-D into three sections: Stevens Village to Beaver, Fort Yukon to Circle, and Circle to Eagle.

Justification: This proposal opens the entire Yukon River Chinook Salmon Management Plan for review and action by the Alaska Board of Fisheries. Opening the management plan allows the Board to

consider any option to address the conservation concerns associated with Yukon River Chinook salmon management.

Proposal 88: Gillnet specifications and operations, and lawful gear and gear specifications.

Prohibit drift gillnet gear for subsistence and commercial fishing. No subsistence or commercial driftnet fishing allowed in the entire Yukon River drainage. **Council recommendation: Support.**

Justification: Setnet fishing was the traditional fishing gear for the lower Yukon River area and with the introduction of drift gillnets in late 1970s or early 1980s fishermen were able to catch more fish more efficiently. The proposal's intent is to get all options available to the Alaska Board of Fisheries. Passage of this proposal would address the conservation concerns of increasingly smaller size fish returning to spawn because drift gillnets target the larger fish which tend to be the older fish and large females. Taking this action would also results in a similar level of fishing efficiency as is current for the Yukon Flats area. Passage of this proposal would allow more fish to reach their spawning grounds and be available to meet subsistence needs of the upper river which have gone unmet for years.

Proposal 89: Gillnet specifications and operations, and lawful gear and gear specifications.

Restrict depth of subsistence and commercial 6-inch mesh to 35 meshes. No commercial or subsistence 6-inch gillnets with a hung depth of more than 15 feet or 35 meshes shall be allowed in the entire Yukon River drainage. **Council recommendation: Support with modification** to have a three year phase in for subsistence only. **Justification:** Deeper nets tend to target the larger and female Chinook salmon. Fishermen across the drainage have noted the decline in size of returning Chinook salmon because of net depth and size selectivity of drift gillnets. Without this conservation measure, complete closure of subsistence use may be necessary to prevent a collapse of the fishery. The three year phase-in will allow time for subsistence fishermen to purchase new 6-inch nets.

Proposal 90: Gillnet specifications and operations, and lawful gear and gear specifications.

Prohibit subsistence and commercial gillnets over 6-inch mesh size. No commercial or subsistence gillnets with a stretched mesh larger than 6-inch shall be allowed in the entire Yukon River drainage.

Council recommendation: Support with modification to have a three year phase in. **Justification:**

This proposal would reduce the detrimental effect on the stock composition and quality of escapement for Yukon River Chinook salmon resulting from the larger mesh size nets. Deeper nets tend to target the larger and female Chinook salmon. Fishermen across the drainage have noted the decline in size of returning Chinook salmon because of net depth and size selectivity of drift gillnets. Without this conservation measure, complete closure of subsistence use maybe necessary to prevent a collapse of the fishery. The three year phase in will allow time for fishermen to purchase new nets there by giving subsistence fishermen time to purchase new 6-inch gear.

Proposal 91: Yukon River Summer Chum Salmon Management Plan.

Limit commercial king salmon harvest during chum directed fisheries with a bycatch of Chinook salmon quota to 3,000 fish until such time that border escapements into Canada are achieved for one full life cycle of chum salmon (six years). Upon reaching the quota, all commercial chum salmon directed fisheries shall be closed for the remainder of the summer chum season. **Council recommendation: Support. Justification:** This proposal because would set a Chinook salmon bycatch cap during directed chum salmon fisheries. This is a necessary conservation measure during these years of poor Chinook salmon returns and to discourage fishermen from targeting the more desired Chinook salmon.

Proposal 92: Yukon River Summer Chum Salmon Management Plan. Prohibit sale of Chinook during non-Chinook directed fisheries. No commercial sales of Chinook salmon caught in non-Chinook

directed commercial fisheries would be allowed in the entire Yukon River drainage. Chinook salmon caught as bycatch shall go into the subsistence fishery only.

Council recommendation: Support. Justification: In light of the sacrifices of Canadian and Alaskan fishermen to reduce their catch of Chinook salmon in order to rebuild Chinook stocks, there should be no profit made from the incidental catch of Chinook salmon in a non-Chinook directed commercial fisheries. The decline of Chinook salmon returns and not making border escape and passage emphasizes the need to protect all returning Chinook salmon.

Proposal 94: Yukon River King Salmon Management Plan. Require windows schedule during lower river commercial fishery, repeal 5 AAC 05.360(e) (managers must stick to the window schedule).

Council recommendation: Support. Justification: The Council firmly supports the "windows" fishing schedule because it allows passage of fish to their spawning without being fished. It is the most effective means for conservation by protecting all age and sex classes of fish coming up the river. The use of a windowed fishing schedule is the most effective and fair way to manage the Chinook salmon fishery. All users would be affected equally across the drainage. The Council's understanding is that when the windowed schedule was established it was to remain in effect for both subsistence and commercial fisheries.

Proposal 95: Yukon River Salmon Management Plan. Reallocate commercial king salmon guideline harvest ranges. **Council recommendation: Support. Justification:** This proposal would more fairly spread the harvest allocation across the drainage and lessen the impacts to single components of the run. This proposal would also allow greater flexibility for the fisheries managers to prosecute the fisheries, and would allow the commercial fishery to be conducted in accordance with the principles contained in the regulations for sustainable salmon fisheries (5 AAC 39.222).

Proposal 96: Yukon River Summer Chum Salmon Management Plan. Reallocate commercial summer chum salmon guideline harvest ranges. **Council recommendation: Support. Justification:** This proposal would more fairly spread the harvest allocation across the drainage and lessen the impacts to single components of the run. This proposal would also allow greater flexibility for the fisheries managers to prosecute the fisheries.

Proposal 97: Yukon River fall chum salmon guideline harvest ranges. Reallocate commercial fall chum salmon harvests. **Council recommendation: Support. Justification:** This proposal would more fairly spread the harvest allocation across the drainage and lessen the impacts to single components of the run. This proposal would also allow greater flexibility for the fisheries managers to prosecute the fisheries.

Proposal 98: Fishing districts and subdistricts. Open commercial fishing between Chris Point and Black River for both drift and set net. **Council recommendation: Oppose.**

Justification: The Council opposes this proposal because it violates the Alaska Board of Fisheries mix stock policy to not allow any new or expanding fisheries when fisheries are fully allocated. The current Yukon River salmon fisheries are fully allocated and there are serious conservation concerns with salmon stocks.

Proposal 99: Closed Waters. Open Andreafsky River to commercial fishing by deleting part (4) of 5 AAC 05.350. **Council recommendation: Support. Justification:** This would be a terminal fishery that ADF&G can adequately manage. Establishing this fishery would take pressure off the Yukon River main

stem fisheries which are more complex due to the number of fishermen involved and the length of the river involved.

Proposal 100: Seasons, bag, possession, and size limits, and methods and means in the Tanana River Management Area. Close the Tok River drainage to sport fishing (coho salmon). **Council recommendation: Support. Justification:** The longevity of Yukon River salmon depends on diversity of salmon stocks. Protecting new spawning habitats is good for the overall health of salmon stocks across the drainage. Allowing these fish to establish themselves in the Tok River drainage may provide an additional fishery resource for the area in the future.

Proposal 164: Unlawful possession of subsistence finfish. Revise unlawful possession of subsistence finfish by applying limitations on home packs and not allowing commercially caught salmon from salmon caught for subsistence in the same storage and processing areas.

Council action: Tabled.

NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

Office of Subsistence Management and Yukon River Drift Fishermen Association staff provided an update regarding Chinook and chum salmon by-catch. The Council voted to send a letter to the North Pacific Fishery Management Council requesting that it add four seats to its membership to be filled by federally qualified subsistence users.

WILDLIFE ISSUES

CALL FOR FEDERAL WILDLIFE PROPOSALS

The Council voted to submit the following as proposed subsistence regulatory changes to the Federal Subsistence Board.

1. List black bear as a furbearer under Federal regulations.
2. Align Unit 25C moose season with the season for the surrounding portions of Unit 25.
3. Moose hunt in Unit 25D to align with moose hunt in Unit 25D west. [Note: will submit proposals to Federal and State boards]
4. Remove the community of Fort Greely's positive customary and traditional use determination for Unit 20D for all species.
5. Include residents along Tok Cutoff road for positive customary and traditional use determination for moose and caribou in Unit 13.
6. Meat-on-bone requirement for Unit 25.

The Council voted to reiterate its desire for the Board to consider the subsistence wildlife proposals it submitted earlier in 2009 and voted to affirm its previous recommendation to maintain the Federal closure of Unit 25D west to non-Federally qualified users.

BOARD OF GAME PROPOSALS

The Council confirmed its proposals to the BOG regarding meat-on-the-bone requirements for Unit 25 and listing black bear as a furbearer.

OTHER WILDLIFE TOPICS

Bear Claw Working Group: OSM staff presented a status report of the Brown Bear Claw Working Group. The group met twice in summer 2009 and is currently doing research requested by regional

advisory council members. The Group will work to create a briefing and possibly a proposal to submit to the Board.

Caribou: The Council heard status updates on the Chisana and Porcupine caribou herds and an update on the development of the Chisana Caribou Herd Management Plan.

Migratory Bird Co-Management Council: The Migratory Birds Program director made a power point presentation on the history of the Program, workings of the Co-Management Council, development of the Migratory Bird Treaty for Alaska, and current issues.

AGENCY REPORTS

In addition to the agency reports pertinent to specific agenda items, agencies also presented the following reports. OSM staff presented information on the Program's schedule of key dates, proposed changes to ANILCA Title VIII Section __.19 regulations on special actions, climate change and subsistence management, and the council correspondence policy. BLM staff gave an update on the status of their planning efforts for the region and development of a draft resource management plan. Yukon Flats Refuge staff reported on the annual moose surveys, and the newly initiated wolf kill rate study. Tetlin Refuge staff provided updates on several on-going studies. The Park Service staff reported on the activities of the subsistence resource commissions in the region, the developing draft EIS for Wrangell-St. Elias, and the collection and use of bones, shed antlers, and plant materials in the parks.

COUNCIL BUSINESS

FUTURE MEETING DATES AND LOCATIONS

The next meeting will include a joint meeting with the Western Interior council February 23-25, 2010 in Fairbanks. The fall 2010 meeting will be October 12-13 at Central with Fairbanks as an alternative location.

SRC APPOINTMENT

The Council voted to reappoint Sue Entsminger to serve on the Wrangell-St. Elias National Park Subsistence Resource Commission.

ANNUAL REPORT TOPICS

The Council asked the coordinator to draft its annual report to the Board and to include the following items:

1. The need for education outreach to urban users. This education would teach urban users proper respect for rural subsistence use areas and subsistence users.
2. Request an update on the agencies responses to the Secretary's 2006 letter instructing the Department agencies in Alaska explore available options, to conduct the studies necessary to fully evaluate the need for and potential benefits of predator reductions to refuge resources and subsistence users.

LETTER TO THE SECRETARY OF THE INTERIOR

The Council voted to send a letter to the Secretary regarding intensive management as a response to the Secretary's December 19, 2006 letter. The letter should note Yukon Flats Refuge as an example of the efforts of Refuge and State management to be allowed to use intensive management tools. The letter should request an update of the evaluation promised in the 2006 letter. The letter will also

request the Secretary for the legal requirements and policy guidelines regarding intensive management for each agency.

ADJOURN

The meeting adjourned at _____, October 14, 2009.

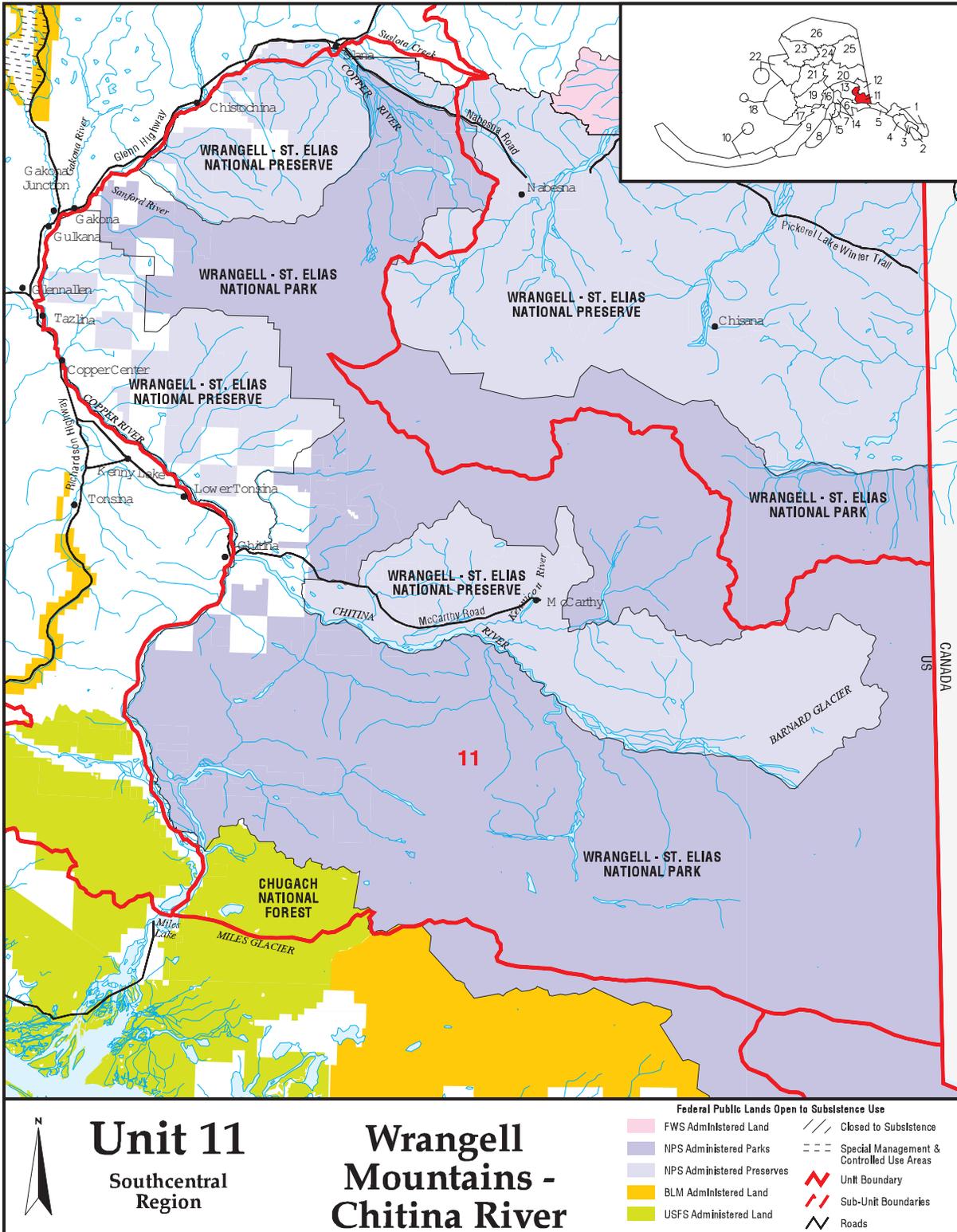
I hereby certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.

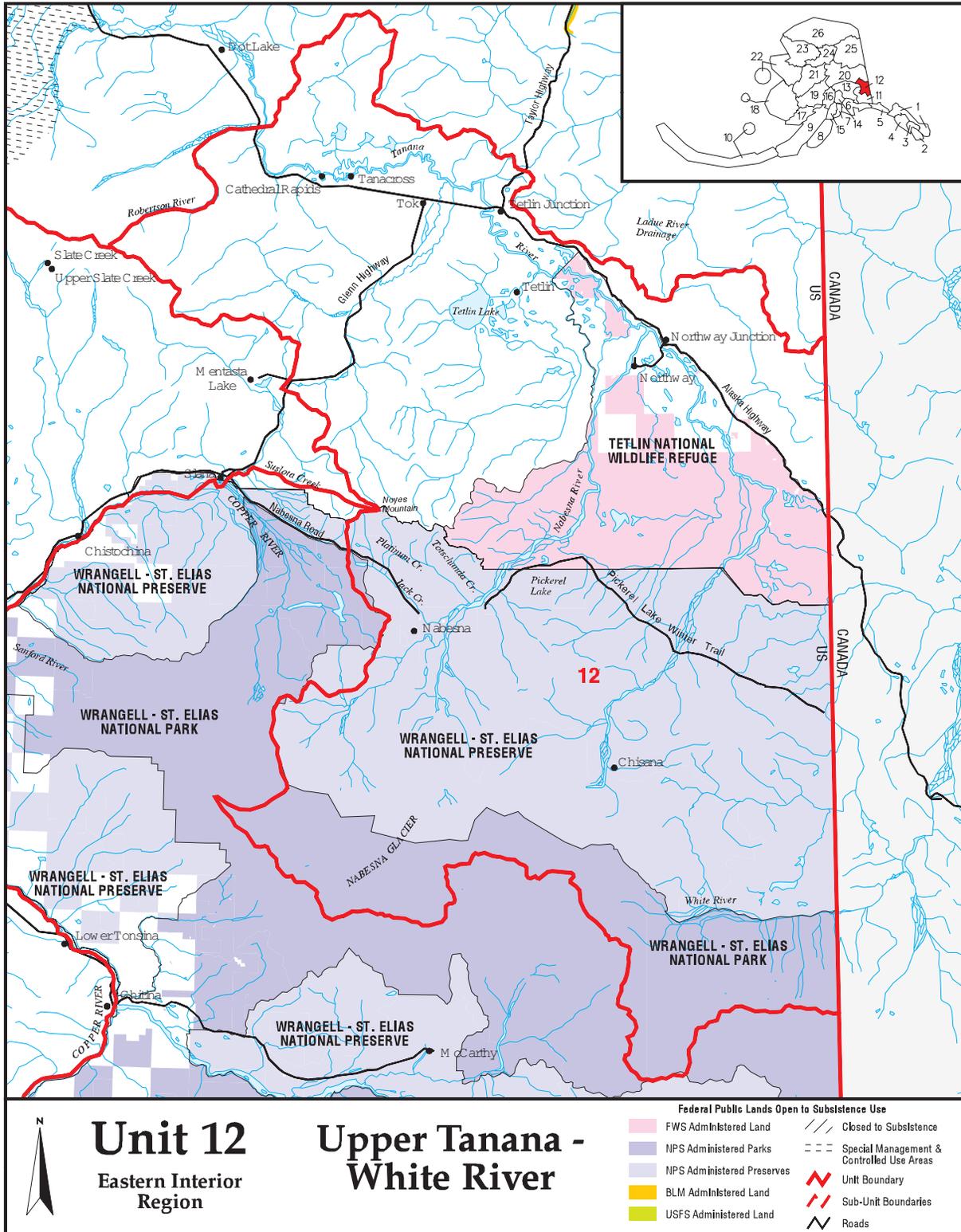
Ann Wilkinson, DFO, Council Coordination Division Chief
USFWS Office of Subsistence Management

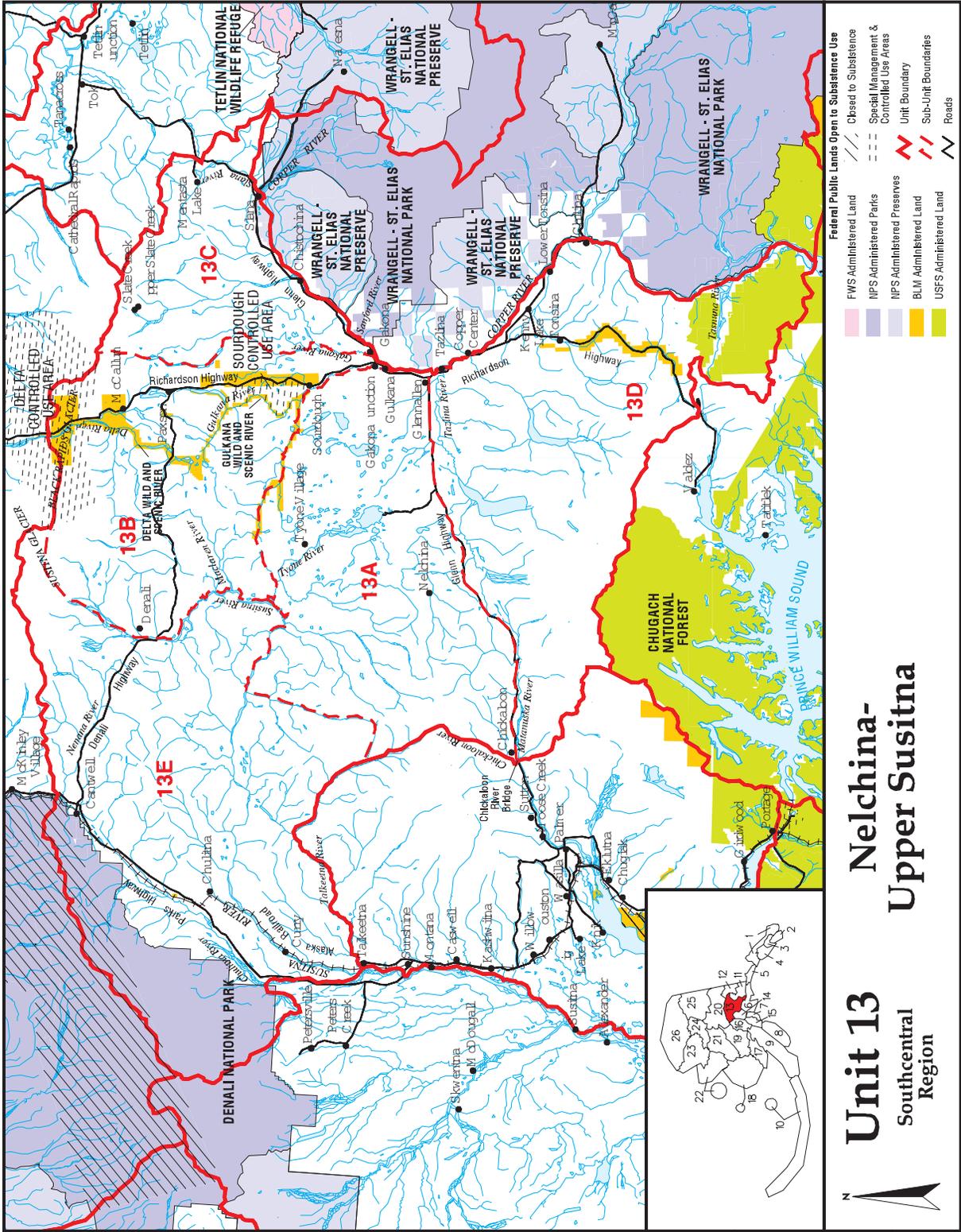
Susan L. Entsminger, Chair
Eastern Interior Alaska Subsistence Regional Advisory Council

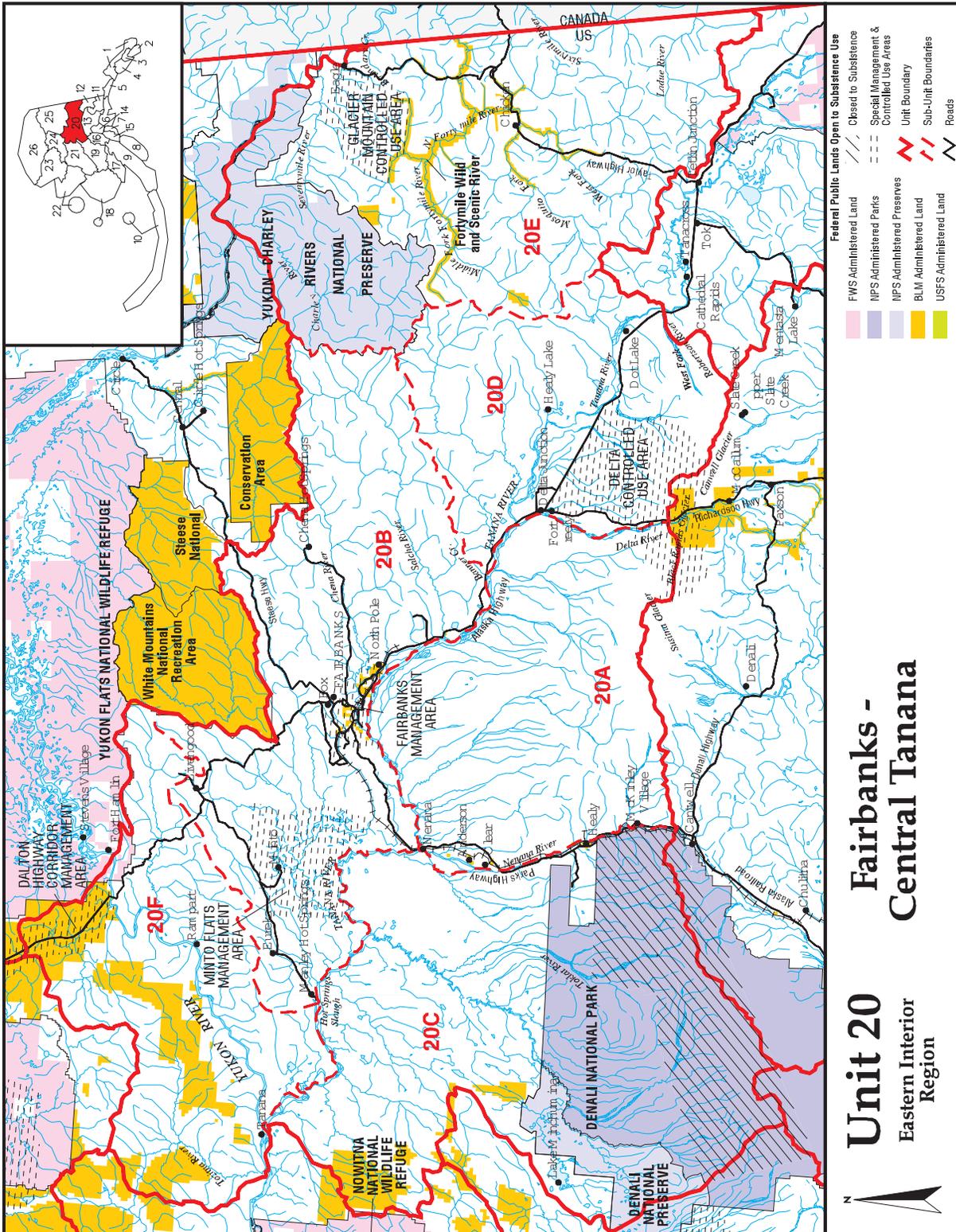
These minutes will be formally considered by the Eastern Interior Alaska Subsistence Regional Advisory Council at its next meeting, and any corrections or notations will be incorporated in the minutes of that meeting.

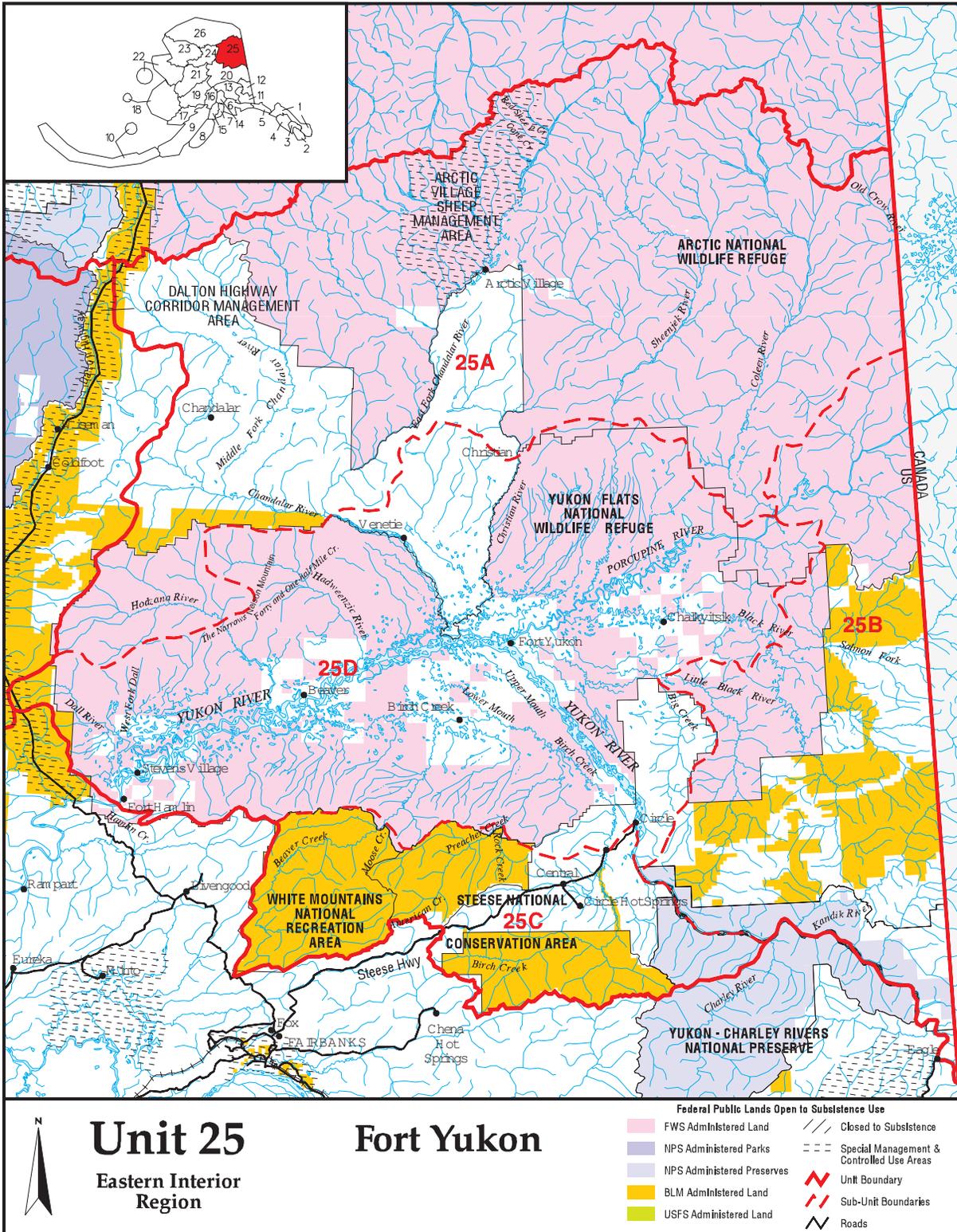
DRAFT











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) <i>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.
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) <i>Definitions</i> Drawing permit—a permit issued to a limited number of Federally qualified subsistence users selected by means of a random drawing.
Southeast Regional Council Recommendation	
Southcentral Regional Council Recommendation	
Kodiak/Aleutians Regional Council Recommendation	
Bristol Bay Regional Council Recommendation	
Yukon/Kuskokwim Delta Regional Council Recommendation	
Western Interior Regional Council Recommendation	
Seward Peninsula Regional Council Recommendation	
Northwest Arctic Regional Council Recommendation	
Eastern Interior Regional Council Recommendation	

continued on next page

WP10-01 Executive Summary (continued)	
North Slope Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	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	
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	<p>§__.26 (f)(3)</p> <p><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></p>
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	

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WP10-04 Executive Summary (continued)	
Eastern Interior Regional Council Recommendation	
North Slope Regional Council Recommendation	
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

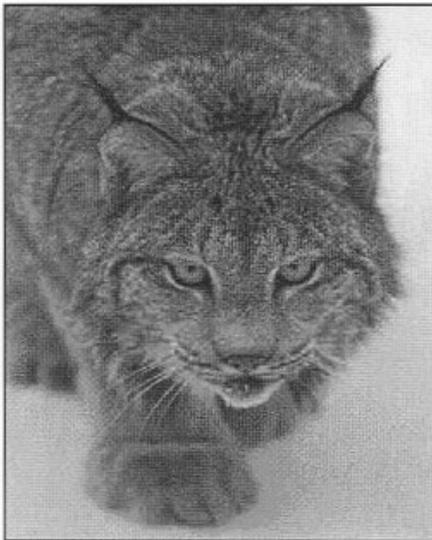
Mr. Stanley Pruszanski, Assistant Regional Director - Law Enforcement

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

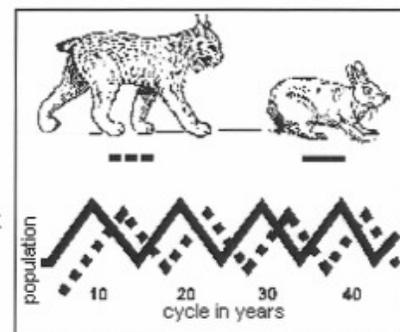


Lynx (*Lynx canadensis*) populations in Alaska and much of Canada fluctuate greatly over a 9-11-year period, responding mainly to the abundance of snowshoe hares (*Lepus americanus*). Lynx population trends are closely tied with those of snowshoe hares even when other prey is available. Lynx respond 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

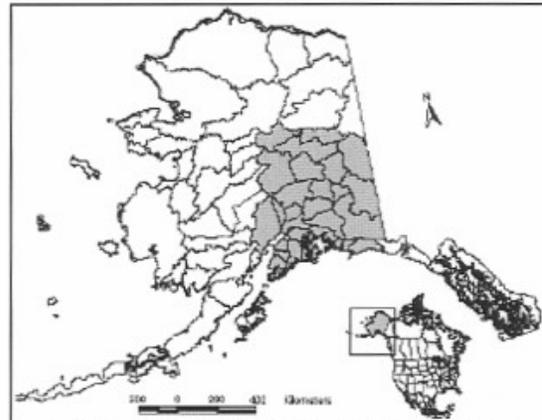


The tracking harvest strategy for lynx was implemented in 1988. The strategy resulted in season closures in some units when lynx populations seemed to be at low levels but later allowed seasons in those units to reopen once lynx populations began to increase. The tracking harvest strategy became difficult 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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Last Modified 08/10/2001 14:02:00

LynxTrak: A Tool for Lynx Harvest Managers

by Howard Golden
Furbearer Biologist, Southcentral Region

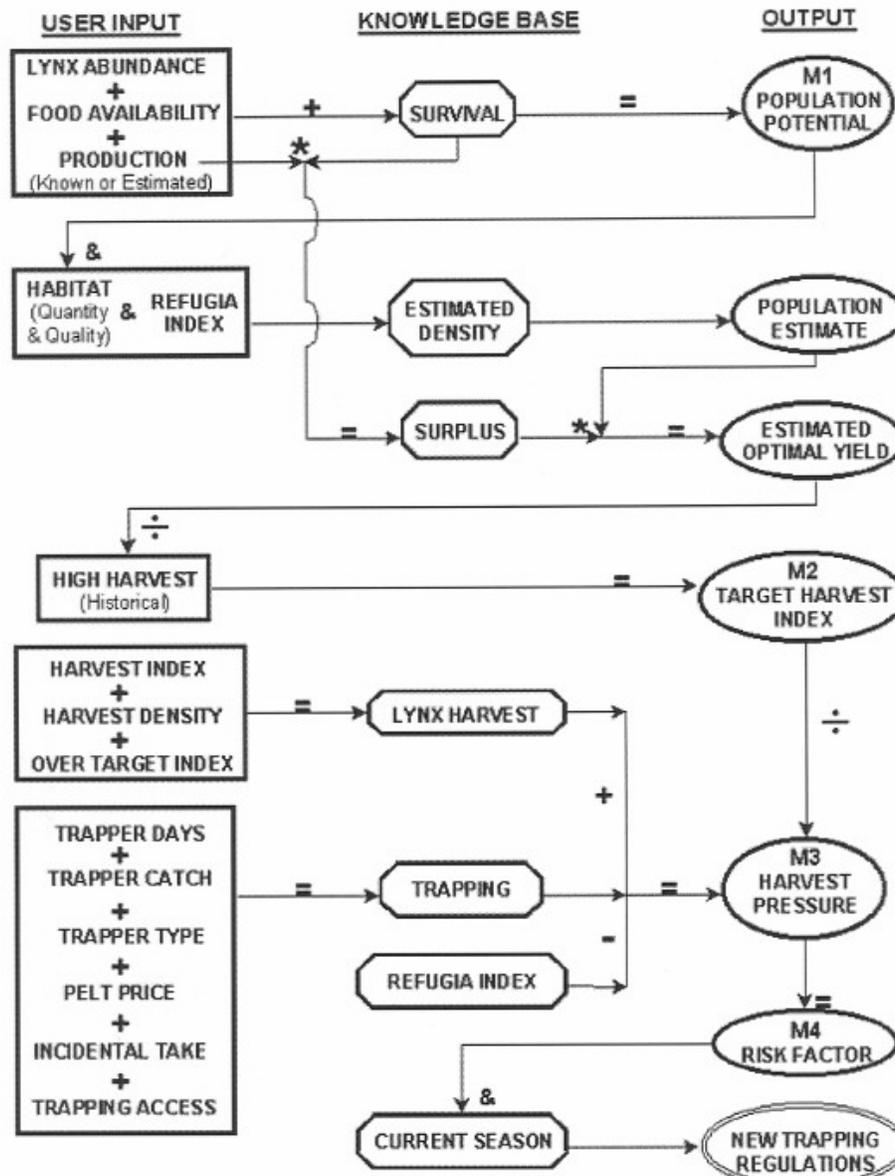


© Brian Slough

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	

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 WP09-05.

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.

WP10-86 Executive Summary	
General Description	Proposal WP10-86 requests a change in the harvest season for moose in Unit 25C from September 1–15 to August 20–September 30. <i>Submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council</i>
Proposed Regulation	Unit 25C — Moose <i>1 antlered bull</i> <i>Aug. 20 Sept. 1–Sept. 15 30</i>
OSM Preliminary Conclusion	Support
Eastern Interior Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	

**DRAFT STAFF ANALYSIS
WP10-86**

ISSUE

Proposal WP10-86, submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council, requests a change in the harvest season for moose in Unit 25C from September 1–15 to August 20–September 30.

DISCUSSION

The proponent is requesting that the Federal moose season for Unit 25C be changed to match the August 20–September 30 season in adjoining portions of Units 25B and 20E within the Yukon-Charley National Preserve. The proponent states that this proposal would benefit Federally qualified subsistence users, especially the residents of Central, Circle, Eagle, and Fort Yukon, who hunt in the Yukon-Charley Rivers National Preserve, the White Mountains National Recreation Area and the Steese National Conservation Area, by providing an additional 27 days to hunt moose in Unit 25C. The proponent also states that aligning the fall season on all Federal public lands in Unit 25C with the seasons already allowed in Units 20E and 25B in the Yukon-Charley Rivers National Preserve would eliminate hunter confusion.

Existing Federal Regulation

Unit 25C — Moose

1 antlered bull

Sept. 1–Sept. 15

Proposed Federal Regulation

Unit 25C — Moose

1 antlered bull

Aug. 20 Sept. 1–Sept. 15 30

Existing State Regulations

Unit 25C — Moose

Resident: 1 bull Harvest

Sept. 1–Sept. 15

Nonresident: 1 bull Harvest

Sept. 5–Sept. 25

Extent of Federal Public Lands

Federal public lands comprise approximately 74% of Unit 25C, consisting of 64% Bureau of Land Management lands, 9% National Park Service lands and 1% Fish and Wildlife Service lands (see **Unit 25 Map**).

Customary and Traditional Use Determinations

There is no specific customary and traditional use determination for moose in Unit 25C. Therefore, all rural residents of the State of Alaska are eligible to hunt moose in Unit 25C.

Regulatory History

The current Federal and State regulations for moose in Unit 25C have been in place since 1993. In 2000, the State Board of Game created a registration hunt (RM865) in Unit 20E (excluding the Middle Fork Fortymile River), with the stipulation that a hunter could hunt both moose (RM865) and caribou (RC860), but not hold a registration permit for both species at the same time. These actions were in response to increased moose harvest and an increase in the number of caribou hunters in much of Unit 20E, and were designed to stabilize the moose harvest to maintain the bull:cow ratio within the State management objective.

Biological Background

For low-density populations of moose, such as those found in Unit 25C, the management goals are to: 1) provide for a sustained harvest, and 2) promote moose habitat enhancement by allowing natural fires to alter vegetation. The management objective in areas where aerial surveys are conducted is to maintain a bull:cow ratio of $\geq 30:100$. In areas where aerial surveys are not conducted, the management objective is to keep large bull harvest at $\geq 20\%$ of the total harvest. Current data on the moose population in Unit 25C indicates that the goals and objectives for this population are being met.

The Alaska Department of Fish and Game completed a geospatial population estimator (GSPE) moose survey (Ver Hoef 2001, Kellie and DeLong 2006) in Unit 25C (4,642 mi² survey area) during November–December 1997 in cooperation with the Bureau of Land Management (BLM). This technique did not incorporate a sightability correction factor (SCF). However, preliminary data by Boertje and others suggests an SCF of 1.1 to 1.2 is appropriate for most of these units, if October or November surveys are flown with good survey conditions (Gasaway et al. 1986, Boertje et al. 2009).

Based on the 1997 GSPE without an SCF, the ADF&G conservatively estimated Unit 25C moose density at 0.5 moose/mi² of moose habitat, with a total population estimate of 2,279 moose (90% CI $\pm 15\%$). Utilizing a conservative SCF of 1.12, the estimated moose density was 0.6 moose/mi². Both estimates are within the expected range of 0.1–1.1 moose/mi² (average ≈ 0.6 moose/mi²) found in all large areas of Interior Alaska (>800 mi²) with lightly harvested bear and wolf populations (Gasaway et al. 1992). Very few moose density estimates have been outside this range during the last 30 years, except in areas where predation is reduced by humans.

During the 2004 spatial trend survey in Unit 25C, the calf to cow ratio was 14:100, and the bull to cow ratio was 45:100 (**Table 1**). These ratios suggest light hunting pressure and high predation on calves (Seaton 2008).

National Park Service (NPS) staff has periodically conducted moose surveys in the Yukon-Charley Rivers National Preserve, results from which are shown in **Table 2**. In 1997, a population estimation survey found a density of 0.27 moose/mi² (Burch and Demma 1997). In 1999 and 2003, NPS surveyed, including a 1,200-mi² portion of Unit 20E, and estimated the moose density for the entire survey area at 0.36 moose/mi² in 1999 and 0.26 moose/mi² in 2003 (Burch 2006). The two most recent aerial surveys, with portions of the preserve in Units 20E (northern portion), 25B and 25C, were conducted in November 2006 and November 2009 in a designated 3,096 mi² survey area consisting of 555 units along a 30–40 mile

Table 1. Unit 25C fall aerial moose composition counts, 1986–2007 (Seaton 2008).

Year	Bulls:100 Cows	Yearling bulls: 100 Cows	Calves:100 Cows	Calves	Percent calves	Adults	Moose observed	Moose per sq mi	90% CI
1986 ^a	103	13	21	8	9	77	85		
1987 ^a	77	11	28	13	14	83	96		
1988 ^a	129	37	33	16	13	112	128		
1996 ^a	119	19	11	3	5	57	60		
1996 ^b	160	0	20	2	7	26	28		
1997 ^c	53	13	37	80	20	319	399	0.49	0.42–0.56
2002 ^a	71	16	9	4	5	77	81		
2002 ^b	59	31	19	6	11	51	57		
2004 ^d	45	14	14	4	9	42	46		
2007 ^c	58	17	38	108	20	428	536	0.65 ^e	0.49–0.81

^a O'Brien Creek count area.

^b Ophir Creek count area.

^c Geospatial population estimator moose population estimate.

^d Spatial trend survey.

^e Not significantly different from the 1997 estimate.

Table 2. Moose survey results for Yukon-Charley Rivers National Preserve, 1997–2009 (Burch, 2006 & 2009).

Year	Bulls per 100 Cows	Calves per 100 Cows	Density moose/mi ²	Population estimate (CI 90%)
1997	60	28	0.27	737
1999	51	36	0.36	979
2003 ⁺	61	25	0.27	835
2006 ⁺	73	33	0.23	726
2009 ⁺	59	26	0.43	1,331

⁺ Sightability correction factor of 1.2 applied to Geo Spatial Estimates .

wide corridor of the Yukon River drainage between Eagle and Circle, which includes the lower sections of the Charley, Nation and Kandik rivers. Moose densities were 0.23 moose/mi² in 2006 and 0.43 moose/mi² in 2009 (**Table 2**).

Analysis of the population survey data in the Preserve, for the survey years between 1997 and 2006, show the moose population has been relatively stable. However, 2009 data indicates that the population has grown, as there were notable increases in the, population density and population size compared to 2006 data (**Tables 2**). Survey data (1997–2009) indicates that the bull:cow ratios have been well above the State management objective of 30:100 in areas with aerial surveys, and well above the State management objective of 40:100 in all survey areas of Unit 20E (Gross 2008).

Harvest History

Unit 25C

For the past 11 years, the reported number of hunters and the reported amount of moose harvested has been slightly increasing. Between 1998 and 2009, the reported number of hunters in Unit 25C averaged 320 per year, with a range of 245–367 (**Table 3**). The reported harvest averaged 60 bulls per year, with a range of 52–79. Estimated unreported harvest averaged 11 bulls per year (**Table 4**).

Table 3. Unit 25C reported moose hunter residency and success, regulatory years 1998–1999 through 2008–2009 (Seaton 2008).

Regulatory year	Successful hunters					Unsuccessful hunters					Total hunters
	Local ^a res	Non local res	Non res	Total (%)		Local ^a res	Non local res	Non res	Total (%)		
1998–1999	5	68	11	84 (34)		23	130	13	166 (66)	250	
1999–2000	8	47	14	69 (26)		21	156	19	196 (74)	265	
2000–2001	7	53	19	79 (24)		29	198	20	247 (76)	326	
2001–2002	2	50	9	61 (19)		23	218	26	267 (81)	328	
2002–2003	7	54	13	74 (21)		23	224	33	280 (79)	354	
2003–2004	3	43	6	52 (17)		20	210	19	249 (83)	301	
2004–2005	4	41	6	51 (21)		15	164	15	194 (79)	245	
2005–2006	3	56	4	63 (17)		17	248	39	304 (83)	367	
2006–2007	3	53	6	62 (18)		18	226	41	285 (82)	347	
2007–2008	4	55	9	68 (19)		9	248	32	289 (81)	357	
2008–2009	6	63	10	79 (25)		16	184	32	232 (75)	311	

^a Hunters who live within the unit in which they reported hunting were considered local.

Table 4. Estimate of Unit 25C moose harvest, regulatory years 1999–2000 through 2008–2009 (Seaton 2008).

Regulatory year	Harvest by hunters							TOTAL
	Reported ^a				Estimated			
	M	F	Unk	Total	Unreported ^b	Illegal/Other ^c	Total	
1999–2000	66	0	0	66	11	0	11	77
2000–2001	79	0	0	79	14	1	15	94
2001–2002	62	0	0	62	11	0	11	73
2002–2003	75	0	0	75	13	2	15	90
2003–2004	52	0	0	52	9	0	9	61
2004–2005	52	0	0	52	9	1	10	63
2005–2006	63	0	0	63	11	0	11	74
2006–2007	62	0	0	62	11	0	11	73
2007–2008	68	0	0	68	12	0	12	80
2008–2009	79	0	0	79	14	0	14	93

^a Data from ADF&G harvest reports.

^b Based on 17.7% unreported harvest (including wounding loss) estimated by Gasaway et al. (1992).

^c Data from Fairbanks Bureau of Wildlife Enforcement wildlife mortality logs and ADF&G records.

Harvest and the number of hunters were lower in 2004 and 2005 compared to other years. In 2004 and 2005, much of interior Alaska was covered in a thick blanket of smoke in the fall due to record-setting wildfires. This may have contributed to the fewer number of hunters in the field and reduced moose harvest.

Yukon-Charley Rivers National Preserve — Units 20E, 25B and 25C

Moose hunting in the Preserve occurs primarily along the main rivers; the Yukon, Kandik, Nation and Charley. Federally qualified users who hunt in the Units 25B and 25C portions of the Preserve do so under Federal regulations, but report under a state registration permit. Federally qualified users who hunt in the Unit 20E portion of the Preserve report under State registration permit RM865.

Between 1983 and 2006, the number of hunters increased, however the number of moose harvested remained fairly stable (**Table 5**). Harvest reports indicate that approximately 178 moose were harvested in Unit 20E, 317 moose in Unit 25B and 27 moose in Unit 25C in the Preserve (Burch, 2006). Harvest in Unit 25C is somewhat proportional to the amount of land in the Preserve compared to the other two units, but may also be an indication that the more favorable and/or preferred hunting locations are outside the boundaries of Unit 25C.

Effects of the Proposal

If this proposal were adopted, the fall season dates of August 20–September 30 would become uniform throughout the Yukon-Charley Rivers National Preserve and all users would be provided an additional 27 days of hunting opportunity in Unit 25C. Because all rural residents are eligible to hunt under Federal regulations in Unit 25C, this could lead to an increase in the number of hunters, especially after the State resident season closes on September 15.

Federally qualified subsistence users would continue to need separate permits for Preserve lands; a State (green) harvest ticket in Unit 25C and State registration permit RM865, in Unit 20E. Federally qualified subsistence users hunting on BLM lands would continue to report under the current State (green) harvest ticket for Unit 25C. Permit RM865 has a stipulation that hunters may not possess State permit RC860, for hunting caribou in Unit 20E, at the same time as RM865 (see Regulatory History).

The amount of moose harvested is likely to increase, mainly due to the season extending into the rut, when moose are more vulnerable. This vulnerability necessitates improved harvest reporting to accurately determine the amount of harvest and to closely monitor the population for conservation purposes. Reporting compliance for RM865 has been much greater than for State green harvest tickets in Unit 20E (Gross 2010, pers. comm.). Therefore, reporting requirements for Unit 25C may need to be reexamined.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-86.

Justification

The fall season dates of August 20–September 30 would become uniform throughout the Yukon-Charley Rivers National Preserve.

The Unit 25C moose population appears healthy enough to allow for a few more bulls to be harvested.

Table 5. Moose hunting information from Yukon-Charley Rivers National Preserve, 1983–2006 (Burch 2006).

Year	Number of Hunters	Number of Reported Moose Harvest	Percent Success
1983	59	21	36
1984	46	19	41
1985	41	19	46
1986	48	13	27
1987	57	14	25
1988	66	17	26
1989	61	17	28
1990	81	35	43
1991	90	31	34
1992	100	12	12
1993	93	36	39
1994	126	32	25
1995	99	33	33
1996	94	24	26
1997	100	24	24
1998	80	37	46
1999	116	41	35
2000	102	38	37
2001	145	25	17
2002	129	34	26
2003	168	20	12
2004	104	26	25
2005	87	24	28
2006	83	29	35
Total	2,175	621	n/a
Mean	91	26	30
1 st 10-yr mean	65	20	32
last 10-yr mean	110	29	28
Last 5-yr mean	114	27	25

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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	
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 dened 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).

WP10-88 Executive Summary	
General Description	Proposal WP10-88 requests that all edible meat of the front quarters, hind quarters, and ribs from moose harvested in Unit 25 must remain on the bones until the meat is removed from the field or is processed for human consumption. <i>Submitted by the Eastern Interior Regional Advisory Council</i>
Proposed Regulation	<i>See analysis for regulatory language.</i>
OSM Preliminary Conclusion	Support Proposal WP10-88 with modification to apply the new regulation only before October 1.
Eastern Interior Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	None

**DRAFT STAFF ANALYSIS
WP10-88**

ISSUES

Proposal WP10-88, submitted by the Eastern Interior Regional Advisory Council (Council), requests that all edible meat of the front quarters, hind quarters, and ribs from moose harvested in Unit 25 must remain on the bones until the meat is removed from the field or is processed for human consumption.

DISCUSSION

The Council is requesting this action because it believes that there is a need to reduce the spoilage and waste of the meat of moose harvested in Unit 25, and that this action will result in less meat being left in the field.

The Council has submitted a parallel proposal to the Alaska Board of Game to consider at its meeting Feb. 26–Mar. 7, 2010 (ADF&G 2010:158; EISRAC 2009a:220 and 2009b:327).

Existing Federal Regulation**36 CFR Part 242.25(a) and 50 CFR Part 100.25(a) Definitions**

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

§ ____ .25(h) Removing harvest from the field

You must leave all edible meat on the bones of the front quarters and hind quarters of caribou and moose harvested in Units 9, 17, 18, and 19B prior to October 1 until you remove the meat from the field or process it for human consumption. You must leave all edible meat on the bones of the front quarters, hind quarters, and ribs of moose harvested in Unit 21 prior to October 1 until you remove the meat from the field or process it for human consumption. You must leave all edible meat on the bones of the front quarters, hind quarters, and ribs of caribou and moose harvested in Unit 24 prior to October 1 until you remove the meat from the field or process it for human consumption. Meat of the front quarters, hind quarters, or ribs from a harvested moose or caribou may be processed for human consumption and consumed in the field; however, meat may not be removed from the bones for purposes of transport out of the field.

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

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

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

Proposed Federal Regulation

§ ____ 100.25(a) Definitions

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

§ ____ .25(h) Removing harvest from the field

You must leave all edible meat on the bones of the front quarters and hind quarters of caribou and moose harvested in Units 9, 17, 18, and 19B prior to October 1 until you remove the meat from the field or process it for human consumption. You must leave all edible meat on the bones of the front quarters, hind quarters, and ribs of moose harvested in Unit 21 prior to October 1 until you remove the meat from the field or process it for human consumption. You must leave all edible meat on the bones of the front quarters, hind quarters, and ribs of caribou and moose harvested in Unit 24 prior to October 1 until you remove the meat from the field or process it for human consumption. Meat of the front quarters, hind quarters, or ribs from a harvested moose or caribou may be processed for human consumption and consumed in the field; however, meat may not be removed from the bones for purposes of transport out of the field.

All edible meat of the front quarters, hind quarters, and ribs from moose harvested in Unit 25 must remain on the bones until the meat is removed from the field or is processed for human consumption.

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

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

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

Existing State Regulation

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

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

(1) for moose and caribou taken before October 1 in Unit 9(B), Unit 17, Unit 18, those portions of Unit 19(A) within the Holitna/Hoholitna Controlled Use Area, Unit 19(B), and Unit 23, the edible meat of the front quarters and hindquarters must remain naturally attached to the bone until the meat is transported from the field or is processed for human consumption;

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

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

5 AAC 92.990. Definitions

(17) “edible meat” means, in the case of a big game animal, except a black bear, the meat of the ribs, neck, brisket, front quarters as far as the distal joint of the radius-ulna (knee), hindquarters as far as the distal joint of the tibia-fibula (hock), and the meat along the backbone between the front and hindquarters . . . ; however, “edible meat” of big game or wild fowl does not include meat of the head, meat that has been damaged and made inedible by the method of taking, bones, sinew, incidental meat reasonably lost as a result of boning or a close trimming of the bones, or viscera.

Extent of Federal Public Land

Federal public land comprises approximately 55% of Unit 25 and consists of 68% U.S. 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

The customary and traditional use determination for moose in Unit 25A is residents of Units 25A and 25D; in Units 25B and 25C, all rural residents; in Unit 25D west, residents of Unit 25D west; and in Unit 25D remainder, residents of the remainder of Unit 25.

Background

At the winter and fall 2009 Council meetings, the Council heard that spoilage of moose meat in the field is a problem. A Council member said:

We’ve heard a fair amount of testimony here from the public concerning seeing these aircraft flying in and out of the airport here with antlers and what appears to not be a lot of meat. Now, where I hunt, this is what the regulation is, you have to leave the meat on the bone of the front quarters, hindquarters, ribs and the brisket . . . I own a meat processing business, and I see a lot of meat wasted when hunters bone the meat and bring it in, because they expose the meat to contamination. When you bone it, you expose all the meat to contamination. And so many times what ends up happening is the meat is not fit for human consumption by the time that people get it to the place of processing (EISRAC 2009b:329).

At these meetings, Council members talked extensively about the need to educate hunters to properly cut and process meat of harvested animals, and about the effects on rural communities of nonrural residents hunting in the traditional hunting territories of Athabascan villages. The Council understood that current Federal and State regulations have salvageable meat requirements.

The Council at its meeting in October 2009 directed the Office of Subsistence Management staff to write a letter to ADF&G asking it to collaborate with villages in educational and outreach programs and to include instructions for salvaging meat.

The Council also drafted a proposal to the Alaska Board of Game requesting that all edible meat of the front quarters, hind quarters, and ribs from moose harvested in Unit 25 must remain on the bones until the meat is removed from the field or is processed for human consumption. The Council believes that the proposed regulation to the Alaska Board of Game would make enforcement of the salvage statutes easier. Several Council members suggested submitting a parallel proposal to the Federal Subsistence Board, because much of the land in Unit 25 is within the boundaries of U.S. Fish and Wildlife Service National Wildlife Refuges.

Effects of the Proposal

If this proposal is adopted, the regulation would apply to all Federally qualified users hunting moose in Unit 25 on Federal public lands. Thus, Federally qualified users would be required to leave all edible meat of the front quarters, hind quarters, and ribs on the bones of moose harvested until the meat is removed from the field or is processed for human consumption. There would be no effect on non-Federally qualified users unless the State Board of Game adopts the Council's State proposal.

Additionally, if the parallel State Board of Game proposal is adopted, the State regulation would apply to all hunters on all lands in Unit 25, except Federally qualified users with a Federal permit. Currently, a Federal permit is required in one area, the Federal public lands in Unit 25D west, and Federally qualified users hunting in this area would not be required to follow the new State regulation.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-88 with modification to apply the new regulation only before October 1.

The modified regulation should read:

§ ____ .25(h) Removing harvest from the field

You must leave all edible meat on the bones of the front quarters and hind quarters of caribou and moose harvested in Units 9, 17, 18, and 19B prior to October 1 until you remove the meat from the field or process it for human consumption. You must leave all edible meat on the bones of the front quarters, hind quarters, and ribs of moose harvested in Unit 21 and Unit 25 prior to October 1 until you remove the meat from the field or process it for human consumption. You must leave all edible meat on the bones of the front quarters, hind quarters, and ribs of caribou and moose harvested in Unit 24 prior to October 1 until you remove the meat from the field or process it for human consumption. Meat of the front quarters, hind quarters, or ribs from a harvested moose or caribou may be processed for human consumption and consumed in the field; however, meat may not be removed from the bones for purposes of transport out of the field.

Justification

Moose meat spoiling in the field occurs with both Federally qualified and non-Federally qualified users of moose in Unit 25. This proposed regulation would affect only Federally qualified subsistence users of moose in Unit 25. The State Board of Game at its meeting in February and March 2010 may adopt a parallel proposal into State regulations. Leaving meat on the bone until it is removed from the field is an

accepted method of enforcing salvage regulations. The new regulation would apply only before October 1 when warmer daytime temperatures contribute to meat spoiling.

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EISRAC. 2009a. Transcripts of the Eastern Interior Subsistence Regional Advisory Council proceedings, March 10–11, 2009 in Fairbanks, Alaska. OSM, FWS. Anchorage, AK.

EISRAC. 2009b. Transcripts of the Eastern Interior Subsistence Regional Advisory Council proceedings, October 13–14, 2009 in Fort Yukon, Alaska. OSM, FWS. Anchorage, AK.

WP10-89 Executive Summary	
General Description	Proposal WP10-89 requests the exclusion of residents of Fort Greely from the customary and traditional use determination for caribou in Units 20D and 20E and for moose in Unit 20D. Fort Greely is located in Unit 20D. <i>Submitted by the Eastern Interior Regional Subsistence Advisory Council</i>
Proposed Regulation	<p>Customary and Traditional Use Determination</p> <p>Caribou</p> <p>Unit 20 D and 20 E</p> <p><i>Rural residents of Unit 12 (north of Wrangell-St. Elias National Preserve), 20D (excluding residents of Fort Greely) and 20E.</i></p> <p>Moose</p> <p>Unit 20 D</p> <p><i>Residents of Unit 20D (excluding residents of Fort Greely) and Tanacross</i></p>
OSM Preliminary Conclusion	Oppose
Eastern Interior Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	

**DRAFT STAFF ANALYSIS
WP10-89**

ISSUES

Proposal WP10-89, submitted by the Eastern Interior Regional Subsistence Advisory Council (Council), requests the exclusion of residents of Fort Greely from the customary and traditional use determination for caribou in Units 20D and 20E and for moose in Unit 20D. Fort Greely is located in Unit 20D.

DISCUSSION

The proponent requests the exclusion of residents of Fort Greely because of the “temporary nature of their residence” on Fort Greely, which, “does not allow for the establishment of a long term consistent pattern of use.” The existing customary and traditional use determinations for caribou in Unit 20D and 20E and moose in Unit 20D include all residents of Unit 20D, including Fort Greely residents (see **Unit 20 Map**).

Under Federal subsistence management regulations, only those Fort Greely residents who have lived in Alaska for a year qualify for a State hunting license and are eligible to harvest caribou and moose under Federal subsistence management regulations.

Those who have not lived in Alaska for a year would be required to harvest caribou in Units 20D and 20E and moose in Unit 20D under State regulations for nonresidents.

Existing Federal Regulation

Customary and Traditional Use Determination

Caribou

Unit 20 D and 20 E

Rural residents of Unit 12 (north of Wrangell-St. Elias National Preserve), 20D, and 20E.

Moose

Unit 20 D

Residents of Unit 20D and Tanacross

Proposed Federal Regulation

Customary and Traditional Use Determination

Caribou

Unit 20 D and 20 E

*Rural residents of Unit 12 (north of Wrangell-St. Elias National Preserve), 20D (**excluding residents of Fort Greely**) and 20E.*

Moose

Unit 20 D

*Residents of Unit 20D (**excluding residents of Fort Greely**) and Tanacross*

Extent of Federal Public Lands/Waters

Federal public lands comprise less than 2% of Unit 20D, including Bureau of Land Management Lands (1.5%) and a small portion of the Yukon-Charley Rivers National Preserve, National Park Service (.5%). The small percentage of Federal public lands in Unit 20D has resulted in “no Federal open season” for moose and caribou in Unit 20D.

Federal public lands comprise 24% of Unit 20E, including Bureau of Land Management Lands (4%), primarily the Forty Mile Wild and Scenic River, and National Park Service Lands (20%), the Yukon-Charley Rivers 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, including the existing customary and traditional use determinations for caribou in Units 20D and 20E and moose in Unit 20D. Fort Greely was not excluded from these customary and traditional use determinations. While some customary and traditional use determinations adopted from the State (i.e., Unit 13B caribou) do specifically exclude residents of military installations, the Board has not made it a practice to specifically exclude residents of military installations from customary and traditional use determinations. For example, residents of the Coast Guard bases in Units 4 and 8 are not excluded from any of the customary and traditional use determinations in Units 4 and 8.

Rural Status

During the review in 2006 of the rural/nonrural status of communities, as required by Federal subsistence regulations, four census designated places (referred to as the Delta Junction vicinity), Delta Junction, Big Delta, Deltana and Fort Greely, were reviewed to determine if these places should be considered as a group and if the group should be determined to be rural or nonrural. The Council heard extensive testimony from area residents in opposition to the inclusion of Fort Greely as part of this grouping (EISRAC 2006:110–126). Much of this testimony focused on the perceived “separateness” of Fort Greely from the other communities. Residents of the Delta Junction vicinity testified that the Fort has its own post office and the people at the Fort are mostly temporary with permanent residency in other states (EISRAC 2006a: 110–126). The Board voted to retain Fort Greely as part of this grouping because the community fulfilled the three guidelines for grouping. The Board also voted for this area, referred to as the Delta Junction vicinity, to retain its rural status.¹ The result of the Board’s decision is that Fort Greely is considered a rural place under Federal subsistence management regulations. With a designation as a rural place, Fort Greely residents are eligible to harvest wild resources under Federal regulations as long as permanent residency is established.

¹The three guidelines for grouping: (1) all four census designated places (CDPs) are road connected and proximal; (2) the majority of the high school-aged students from Big Delta, Deltana and Fort Greely attend high school in Delta Junction; and in the two outlying CDPs, over 30% of the workers commute within the vicinity (41% of the workers living in Big Delta commute either to Delta Junction, Deltana or Fort Greely, or to a remainder area within the Southeast Fairbanks Census area and 45% of the workers in Deltana commute to Delta Junction or Fort Greely (Federal Register 2007:25694).

Community Characteristics

Fort Greely is an U.S. Army base located near Delta Junction, Alaska in Unit 20D. The 2009 resident population was approximately 700 people and the total workforce including military, civilian, and contractors is approximately 1,400 people (U.S Army Alaska 2009:13). It is likely that a small number of civilian employees claim Fort Greely as their permanent residence, although the actual number is not known.

The U.S. Army has a long history in the Fort Greely area. According to the Division of Community and Regional Affairs (DCRA) community database, the U.S. Army Signal Corps completed the McCarthy Telegraph Station in this area in 1904. In 1942, at the same time as the construction of the Alaska Highway, military airfields were built in the Fort Greely area. In 1997, Fort Greely was listed for closure under the Department of Defense Base Realignment and Closure program. While in the process of being down-sized,” the fort was identified as a potential missile defense site and became the site of U. S. missile complex in 2004 (DCRA 2010).

Harvest History

Residents of Fort Greely do not qualify to harvest caribou or moose under Federal subsistence regulations unless Fort Greely has been their permanent, primary home for the previous year. If they have been absent, they must declare their intention to return to their home at Fort Greely.

Harvest data indicate that residents of Fort Greely have harvested caribou in Units 20D and 20E and moose in Unit 20E since recording began in 1983. Caribou and moose harvests in these units are administered by a joint State/Federal permit.

The Fortymile Caribou Herd Harvest Plan, 2006–2012, was developed by a wide array of stakeholders including ADF&G, ADF&G advisory committees, the Eastern Interior Regional Subsistence Advisory Council, the Federal Subsistence Board and Canadian First Nations and national government entities. One of the management aspects of the Fortymile Caribou Herd Harvest Plan, 2006–2012, is the use of a single State/Federal registration permit. This permit provides data necessary for timely management of hunts with harvest quotas which is the case with both caribou and moose in this area. **Tables 1–3** show the harvests of Fort Greely residents of moose and caribou for 1983–2004 with several annual gaps in data (ADF&G 2010).

Table 1: Unit 20 D Caribou Fort Greely Permit/Harvests

Year	# of Permits	Attempted	Harvested
2004	1	1	0
2000	4	4	0
1998	8	8	2
1997	3	3	0
1991	21	21	5
1990	17	17	6
1989	2	2	2
1988	3	3	3
1983	2	2	0
Total	61	61	18

Effects of the Proposal

If this proposal is adopted, it would exclude the permanent residents of Fort Greely from being able to harvest caribou in Units 20D and 20E and moose in Unit 20D under Federal subsistence management regulations. This would have no effect for moose or caribou harvests in Unit 20D because there are no Federal open seasons and virtually no Federal public lands.

If this proposal is adopted, Fort Greely residents who qualify for a State hunting license (residency of one year) would continue to be eligible to harvest moose and caribou in Unit 20D and 20E under State hunting regulations.

**Table 2: Unit 20 E Caribou
Fort Greely Permit/Harvests**

Year	# of Permit	Attempted	Harvested
2004	4	4	1
2000	1	1	0
1999	3	3	0
1998	1	1	0
1995	5	5	1
1994	12	12	0
1993	21	21	0
1992	13	13	2
1991	40	40	8
1990	26	26	10
1989	5	5	0
1983	3	3	0
Total	134	134	22

**Table 3: Unit 20 D Moose
Fort Greely Permit/Harvests**

Year	# of Permits	Attempted	Harvested
2004	2	2	0
2000	2	2	1
1999	11	11	2
1998	10	10	4
1997	13	13	5
1996	15	15	1
1995	12	12	3
1994	23	23	2
1993	32	32	2
1992	37	37	6
1991	63	63	14
1990	60	69	13
1989	76	76	8
1988	59	59	17
1987	62	62	11
1986	46	46	9
1985	40	40	4
1984	70	70	5
1983	70	70	11
Total	703	703	118

If this proposal is not adopted, Fort Greely residents who have established residency would continue to be Federally qualified to hunt under Federal regulations for caribou in Unit 20D and 20E and for moose in Unit 20D. As noted, however, the lack of Federal public lands in Unit 20D has created a “no Federal open season” in Unit 20D for moose and caribou. A Federal season is only open for harvesting caribou in Unit 20E.

Whether the proposal is adopted or not, those Fort Greely residents who have not established residency would continue to be eligible to harvest moose and caribou under State regulations for nonresidents for specific hunt areas for caribou in Unit 20D and 20E and for moose in Unit 20D.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP10-89.

Justification

Fort Greely is considered part of the rural grouping of the communities in the Delta Junction vicinity due to the integration of these communities. With a designation as a rural community, Fort Greely residents are eligible to harvest wild resources under Federal subsistence management regulations, as long as a one year residency is established, and the customary and traditional use determination includes that community for a particular species. The existing customary and traditional use determinations for caribou in Unit 20D and 20E and moose in Unit 20D include all residents of Unit 20D, including Fort Greely residents.

The data indicate that Fort Greely residents have a history of caribou harvest in Units 20D and 20E and moose in Unit 20D, thus, there is no evidence to support exclusion of permanent residents of Fort Greely from the existing customary and traditional use determination for caribou in Units 20D and 20E and moose in Unit 20D.

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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.</p> <p><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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WP10-91 Executive Summary	
General Description	Proposal WP10-91 requests that the Unit 25 brown bear/grizzly bear (<i>Ursus arctos</i>) harvest limit be increased from 1 to 2–3 bears. <i>Submitted by Phillip Solomon of Fort Yukon</i>
Proposed Regulation	<p>Unit 25—Brown Bear</p> <p><i>Unit 25A and 25B — † 3 bears</i> <i>Aug. 10–June. 30</i></p> <p><i>Unit 25C — † 3 bears</i> <i>Sept. 1–May 31</i></p> <p><i>Unit 25D — † 3 bears</i> <i>July 1–June 30</i></p> <p><i>Note: The hide, skull and edible meat of a brown bear must be salvaged for human use</i></p>
OSM Preliminary Conclusion	Support Proposal WP10-91 with modification to increase the harvest limit to two bears.
Eastern Interior Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	

DRAFT STAFF ANALYSIS WP10-91

ISSUES

Proposal WP10-91, submitted by Phillip Solomon of Fort Yukon, requests that the Unit 25 brown bear/grizzly bear (*Ursus arctos*) harvest limit be increased from 1 to 2–3 bears.

DISCUSSION

The proponent claims that the current harvest limit of 1 bear is too low to meet needs for traditional subsistence uses and that there is a high number of brown bears. The proponent advocates that an increase in the harvest limit to 2–3 bears will also help compensate for low moose and salmon numbers when trying to meet subsistence needs.

Note: Clarification was provided by the proponent as to exactly how many brown bears should be proposed for the harvest limit after the proposal was distributed for public comment. The proponent would like the harvest limit to be set at 3 bears for Unit 25.

Existing Federal Regulation

Unit 25—Brown Bear

<i>Unit 25A and 25B — 1 bear</i>	<i>Aug. 10–June. 30</i>
<i>Unit 25C — 1 bear</i>	<i>Sept. 1–May 31</i>
<i>Unit 25D — 1 bear</i>	<i>July 1–June 30</i>

Note: The hide, skull and edible meat of a brown bear must be salvaged for human use

Proposed Federal Regulation

Unit 25—Brown Bear

<i>Unit 25A and 25B — † 3 bears</i>	<i>Aug. 10–June. 30</i>
<i>Unit 25C — † 3 bears</i>	<i>Sept. 1–May 31</i>
<i>Unit 25D — † 3 bears</i>	<i>July 1–June 30</i>

Note: The hide, skull and edible meat of a brown bear must be salvaged for human use

Existing State Regulations

Units 25A and 25B—Brown/Grizzly Bear

<i>Residents and Nonresidents—1 bear every regulatory year</i>	<i>Aug. 10–June 30</i>
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Unit 25C—Brown/Grizzly Bear

Residents and Nonresidents — 1 bear every regulatory year *Sept. 1–May 31*

Unit 25D—Brown/Grizzly Bear

Resident — 1 bear every regulatory year *July 1–Nov. 30*

Or

Resident — 1 bear every regulatory year *Mar. 1–June 30*

Nonresident — 1 bear every regulatory year *Sept. 1–Nov. 30*

Or

Nonresident — 1 bear every regulatory year *Mar. 1–June 15*

Extent of Federal Public Lands

Federal public lands comprise approximately 55% of Unit 25 and consists of U.S. Fish and Wildlife Service (37%), Bureau of Land Management (16%), and National Park Service (2%) lands (see **Unit 25 Map**).

Customary and Traditional Use Determinations

Residents of Unit 25D have a positive customary and traditional use determination for hunting brown bear in Unit 25D.

Residents of Unit 25 and Eagle have a positive customary and traditional use determination for hunting brown bear in Unit 25 Remainder.

Regulatory History

There was no Federal open season for brown bears in Unit 25 during the 1990–1991 through 1998–1999 regulatory years. In 1999, the Federal Subsistence Board (Board) adopted WP99-57 and WP99-58 to open a year-round brown bear season with a 1 bear harvest limit in Unit 25D due to adequate abundance and expected low harvest levels. In 2001, the Board adopted WP01-36 to open a September 1–May 31 brown bear season with a 1 bear harvest limit in Unit 25 Remainder. Brown bear abundance was determined to be adequate; anticipated harvest was expected to be minimal; and harvest quotas were not being met under the State regulations.

The State regulations have had a brown bear harvest for Unit 25 before the inception of the Federal Subsistence program in 1990. Under the State regulations, harvest limits were set at one brown bear every four years up until regulatory year 1998–1999 for Unit 25D and 2004–2005 for all of Unit 25. The State harvest limit was then increased to one brown bear every regulatory year starting in regulatory year 1998–1999 for Unit 25D and 2004–2005 for all of Unit 25.

Biological Background

Brown bears are widely distributed in northeastern Alaska. The brown bear population for Unit 25 declined in the 1960s primarily from aircraft-supported hunting associated with guiding. As a result,

regulations were implemented to limit harvest starting in 1971. As the population recovered, regulations were gradually liberalized. Population trend data for Unit 25 are currently sparse; however, there is a possibility that the population has increased or expanded into new habitat because local residents on the Yukon River reported seeing more brown bears recently compared to years prior to 2000 (Lenart 2007).

The current population estimate of brown bears in Units 25A, 25B, and 25D is based on the 1993 estimate of approximately 1,200 brown bears (2.4 bears/100 mi²) (Lenart 2007) and estimated densities and population size slightly varies between the units (**Table 1**). In the mountainous portion of Unit 25C, Eagan (1995) (*cited in Young 2007*) determined that there was a medium density (1.3–2.6 bears/100 mi²).

In northern Alaska, female brown bears do not successfully reproduce until they are older than 5 years (Reynolds 1987). The delay in reproduction, as well as small litter sizes (1.6 cubs/litter), long intervals between successful reproductive events and short potential reproductive periods cause the low rates of successful production in brown bears in northern Alaska (U.S. Fish and Wildlife Service 1982). In addition, female brown bears exhibit high fidelity to home ranges and little emigration or immigration (Reynolds 1993 *cited in Lenart 2007*). Therefore, brown bears are often managed conservatively.

Brown bears in Unit 25D have been identified as a significant predator on moose calves that contributes to maintaining a low density of moose. In their moose mortality study, Bertram and Vivion (2002) found that predation was responsible for 97% of known calf mortality, with brown bears causing 39% of it, second only to black bear at 45%. As a result, the *Yukon Flats Cooperative Moose Management Plan* (ADF&G 2002) prescribes increasing brown bear harvest.

Harvest History

The Alaska Department of Fish and Game (ADF&G) management objectives for Unit 25 brown bear includes: Managing a population capable of sustaining mean annual harvest of 30 bears in Unit 25A and 29 bears in Units 25B and 25D, with a minimum of 60% males in the harvest (Lenart 2007); and manage for a 3-year mean annual human-caused bear (≥ 2 years of age) mortality of 6 from Unit 25C (Young 2007). The harvestable surpluses for Unit 25A and Units 25B and 25D are based on the conservative assumption that 5% of the total population can be harvested on a sustainable basis. The ADF&G also wants to manage for a temporary reduction in brown bear numbers and predation on moose in Unit 25D until moose populations recover (Lenart 2007).

Based on reported harvest, brown bear management objectives were generally met in Unit 25 (Lenart 2007, Young 2007). Each year, the total reported harvest was below the allowable harvest for each unit and most often the ratio of harvest was 60+% male for each year (**Tables 1 and 2**). Non-Federally qualified subsistence users and nonresidents account for the majority of the reported harvest, while Federally qualified subsistence users often account for <8% of the reported harvest each year for Unit 25A (**Table 3**). In Units 25B and 25D, reported harvest is usually <7 bears each year for all hunter groups (**Table 4**).

Household survey data indicates that the brown bear harvest in 2006 within the Yukon Flats National Wildlife Refuge has been over the allowable limit of 29 for combined Units 25B and 25D and for Federally qualified subsistence users. The Council of Athabaskan Tribal Governments conducted bear harvest interviews with local hunters in villages within Unit 25D and found that 37 brown bears were taken in 2006 (Thomas 2008). It is suspected that many bears were not reported because of the difficulty of sealing a bear in remote areas (Lenart 2007). Household survey harvest data for all other years has been below the ADF&G allowable harvest limit of 29, but this survey only considered Federally qualified subsistence users and did not take into account other hunter groups (**Table 2**). Although the harvest

amount exceeded the ADF&G allowable harvest, it helped address the ADF&G management objective for a temporary reduction of brown bears in Unit 25D to decrease predation on moose (Lenart 2007).

Effects of the Proposal

If the brown bear harvest limit were increased from one to three per every regulatory year in Unit 25, overall harvest is likely to increase. An increase of this magnitude may lead to exceeding the ADF&G allowable harvest limits of 30 bears in Unit 25A and 29 bears in Units 25B and 25D.

Other Alternative Considered

The other alternative considered was to oppose the proposal. Harvest under the current regulations may already be allowing harvest to be close to or exceeding the allowable harvest limit set by the State. Although reported harvest has consistently been below the ADF&G allowable harvest limit, household survey data indicates that the actual harvest may be much higher for Unit 25. Current conservative management of brown bears may be warranted given the species' low reproductive rate.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-91 with modification to increase the harvest limit to two bears.

The proposed regulations would read:

Unit 25—Brown Bear

<i>Unit 25A and 25B—1 2 bears</i>	<i>Aug. 10—June. 30</i>
<i>Unit 25C—1 2 bears</i>	<i>Sept. 1—May 31</i>
<i>Unit 25D—1 2 bears</i>	<i>July 1—June 30</i>

Note: The hide, skull and edible meat of a brown bear must be salvaged for human use

Justification

Federally qualified subsistence users account for a small amount of the annual brown bear harvest. Harvest data indicates that non-Federally qualified subsistence users and nonresidents account for the majority of the reported harvest, while Federally qualified subsistence users often account for less than 8% of brown bears harvested annually in Unit 25A. In Units 25B and 25D, reported harvest is usually less than 7 bears annually for all user groups.

An increase in the harvest limit will provide Federally qualified subsistence users more opportunity for subsistence uses of brown bear, consistent with the proponent's request, while limiting the increase from 1 to 2 bears will balance conservation considerations. The existing salvage requirement in regulation should assure that bears harvested will be fully utilized for human use.

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WP10-92 Executive Summary	
General Description	Proposal WP10-92 requests that the annual harvest limit for black bear (<i>Ursus americanus</i>) in Unit 25 be increased from 3 to 3–5 bears per year. <i>Submitted by Phillip Solomon of Fort Yukon</i>
Proposed Regulation	<p>Unit 25—Black Bear</p> <p><i>Unit 25—3 5 bear</i> <i>July 1–June. 30</i></p> <p><i>Unit 25D—3 5 bear or 3 5 bear by State</i> <i>July 1–June 30</i></p> <p><i>community harvest permit</i></p> <p><i>Note: The hide, skull and edible meat of a black bear must be salvaged for human use.</i></p>
OSM Preliminary Conclusion	Oppose
Eastern Interior Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	

DRAFT STAFF ANALYSIS WP10-92

ISSUE

Proposal WP10-92, submitted by Phillip Solomon of Fort Yukon, requests that the annual harvest limit for black bear (*Ursus americanus*) in Unit 25 be increased from 3 to 3–5 bears per year.

DISCUSSION

The proponent claims that the residents of the Yukon Flats area eat a lot of black bears and that there are enough black bears to support increasing the harvest limit, which would not hurt the population. The proponent states that an increase in the harvest limit will also help compensate for low moose and salmon numbers along with a changing climate when trying to meet subsistence needs.

Note: Clarification was provided by the proponent as to exactly how many black bears should be proposed for the harvest limit after the proposal was distributed for public comment. The proponent would like the harvest limit to be set at 5 bears for Unit 25.

Existing Federal Regulation

Unit 25—Black Bear

Unit 25—3 bear *July 1–June.30*

Unit 25D—3 bear or 3 bear by State community harvest permit *July 1–June 30*

Note: The hide, skull and edible meat of a black bear must be salvaged for human use.

Proposed Federal Regulation

Unit 25—Black Bear

Unit 25—3 5 bear *July 1–June. 30*

Unit 25D—3 5 bear or 3 5 bear by State community harvest permit *July 1–June 30*

Note: The hide, skull and edible meat of a black bear must be salvaged for human use.

Existing State Regulations

Units 25A, 25B, 25C—Black Bear

Residents and Nonresidents—3 bears *No closed season*

Unit 25D—Black Bear

<i>Resident—3 bears</i>	<i>No closed season</i>
<i>Or</i>	
<i>Resident—3 bears by Community permit*</i>	<i>No closed season</i>
<i>Nonresident—3 bears</i>	<i>No closed season</i>

* See Regulatory History

Extent of Federal Public Lands

Federal public lands comprise approximately 55% of Unit 25 and consists of U.S. Fish and Wildlife Service (37%), Bureau of Land Management (16%), and National Park Service (2%) lands (See **Unit 25 Map**).

Customary and Traditional Use Determinations

Residents of Unit 25D have a positive customary and traditional use determination for hunting black bears in Unit 25D.

All rural residents have a positive customary and traditional use determination for hunting black bears in Unit 25 Remainder.

Regulatory History

The harvest limit for black bear in Unit 25 has been three bears since the inception of the Federal Subsistence program in 1990. State regulations have also allowed the harvest of three black bears since 1990.

In 2003, the Federal Subsistence Board (Board) adopted WP03-42 to allow fall baiting of black bear and to establish a community harvest limit of 3 bears. These changes also aligned Federal regulations with State regulations.

In March 2002, the Board of Game established a community harvest permit program for black bear in Unit 25. The program allows people in a community or other group to pool their individual harvest limits (3 bears) so that one hunter may harvest more than 3 bears each year for use by the community or group. The program requires a hunt administrator who signs up participants, distributes harvest permits to participating hunters and monitors and reports harvest to the ADF&G. The program is not likely to increase harvest, and is intended to better accommodate traditional hunting and sharing practices and improve harvest reporting. Participants are required to have a valid community harvest permit for each bear taken (ADF&G 2002). To date, local users have not utilized this program for black bear (Lenart, 2010, pers. comm.).

Biological Background

Black bears are abundant in Unit 25 (ADF&G 2002, Bertram and Vivion 2002), 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 thought 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, Miller 1994

cited in Bertram and Vivion 2002). The total population of black bear in Unit 25(D), based on an assumed density of 1 black bear per 5–10 square miles, is 1,750–3,500 black bears (ADF&G 2002).

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 0.45–0.50 (Bertram and Vivion 2002, Miller 1994). Annual recruitment for Unit 25D is estimated at 175–350 black bears (ADF&G 2002).

Black bears were monitored on the western Yukon Flats 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 0.45 (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. An adult male black bear was also found to be killed by a brown bear (Bertram and Vivion 2002).

Harvest History

The black bear has traditionally been an important part of Athabascan culture. The black bear's meat is an important food, and its fat is considered a delicacy. The fat, rendered into lard, is eaten with dried fish. The meat is also mixed with berries and fish to make Eskimo ice cream.

Household survey data indicates that annual black bear harvest for the Yukon Flats area (Unit 25D) has been between 32 and 68 for years 2003–2008 (Thomas 2008). Current harvests are lower than the estimated annual recruitment of 175–350 bears (ADF&G 2002).

Current Events

The Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service are currently conducting a study to estimate the density of black bears in a 500 mi² study area within Unit 25D, where a large portion of the black bear harvest occurs and where most of the villages in Unit 25 are located. Results from this study are expected in August 2010.

Effects of the Proposal

If the black bear harvest limit were increased from three to five in Unit 25, overall harvest may increase for local hunters. There is a need for more local knowledge and information from the public and the members of the Eastern Interior Regional Advisory Council at the Council's February 2010 meeting in Fairbanks.

OSM PRELIMINARY CONCLUSION

Oppose Proposal WP10-92

Justification

There is ample opportunity for local residents to harvest black bears, as current regulations allow an annual harvest limit of three bears for individuals. Community harvest permits under State regulations

provide additional harvest opportunities in Unit 25. Local users have yet to utilize community harvest permits.

The Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service are currently conducting a study to estimate the density of black bears in 25D. Results from this study are expected in August 2010. Once the results are known, better decisions can be made in regards to black bears and harvest limits. A future proposal may be warranted if population data indicate sufficient abundance to support a more liberal harvest limit.

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WP10-93 Executive Summary	
General Description	Proposal WP10-93 requests changes in the dates of the fall moose season in Unit 25D remainder. <i>Submitted by Phillip Solomon of Fort Yukon</i>
Proposed Regulation	<p>Unit 25D—Moose</p> <p><i>Unit 25D west, that portion lying west of a line extending from the Unit 25D boundary on Preacher Creek, Birch Creek and lower mouth of Birch Creek to the Yukon River; then downstream along the north bank of the Yukon River (including islands) to the confluence of the Hadweenzic River; then upstream along the west bank of the Hadweenzic River to the confluence of the Forty and One-Half Mile Creek; and then upstream along Forty and One-Half Mile Creek to Nelson Mountain on the Unit 25D boundary —1 bull by a Federal registration permit. Permits will be available in the following villages: Beaver (25 permits), Birch Creek (10 permits) and Stevens Village (25 permits).</i></p> <p><i>Unit 25D remainder—1 antlered moose</i></p> <p style="text-align: right;"><i>Aug. 25–Feb. 28</i></p> <p style="text-align: right;"><i>Aug. 25–Sept. 25 Oct. 1 Dec. 1–Dec. 20</i></p>
OSM Preliminary Conclusion	Support Proposal WP10-93 with modification to only extend the end of the season by the requested six days.
Eastern Interior Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	

DRAFT STAFF ANALYSIS WP10-93

ISSUES

Proposal WP10-93, submitted by Phillip Solomon of Fort Yukon, requests changes in the dates of the fall moose season in Unit 25D remainder.

DISCUSSION

The proponent is requesting that the dates of the Federal fall moose season for Unit 25D remainder be changed from August 25–September 25 to August 1–October 1 to provide an additional 30 days to harvest moose. The proponent states that, due to low moose harvest, high fuel prices, high food prices, and the need to work; local residents need more time to be able to harvest moose more opportunistically in conjunction with other subsistence-related activities, such as cutting and gathering firewood in early August.

The current Federal seasons of August 25–September 25 and December 1–20 in Unit 25D remainder are designed to provide local residents with opportunity, outside of the State season, to harvest moose and not have to compete with non-subsistence hunters. Federally qualified subsistence users can harvest moose for 15 days prior to, and 5 days after (as well as during), the State season. Meat spoilage is a primary concern with an early August opening requested by the proponent. In the Yukon Flats area, temperatures in early August are variable, but have historically reached 80–90 degrees. Therefore, meat will have a higher likelihood of spoiling if harvest is allowed in early August (Bertram, 2009).

Note: Proposals WP10-86 and WP10-101 are related to this proposal, in that they are also requesting extensions of the Federal fall moose season for Unit 25C and a portion of Unit 20E, respectively, to match the August 20–September 30 season in adjoining portions of Units 25B and 20E within the Yukon-Charley Rivers National Preserve. These proposals are analyzed separately from this analysis.

Existing Federal Regulation

Unit 25D—Moose

<i>Unit 25D west, that portion lying west of a line extending from the Unit 25D boundary on Preacher Creek, Birch Creek and lower mouth of Birch Creek to the Yukon River; then downstream along the north bank of the Yukon River (including islands) to the confluence of the Hadweenzic River; then upstream along the west bank of the Hadweenzic River to the confluence of the Forty and One-Half Mile Creek; and then upstream along Forty and One-Half Mile Creek to Nelson Mountain on the Unit 25D boundary —1 bull by a Federal registration permit. Permits will be available in the following villages: Beaver (25 permits), Birch Creek (10 permits) and Stevens Village (25 permits).</i>	<i>Aug. 25–Feb. 28</i>
<i>Unit 25D remainder—1 antlered moose</i>	<i>Aug. 25–Sept. 25 Dec. 1–Dec. 20</i>

Proposed Federal Regulation

Unit 25D—Moose

Unit 25D west, that portion lying west of a line extending from the Unit 25D boundary on Preacher Creek, Birch Creek and lower mouth of Birch Creek to the Yukon River; then downstream along the north bank of the Yukon River (including islands) to the confluence of the Hadweenzik River; then upstream along the west bank of the Hadweenzik River to the confluence of the Forty and One-Half Mile Creek; and then upstream along Forty and One-Half Mile Creek to Nelson Mountain on the Unit 25D boundary—1 bull by a Federal registration permit. Permits will be available in the following villages: Beaver (25 permits), Birch Creek (10 permits) and Stevens Village (25 permits).

Aug. 25–Feb. 28

Unit 25D remainder—1 antlered moose

*Aug. 25–Sept. 25 Oct. 1
Dec. 1–Dec. 20*

Existing State Regulations

Unit 25D—Moose

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

TM940

Aug. 25–Feb. 28

Unit 25D remainder

Resident—One bull

Harvest permit

Sept. 10–Sept. 20

Or

Resident—One bull

Harvest permit

Feb. 18–Feb. 28

Or

Resident—One bull

CM001

Sept. 10–Sept. 20

Or

Resident—One bull

CM001

Feb. 18–Feb. 28

Nonresident—One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side

Harvest permit

Sept. 10–Sept. 20

Extent of Federal Public Lands

Federal public lands comprise approximately 61% of Unit 25D; 60% U.S. Fish and Wildlife Service lands and 1% Bureau of Land Management lands (see **Unit 25 Map**).

Customary and Traditional Use Determinations

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

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

Regulatory History

Unit 25D was divided by the State into Unit 25D West and Unit 25D East (remainder) in the early 1980's to allow the use of differing regulatory schemes to address the status of the respective moose populations. Low moose density in the western portion of the subunit, combined with the relatively high demand for moose by local residents, resulted in the use of permit systems that have limited hunting primarily to residents of the area, right up to the present. In 1990, the State established a Tier II permit hunt in Unit 25D West because the harvestable surplus was deemed insufficient to support all subsistence uses. During most of the 1990s, 125 permits were available annually for 3 hunting seasons. Also, beginning in 1990, the Federal Subsistence Board began promulgating regulations for subsistence use on Federal lands and initially provided an unlimited number of permits to residents of Beaver, Stevens Village and Birch Creek to harvest bull moose on Federal lands. The state Tier II system remained in effect and applied to both private and Federal lands. However, from 1993 to 1999, State Tier II permits were not recognized on Federal land. During this period, a maximum of 30 Federal permits and 125 State Tier II permits were issued annually. In 1999, discussions with local residents helped identify a number of steps that could improve moose management on the western Yukon Flats, including revising the harvest quota for moose, reducing the number of Tier II permits and aligning State and Federal hunting seasons (Caikoski, 2008). In 2000, the Alaska Board of Game lengthened the State season in Unit 25D West to Aug. 25–Feb. 28 to match the Federal season, increased the harvest quota from 35 to 60 bull moose, and reduced the number of Tier II permits from 125 to 75. State Tier II permits issued to resident of Unit 25D West were again recognized as valid on Federal lands beginning in 2000, when 60 Federal and 75 Tier II permits were available, with a combined State and Federal harvest quota of up to 60 bull moose. The number of annual permits and the combined harvest quota are still in effect.

In 2000, the State Board of Game approved a regulation that established a community harvest permit program (CM001) for part of Unit 25D East. The Board established the Chalkyitsik Community Harvest Area and a community harvest limit for moose in the portion of Units 25D and 25B included in the community harvest area.

The Alaska Department of Fish and Game initiated a cooperative effort in 2001 to develop a moose management plan for the Yukon Flats. By 2002, the Yukon Flats Cooperative Moose Management Plan (YFCMMP) was completed and endorsed by the Alaska Board of Game (ADF&G 2002). The YFCMMP was designed to promote moose population growth in the Yukon Flats through the following guidelines: 1) improve moose harvest reporting to better document subsistence needs and improve management, 2) reduce predation on moose by increasing the harvest of bears and wolves, 3) minimize illegal cow harvest and reduce the harvest of cows for ceremonial purposes to improve recruitment, 4) inform hunters and others about the low moose population on the Yukon Flats and avenues people can take to help in the

effort to increase moose abundance, and 5) use scientific information and traditional knowledge to help make management decisions.

Biological Background

For Unit 25, the State manages moose per the following management direction of the Alaska Board of Game (Caikoski, 2008):

State Management Goals

Unit 25 Overall

- Protect, maintain and enhance the moose population and its habitat in concert with other components of the ecosystem.

Unit 25B and 25D

- Provide for subsistence use and for the greatest opportunity to harvest moose.
- Protect, maintain and enhance the Yukon Flats moose population and habitat, maintain traditional lifestyles and provide opportunities for use of the moose resource.
- Increase the harvestable surplus of bull moose in key hunting areas near local communities by reducing mortality from bear and wolf predation.

State Management Objectives

Unit 25 Overall

- Double the size of the moose population in key hunting areas and, if possible, within the entire planning area, in the next 10 years.
- Maintain a minimum of 40 bulls per 100 cows as observed in fall surveys
- Improve moose harvest reporting to attain 90% or greater reporting compliance during the next 3 years.
- Minimize cow moose harvest while the population is rebuilding, recognizing that some cows will probably be taken for ceremonial purposes when bull moose are in poor condition.

Unit 25D

- Increase the number of moose from 4,000 to 8,000 by 2012.

At the same time as Unit 25D was divided for management purposes (see above), separate surveys areas were established in subunits 25D East and 25D West by the ADF&G and the USFWS, respectively. Since 1999, population surveys have been conducted in these two subunits utilizing geospatial population estimators (GSPE) described in Ver Hoef (2001, 2008) and in Kellie and DeLong (2006). From 1999 to 2006, estimated densities have ranged from 0.18 to 0.38 moose/mi² (Caikoski 2008). Survey data indicated that moose numbers were stable in the eastern Yukon Flats and declined in the western Yukon Flats. The ADF&G classified both populations as at “extremely low densities” (Caikoski 2008).

Population Size

The most recent moose surveys for which data are available were conducted in 2007 by the ADF&G in Unit 25D East and in 2006 by the USFWS in Unit 25D West. Based on extrapolation, the estimated observable population was 1,600–2,700 moose (0.15–0.25 moose/mi²) in Unit 25D East and 900–1,500 moose (0.14–0.22 moose/mi²) in Unit 25D West. Combining estimates, the total observable moose

population for Unit 25D was 2,500–4,200 moose (0.14–0.24 moose/mi²). Assuming a minimum sightability correction factor of 1.23 for GSPE conducted at 7–8 min/mi², the total moose population was estimated at 3,100–5,200 moose (0.18–0.29 moose/mi²) for Unit 25D in 2007 (Caikoski 2008).

Population Composition

In Unit 25D East, estimates from fall surveys during 2005–2007 resulted in high bull:cow ratios (range 60–80 bulls:100 cows) and high calf:cow ratios (range 37–58 calves:100 cows; **Table 1**). Yearling recruitment also appeared to be robust, as indicated by high yearling bull:cow ratios (range 12–22 yearling bulls:100 cows). In 2006, Unit 25D West fall survey data resulted in 65 bulls:100 cows, 22 calves:100 cows and 18 yearling bulls:100 cows (**Table 1**). However, significant variation between years and poor precision in ratio estimates due to small sample sizes makes detection of trends in ratios difficult (Caikoski 2008). Furthermore, given that harvest of cows is known to occur and a decline in the population trend has occurred, these ratio data for calves, yearling bulls and adult bulls per 100 cows may be more indicative of a stable or declining cow population. For example, in some survey years, yearling recruitment is unexplainably high compared to fall calf production from the previous year (i.e. fall yearling recruitment appears greater than the prior year's fall calf recruitment). Possible causes of this discrepancy may include measure error, moose movement and significant harvest of cow moose (Caikoski 2008).

Sources of Mortality

Predation is a major factor accounting for a low density of moose in Unit 25D. In their moose mortality study, Bertram and Vivion (2002) found that predation was responsible for 97% of known calf mortality, with black bears (45%) and brown bears (39%) the major causes. Annual harvest by humans was estimated at 7 to 12% of the population, and of that, illegal cow harvest constituted at least 33% (Bertram and Vivion 2002). These issues have been, and are being addressed by and through the Yukon Flats Cooperative Moose Management Plan (ADF&G 2002).

Harvest History

The current Federal seasons in Unit 25D remainder are August 25–September 25 and December 1–20. Federally qualified subsistence users can harvest moose for 15 days prior to, and 5 days after (as well as during), the State fall season of September 10–20.

Moose harvest in 25D West is allowed only under State Tier II or Federal subsistence permits, with a harvest quota of 60 bull moose. During the 11-year period of 1997–2007, the harvest reported through these two permit systems has ranged from 11 to 30 moose (**Table 3**).

Current Events

Staff of the Yukon Flats National Wildlife Refuge, Alaska Department of Fish and Game, and Council of Athabaskan Tribal Governments will be meeting with communities in Unit 25D during 2010 to develop moose regulation proposals for both the State and Federal boards to consider (Lenart 2010; Bertram 2010).

Effects of the Proposal

If this proposal were adopted, Federally qualified subsistence users would be provided an additional 30 days of harvest opportunity, which would likely lead to an increase in the amount of moose harvested.

Table 1. Estimated moose population composition based on fall GSPE surveys in Unit 25D, 1999–2007 (Caikoski 2008).

Survey area and year	Bulls: 100 Cows	Yrlg bulls: 100 Cows	Calves: 100 Cows
<i>Eastern Unit 25D (2,936 mi²)</i>			
1999	57	24	59
2000	79	19	49
2001	95	17	43
2004	43	10	51
2005	80	22	58
2006	60	12	37
2007	64	15	39
<i>Venetie Survey (2,858 mi²)</i>			
2004	75	24	41
2005	44	4	58
<i>Birch Creek Survey (3,630 mi²)</i>			
2006	55	8	29
<i>Western Unit 25D (2,269 mi²)</i>			
1999	31	6	31
2000	71	12	22
2001	52	9	27
2004	72	5	34
2006	65	18	22

Table 2. Unit 25D East reported moose harvest, regulatory years 1996–1997 through 2006–2007 (Caikoski 2008).

Regulatory year	Bulls	Cows	Unknown	Total
1996–1997	14	0	0	14
1997–1998	19	0	0	19
1998–1999	23	0	0	23
1999–2000	16	0	0	16
2000–2001 ^b	21	0	0	21
2001–2002 ^c	16	0	0	16
2002–2003 ^d	24	0	0	24
2003–2004 ^e	12	0	0	12
2004–2005	8	0	0	8
2005–2006	23	0	0	23
2006–2007	16	0	0	16

^aSource: moose harvest reports

^bIncludes 3 moose taken in Chalkyitsik community harvest permit hunt

^cIncludes 2 moose taken in Chalkyitsik community harvest permit hunt

^dIncludes 11 moose taken in Chalkyitsik community harvest permit hunt

^eIncludes 9 moose taken in Chalkyitsik community harvest permit hunt

Table 3. Unit 25D West moose harvest for permit hunt TM940 (Tier II) and Federal subsistence permits, regulatory years 1996–1997 through 2006–2007 (Caikoski 2008).

Regulatory year	TM940 Permits issued	Did not hunt	Did not report	Unsuccessful hunters	Successful hunters	Bulls	Cows	Unk	Tier II	Fed. sub. harv	Total harvest
1996–1997	91	32	18	31	10	10	0	0	10	7	17
1997–1998	36	23	0	11	2	2	0	0	2	13	15
1998–1999	40	21	1	11	7	7	0	0	7	20	27
1999–2000	92	55	0	24	13	13	0	0	13	17	30
2000–2001	75	41	4	21	9	7	0	2	9	7	16
2001–2002	34	15	6	9	4	4	0	0	4	14	18
2002–2003	49	23	6	16	4	4	0	0	4	7 ^a	11
2003–2004	51	31	7	10	3	3	0	0	3	7 ^b	10
2004–2005	72	29	27	15	1	1	0	0	1	15 ^c	16
2005–2006	53	22	2	22	7	7	0	0	7	14	21
2006–2007	75	56	0	17	2	2	0	0	2	10	12

^aNo Federal harvest reports received from Stevens Village

^bIncludes 6 cows reported by Stevens Village hunters

^cIncludes 5 cows reported by Stevens Village hunters

This could lead to a conservation concern, given the low population size and population density, classified as “extremely low.”

Meat spoilage is a primary concern with the early August opening requested by the proponent. In the Yukon Flats area, temperatures in early August are variable, but have historically reached 80–90 degrees. Therefore, meat will have a higher likelihood of spoiling if harvest is allowed in early August (Bertram, 2009).

Other Alternatives Considered

One alternative considered was to oppose the proposal, as an additional 30 days of harvest opportunity could result in an increase in the amount of moose harvested that may exceed the sustainable level.

Another alternative considered was to defer the proposal. In 2010, staff of the Yukon Flats National Wildlife Refuge, Alaska Department of Fish and Game, and Council of Athabaskan Tribal Governments will be meeting with communities in Unit 25D, including Fort Yukon, to discuss moose management options and to develop moose regulation proposals for both the State and Federal boards to consider. The outcome of the meetings may result in consensus on proposals to address the issues raised in this proposal.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-93 **with modification** to only extend the end of the season by the requested six days.

The modified regulation would read:

Unit 25D—Moose

Unit 25D west, that portion lying west of a line extending from the Unit 25D boundary on Preacher Creek, Birch Creek and lower mouth of Birch Creek to the Yukon River; then downstream along the north bank of the Yukon River (including islands) to the confluence of the Hadweenzic River; then upstream along the west bank of the Hadweenzic River to the confluence of the Forty and One-Half Mile Creek; and then upstream along Forty and One-Half Mile Creek to Nelson Mountain on the Unit 25D boundary —1 bull by a Federal registration permit. Permits will be available in the following villages: Beaver (25 permits), Birch Creek (10 permits) and Stevens Village (25 permits)

Aug. 25–Feb. 28

Unit 25D remainder—1 antlered moose

*Aug. 25–~~Sept. 25~~ Oct. 1
Dec. 1–Dec. 20*

Justification

A six-day increase at the end of the current fall season will provide for some additional harvest opportunity, consistent with the proponent's request, while addressing conservation and meat spoilage concerns over a 30-day increase in the fall season, starting in early August.

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WP10-94 Executive Summary	
General Description	Proposal WP10-94 requests extension of the harvest season in a portion of Unit 25A from July 1–April 30 to July 1–June 30. Only bull or antlerless cow caribou may be taken May 1–June 30. This regulation change would apply only to the Chandalar drainage, west of the Middle Fork of the Chandalar River drainage. The harvest limit is to stay the same. <i>Submitted by Jack Reakoff</i>
Proposed Regulation	<p>Unit 25—Caribou</p> <p><i>Unit 25A remainder, 25B, and 25D remainder — 10 caribou</i> <i>July 1– Apr. 30</i></p> <p><i>Unit 25A¹ within the Chandalar River drainage, west of the Middle Fork of the Chandalar River drainage — 10 caribou. However, only bulls or antlerless cows may be taken May 1– June 30.</i></p> <p>¹The proposed regulatory language as submitted applies to unit 25A. This was misprinted as unit 25 in the Federal Subsistence 2010–2012 Wildlife Proposals Book.</p>
OSM Preliminary Conclusion	<p>Support Proposal WP10-94 with modification to establish a caribou hunting season from July 1 through June 30 in Unit 25A restricting the harvest to bulls only from May 15 through June 30.</p> <p>Unit 25—Caribou</p> <p><i>Unit 25A remainder, 25B, and 25D remainder — 10 caribou</i> <i>July 1– Apr. 30</i></p> <p><i>Unit 25A in those portions west of the east bank of the East Fork of the Chandalar River extending from its confluence with the Chandalar River upstream to Guilbeau Pass and north of the south bank of the mainstem of the Chandalar River at its confluence with the East Fork Chandalar River west (and north of the south bank) along the West Fork Chandalar River — 10 caribou. However, only bulls may be taken May 15– June 30.</i></p>
Eastern Interior Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	

**DRAFT STAFF ANALYSIS
WP10-94**

ISSUES

Proposal WP10-94, submitted by Jack Reakoff requests extension of the harvest season in a portion of Unit 25A from July 1–April 30 to July 1–June 30. Only bull or antlerless cow caribou may be taken May 1–June 30. This regulation change would apply only to the Chandalar drainage, west of the Middle Fork of the Chandalar River drainage. The harvest limit is to stay the same.

DISCUSSION

A complimentary proposal (Wildlife Proposal 100) was submitted by the proponent to the Alaska Board of Game (BOG) for their February 26th meeting. The complimentary proposal requests a harvest season change on State land within the Chandalar River drainage west of and including the Middle Fork of the Chandalar and north of the main stem and the west fork of the Chandalar. Wildlife Proposal 100 mirrors Federal proposal WP10-94 in harvest season and harvest limit. Both proposals request an extension of the season through May and June while only allowing the harvest of bulls and antlerless cows at that time. This would protect calving cows while allowing customary and traditional use of the resource in spring and early summer. If both proposals are adopted, State and Federal regulations would be aligned simplify hunting regulations for the users in the area west of the Middle Fork of the Chandalar River drainage.

The proposal applies to only a small portion of land administered by BLM in the northwest corner of 25A. Most of the BLM land lies within the Dalton Highway Corridor Management Area (DHCMA), which extends five miles from each side of the Dalton Highway. Hunting in the DHCMA under State regulations is restricted to bow hunting only. However, Federally qualified subsistence users can hunt within the DHCMA using firearms. Hunting with firearms in the DHCMA is only authorized for residents of Alatna, Allakaket, Anaktuvuk Pass, Bettles, Evansville, Stevens Village, and residents living within the Dalton Highway Corridor Management Area.

Existing Federal Regulation

Unit 25—Caribou

Unit 25A, 25B, and 25D remainder — 10 caribou

July 1–Apr. 30

Proposed Federal Regulation

Unit 25—Caribou

Unit 25A remainder, 25B, and 25D remainder — 10 caribou

July 1– Apr. 30

Unit 25A¹ within the Chandalar River drainage, west of the Middle Fork of the Chandalar River drainage — 10 caribou. However, only bulls or antlerless cows may be taken May 1– June 30.

July 1– June 30

¹The proposed regulatory language as submitted applies to unit 25A. This was misprinted as unit 25 in the Federal Subsistence 2010–2012 Wildlife Proposals Book.

Existing State Regulation

Unit 25 A—Caribou

Residents Only—10 caribou

July 1—April 30

Extent of Federal Public Lands

Federal public lands comprise approximately 77.7% of Unit 25A. The Arctic National Wildlife Refuge and Yukon Flats National Wildlife Refuge, both managed by Fish and Wildlife Service, comprise 73.5% of the land. BLM administers 2.2 % of the lands much of which is within the DHCMA (**Unit 25 Map**).

Customary and Traditional Use Determinations

There has not been a customary and traditional determination made for caribou in Unit 25A, therefore, all rural residents can harvest caribou in Unit 25A.

Regulatory History

In 1991, the Dalton Highway was officially open to public traffic and the Central Arctic Caribou Herd (CAH) became accessible to hunters via the road system. In 1992, the DHCMA was established to limit harvest near the highway. Under State hunting regulations this area was closed to all hunting except with bow and arrow, while Federal subsistence hunting regulations allowed for hunting with firearms on Federal public land by Federally qualified subsistence hunters. During the first year of the regulation hunting was open to all Federally qualified subsistence users, however, in 1992 the Federal Board limited it to residents of Alatna, Allakaket, Anaktuvuk Pass, Bettles, Evansville, Stevens Village, and residents living within the Dalton Highway Corridor Management Area.

Harvest limits and seasons in Unit 25A for caribou have been consistent since 1996 for both the State and Federal hunts. During its March 2000 meeting, the BOG established intensive management population and harvest objectives for the CAH. The intensive management population objective for the CAH is 18,000–20,000 caribou and the harvest objective is 600–800 caribou (5 AAC 92.108). With the exception of regulatory year 2006, the harvest of CAH has not exceeded the harvest objective and the herd population has been within the population objectives since 1991.

Biological Background

Since the mid 1970s, when the CAH was recognized as a discrete herd, it has experienced tremendous growth. In 1975, it was estimated at 5,000 caribou (Cameron and Whitten 1979), by 2000 the herd size had increased substantially to over 27,000 animals. Photocensus completed in July 2008 estimated a herd size of 66,772 animals (Lenart 2009, pers. comm.). This growth represents a 246% increase from 2000 (**Table 1**). The annual rate of increase was 4% from 1995 to 1997, 11.2% from 1997 to 2000, 8.4% from 2000 to 2002 and most recently 13.1% from 2002 to 2009. This impressive growth rate has been attributed to low adult mortality (<10%), high parturition rates ($\geq 85\%$) and high calf survival (Lenart 2007). Parturition rates of radio-collared females ≥ 4 years old were 93% (n=56) and 98% (n=4) in 2007 and 2008, respectively. High rates in this age group have been documented since 1998. General parturition rates for 3-year-olds were good from 1998 through 2007 ($\geq 71\%$). The last fall composition survey was conducted in October 2002. No surveys were conducted in 2003–2008. The fall survey in October 2002 indicates a bull:cow ratio of 67:100 and a calf:cow ratio of 72:100 (**Table 2**). Bull:cow ratios have been high since 1976 (>50:100), indicating harvest had little effect on sex ratios. Calf:cow

Table 1. Central Arctic Caribou Herd estimated population size, 1978-2008. (Modified from Lenart 2007 and Lenart Pers. Comm. 2009)

Date	Method ^a	Estimated Size
1978	STS	5,000
1981	AC	8,537
1983	APDCE	12,905
1991	GM	19,046 ^b
1992	APDCE	23,444
1995	APDCE	18,100
1997	APDCE	19,730
2000	APDCE	27,128
2002	APDCE	31,857
2008	APDCE	66,772

^a STS-Systematic transect surveys; AC= Aerial counts; APDCE-Aerial Photo Direct Count Extrapolation (Davis et al. 1979); GM=Gasaway method (Gasaway et al. 1986; Valenborg 1993).

^b Ninety-percent confidence interval was 14,677-23,414.

Table 2. Central Arctic Caribou Herd fall composition counts, 1976-2002. (Modified from Lenart 2007)

Date	Total			Composition		
	Bulls:100 Cows	Calves:100 Cows	Calves (%)	Cows (%)	Bulls (%)	Sample Size
1976	122	44	17	38	46	1223
1977	118	55	20	37	43	628
1978	96	58	23	39	38	816
1980	132	49	18	35	47	1722
1981	81	64	26	41	33	1712
1992	96	47	19	41	40	2469
1996	61	67	29	44	27	3062
2000	84	57	24	42	35	3335
2001	73	54	24	44	32	4092
2002 ^a	67	72	30	42	28	1732

^a This survey was conducted later in the fall than usual, and caribou were more widely distributed; thus, ADF&G was unable to obtain a large sample size.

ratios were high in 2000, 2001 and 2002 (> 50:100) indicating summer calf survival rates were high. Peak calving for this herd occurs in early June and cows drop their antlers within a week of calving.

Harvest History

Harvest levels have been well within the management objectives since the early 1990s. While most of the CAH harvest occurs in Unit 26B, some also occurs in units 24, 25A, and 26A. Beginning in regulatory year 2000, harvest of the CAH began to increase but remained below the maximum sustained yield of 5% (**Table 3**). During regulatory years 06–07, most of the reported harvest occurred in August (51% and 48%, respectively) similar to previous years. The remaining harvest occurred primarily in September and October (Lenart 2009, pers.comm.). Reported harvest of cows during regulatory years 06 and 07 was considerably lower than the management objective of 3% of the cows in the population. The management objective of maintaining at least 40 bulls:100 cows has also been achieved.

Table 3. Central Arctic Caribou Herd harvest and hunter success, regulatory years 2000-2001 through 2007-2008^a. (Modified from Lenart 2007 and Lenart per. Com. 2009)

Regulatory Year	Reported Harvest			Total Harvest	Total Hunters	Percent Successful Hunters ^b	Estimated Unreported Harvest ^c	Reported Harvest
	Male	Female	Unk					
2000-2001	465	28	1	494	804	52	200-250	694-744
2001-2002	496	16	4	516	918	47	200-250	716-766
2002-2003	389	23	3	415	851	41	200-250	615-665
2003-2004	389	11	4	404	717	48	200-250	604-654
2004-2005	588	42	4	634	989	52	200-250	834-884
2005-2006	635	45	7	687	1104	52	200-250	887-937
2006-2007	798	37	6	841	1331	53	200-250	1041-1091
2007-2008	620	68	2	690	1380	42	200-250	890-940

^a Source: Harvest ticket reports in ADF&G WINFONET database.

^b Percent successful hunters calculated by dividing successful hunters by number of total hunters.

^c Estimated by area biologist and Division of Subsistence.

Effects of the Proposal

This proposal would extend the Federal caribou subsistence harvest season in a portion of Unit 25A west of the middle fork of the Chandalar River drainage. This change would allow Federally qualified hunters the opportunity to harvest additional caribou (bulls or antlerless cows) during May and June. Allowing antlerless cows to be taken may have unintended consequences as some antlerless cows are parturient although the number is small (Lenart 2009, pers. comm.). The CAH population has exceeded the population objectives since 1991 and the herd can sustain additional harvest. This hunt would allow for additional Federal subsistence opportunity. In addition, if the BOG adopts Wildlife Proposal 100, State and Federal hunting regulations will be in alignment within the affected area.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-94 **with modification** to establish a caribou hunting season from July 1 through June 30 in Unit 25A restricting the harvest to bulls only from May 15 through June 30.

The regulations should read:

Unit 25—Caribou

Unit 25A remainder, 25B, and 25D remainder — 10 caribou

July 1– Apr. 30

Unit 25A in those portions west of the east bank of the East Fork of the Chandalar River extending from its confluence with the Chandalar River upstream to Guilbeau Pass and north of the south bank of the mainstem of the Chandalar River at its confluence with the East Fork Chandalar River west (and north of the south bank) along the West Fork Chandalar River — 10 caribou. However, only bulls may be taken May 15– June 30.

July 1– June 30

Justification

The CAH has steadily increased in abundance since 1995, and currently exceeds the upper level population objectives by over 40,000 animals. Extending the hunt will provide additional harvest

opportunities for subsistence users. Furthermore, restricting the hunt to bulls in May and June will protect the calving females. The additional harvest of bulls will have little effect on the population, while providing additional subsistence opportunity. This hunt occurs in the area where CAH winters. The date and the area description were changed from the proposal to matches the description in Wildlife Proposal 100 submitted to the BOG. If this proposal is adopted it would align Federal and State regulations in this portion of Unit 25A.

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WP10-95 Executive Summary	
General Description	Proposal WP10-95 requests that the harvest limit be reduced for wolf hunting in that portion of Unit 20C within Denali National Park and Preserve. This proposal is cosponsored by the Denali Subsistence Resource Commission. <i>Submitted by the Denali National Park and Preserve</i>
Proposed Regulation	<p>Unit 20C—Wolf Hunting</p> <p><i>Unit 20C, that portion within Denali National Park and Preserve</i></p> <p><i>1 wolf</i> <i>Aug. 10–Oct. 31</i></p> <p><i>10–5 wolves</i> <i>Nov. 1 Aug–April 30</i></p> <p><i>Unit 20C remainder</i></p> <p><i>10 wolves</i> <i>Aug 10–April 30</i></p>
OSM Preliminary Conclusion	Support
Eastern Interior Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	

**DRAFT STAFF ANALYSIS
WP10-95**

ISSUES

Proposal WP10-95, submitted by the Denali National Park and Preserve, requests that the harvest limit be reduced for wolf hunting in that portion of Unit 20C within Denali National Park and Preserve. This proposal is cosponsored by the Denali Subsistence Resource Commission.

DISCUSSION

In November 2009, the proponent clarified that their intent was that this proposal only apply to the portion of Unit 20C within Denali National Park and Preserve (Craver 2009a, pers. comm.). Their intent was a harvest limit of one wolf for hunters from August 10 to October 31, and five wolves from November 1 to April 30. The Denali Subsistence Resource Commission voted to co-sponsor this proposal at its November 2009 meeting (Craver 2009b, pers. comm.; R. Collins 2010, pers. comm.).

The proponent states that this regulatory change should be made to protect subsistence hunting and trapping by limiting the opportunities for incidental harvest of wolves from frequently viewed packs near the Denali Park Road during a September subsistence moose hunt. The proponent observes that these wolves have value for the tourist industry and that the harvest of wolves could result in unfavorable publicity and increased pressure on the National Park Service to curtail subsistence activities. The proponent also noted that wolf pelts are not prime until later in the winter.

Existing Federal Regulation

Unit 20C—Wolf Hunting

10 Wolves

Aug. 10–April 30

Proposed Federal Regulation

Unit 20C—Wolf Hunting

Unit 20C, that portion within Denali National Park and Preserve

1 wolf

Aug. 10–Oct. 31

+0 5 wolves

Nov. 1 ~~Aug. 10~~–April 30

Unit 20C remainder

10 wolves

Aug. 10–April 30

Existing State Regulation

Units 20C—Wolf Hunting

5 Wolves

Aug. 10–May 31

Extent of Federal Public Lands

This proposal affects Federal public lands within the Denali National Park and Preserve (See **Unit 20 Map**). Wildlife may not be taken for subsistence uses on lands within Mount McKinley National Park as it existed prior to December 2, 1980. Subsistence is permitted in Denali National Preserve and lands added to Denali National Park on December 2, 1980.

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 Unit 20C. These rural residents may hunt wolves on Denali National Preserve land under Federal regulations.

In order to engage in subsistence on lands added to Denali National Park on December 2, 1980, 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. The subsistence resident zone(s) for Denali National Park and Preserve include the communities of Cantwell, Lake Minchumina, Nikolai, and Telida.

Regulatory History

The Alaska National Interest Lands Conservation Act (ANILCA), Public Law 96-487, Section 1, Title II, sec. 202(3)a expanded Mount McKinley National Park for a variety of reasons, including protection of habitat for fish and wildlife, and to provide continued opportunities and other wilderness recreational activities. Subsistence uses by local residents are permitted in additions to the Park, where such uses are traditional in accordance with Title VIII of ANILCA. Title II, Sec. 203 permits hunting on the Preserve portion of Denali National Park and Preserve and provides that subsistence uses by local residents is allowed on the Preserve and Park where specified. Title VIII, Section 802 requires that utilization of the public lands is to cause the least adverse impact possible on rural residents who depend upon subsistence uses of the resources.

In 1990, the Federal Subsistence Management Program wolf hunting season in Unit 20C was from August 10 to April 30 with no harvest limit. The harvest limit was reduced to 10 wolves in 1991. The season was shortened to September 1 to March 31 in 1998. In regulatory year 2000/2001 there was no harvest limit and an August 10 to April 30 season. In regulatory year 2001/2002 the harvest limit was reduced to 10 wolves.

In 1996, the Denali Subsistence Resource Commission submitted a proposal to the Federal Subsistence Board, concerning the wolf hunting season in those portions of Units 13, 16, 19 and 20 that are within Denali National Park and Preserve. The Denali Subsistence Resource Commission asked that the wolf hunting season be shortened to coincide with the wolf trapping season, which at that time extended from November 1 to March 31 in Unit 20C. The reason for the proposal was to limit the harvest of wolves to the period when their hides were most valuable. Consistent with the recommendations of the Eastern Interior Alaska Subsistence Regional Advisory Council (Council) and the Southcentral Alaska Subsistence Regional Advisory Council, the Federal Subsistence Board (Board) rejected this proposal (Proposal 31) in 1997.

In 2004, Defenders of Wildlife submitted Proposal WP05-02 requesting that wolf hunting seasons in Units 1, 3-4, 5A, 6-7, 9-13, 14C, 15-21, and 24-26 not be opened 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.

This type of proposed regulation (a stair-stepped harvest limit) has been approved by the Board previously for wolf harvest in Unit 24.

The 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.

Biological Background

Murie (1944) observed that the wolves (*Canis lupus*) have been part of Alaska fauna for hundreds of years and have probably been present since the Pleistocene glaciation. Wolves are found throughout Denali National Park and Preserve. Prey species include caribou, moose, sheep, small mammals, snowshoe hare, and beaver. 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. Meier et al. (2006) reported that 28% of the wolves they studied in Denali National Park and Preserve 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.

Wolves live at low densities in a structured population of territorial packs (Mech and Boitani 2003). The size of the home range is believed to depend 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) reported 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.

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. Since 1986, estimated wolf density in Denali National Park and Preserve has varied from approximately 13 to 48 wolves/1000 mi² (Meier 2005). Meier (2005) observed that low numbers of caribou in the Denali herd, along with a series of mild winters, had resulted in low numbers of vulnerable prey (moose, caribou and sheep) for wolves to kill. The spring/late winter 2009 wolf density estimate (23/1000 mi²) was the lowest observed in more than 20 years (Meier 2010, pers. comm.). The Denali National Park and Preserve wolf population is currently estimated at fewer than 90 wolves (Rabinowitch 2010, pers. comm.).

Harvest History

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. Wolf harvest estimates for Denali National Park and Preserve are based on reported harvests from Unified Coding Units (UCUs) that are entirely or partly within the boundaries of the Park and Preserve (NPS 2009b). From regulatory years 1998/99 to 2007/08, the reported total annual harvest of wolves by hunters and trappers in and around the Denali National Park and Preserve ranged from 10 to 29 wolves/year (**Table 1**). Approximately 90% of this harvest was from outside of Denali National Park and Preserve boundaries (Rabinowitch 2010). Examination of wolf sealing data shows no evidence that any wolves have been harvested, either by hunting or trapping, during the months of August, September or October within the boundaries of Denali National Park and Preserve. However, outside of the Park and Preserve boundaries approximately 13% of the wolf harvest has been in those months (**Table 1**).

Table 1. Estimated wolf harvest (hunting and trapping) in and around Denali National Park and Preserve portion of Unit 20C (NPS 2009b).

Regulatory Year	Reported Total Harvest	Aug.–Oct. Harvest
1998/99	22	1
1999/2000	29	7
2000/01	28	6
2001/02	15	1
2002/03	22	3
2003/04	27	2
2004/05	14	2
2005/06	10	1
2006/07	18	1
2007/08	27	3

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

At its March 2005 meeting, Council member Entsminger noted that, as a skin sewer, she has seen wolf hides from fall 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). At the Southcentral Alaska Subsistence Regional Advisory Council's March 2005 meeting, it was noted that the Denali Subsistence Resource Commission had reported that the early season wolf pelts have low commercial value but are a resource for local subsistence user making crafts and clothing for personal use (SCRAC 2005).

According to Denali Subsistence Resource Commission Chair Mr. Ray Collins, local subsistence users do not target fall wolves because their pelts are not in their prime. Mr. Collins is not aware of any Federally qualified subsistence users taking wolves in the Kantishna area during the fall. Mr. Collins believes that any take of wolves in the fall in Kantishna would be incidental to harvesting a moose (R. Collins 2010,

per. comm.). Ms. Miki Collins, member of the Denali Subsistence Resource Commission and skin sewer, noted that in the twenty years she and her twin sister, Julie, have trapped wolves, they have never taken a fall wolf because they are unsure of the quality of the wolf pelts that time of year for skin sewing. According to Ms. Collins, last year a Lake Minchumina resident harvested a wolf in October and the pelt was in such poor condition he was unable to sell the hide (M. Collins 2010, pers. comm.). No member of the Denali Subsistence Resource Commission, and no subsistence hunter who has obtained a permit to drive the Denali Park Road to hunt moose, has expressed an interest in taking a wolf during the fall moose hunting season (Rabinowitch 2010).

Effects of the Proposal

If this proposal is adopted, the Federal harvest limit for wolf hunting would be reduced from 10 per year to 6 in that portion of Unit 20C that is within the Denali National Park and Preserve. Under Federal subsistence regulations, hunters would be allowed to take 1 wolf from August 10 to October 31 and an additional 5 wolves from November 1 to April 30. Hunters can take wolves within Denali National Preserve under State regulations (5 wolf limit and August 10–May 31 season).

This proposal affects Federally qualified subsistence hunters from the communities of Cantwell, Lake Minchumina, Nikolai, and Telida and those that have 13,440 permit to hunt in the portion of Denali National Park that was established on December 2, 1980. These same subsistence users are represented by the Denali Subsistence Resource Commission which is requesting this regulatory change.

The proposal would not affect regulations regarding wolf trapping in this area, currently November 1–April 30, with no harvest limit. Trapping is by far the most common means of subsistence wolf harvest in Denali National Park and Preserve.

Wolves in the Kantishna area of Denali National Park and Preserve, where subsistence moose hunting takes place, are frequently seen by park visitors and are relatively unafraid of humans. Under the current hunting bag limit of 10 wolves per hunter, a single hunter could remove a significant portion of Denali's wolf population (currently estimated at fewer than 90 wolves parkwide). Such an incident could cause the emergency closure of the Unit 20C wolf harvest in Denali National Park and Preserve, eliminating opportunities for the subsistence harvest of wolves later in the year when the pelts are prime.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-95

Justification

This proposal is cosponsored by the Denali Subsistence Resource Commission which represents the Federally qualified subsistence users that would be affected by the proposed regulatory change.

The proposed regulation would not curtail any historic pattern of use and would protect future patterns of subsistence use in Denali National Park and Preserve. There is no evidence that Federally qualified subsistence users have harvested any wolves in Denali during the fall months, and no interest has been expressed by subsistence users who reside in close proximity to the Park and Preserve in such harvest opportunities. This proposal provides a stair-stepped harvest limit that allows some opportunistic harvest as early as August 1, while attempting to restrict most wolf harvest to the winter months.

Even if this proposal is adopted by the Federal Subsistence Board, hunters would still be able to take wolves under State regulations on Denali National Preserve lands in Unit 20C.

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WP10-96 Executive Summary	
General Description	Proposal WP10-96 requests a Federal hunting season for muskrat on Federal public lands within Unit 20 remainder with a harvest limit of 25 muskrat per season. <i>Submitted by Miki Collins</i>
Proposed Regulation	<p>Unit 20–Muskrat Hunting</p> <p><i>Unit 20E, that portion within Yukon-Charley Rivers National Preserve—No limit Sept. 20–June 10</i></p> <p><i>Unit 20 remainder — 25 Muskrat No open season Nov. 1–June 10</i></p>
OSM Preliminary Conclusion	<p>Support proposal WP 10-96 with modification to establish a muskrat hunting season from November 1 through 10 June in Unit 20C, that portion within Denali National Park and Preserve.</p> <p>Unit 20–Muskrat</p> <p><i>Unit 20E, that portion within Yukon-Charley Rivers National Preserve—No limit Sept. 20–June 10</i></p> <p><i>Unit 20C, that portion within Denali National Park and Preserve—25 Muskrat Nov. 1–June 10</i></p> <p><i>Unit 20 remainder No open season</i></p>
Eastern Interior Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	

DRAFT STAFF ANALYSIS WP10-96

ISSUES

Proposal WP10-96, submitted by Miki Collins, requests a Federal hunting season for muskrat on Federal public lands within Unit 20 remainder with a harvest limit of 25 muskrat per season.

DISCUSSION

The proponent's intent is to establish a hunting season in order to provide opportunity to harvest muskrat with a firearm while trapping in Denali National Park and Preserve. While there is some ambiguity in the proposal as to whether the intended scope of the proposed regulation is limited to Denali National Park and Preserve, this was verified in consultation with the proponent. Federal subsistence trapping regulations prohibit the taking of free-ranging furbearers with a firearm on National Park Service (NPS) lands under a trapping license. To opportunistically harvest muskrat with a firearm for subsistence proposes on NPS lands a muskrat hunting season must be created. A hunting season in Denali National Park and Preserve would allow for the incidental harvest of muskrat during the trapping season. It is not necessary to apply this regulation beyond Denali National Park and Preserve because individuals can currently harvest muskrat with a firearm in the rest of Unit 20 excluding NPS lands under current Federal and State trapping regulations. A hunting season for muskrat on other NPS lands in Unit 20, at Yukon-Charley Rivers National Preserve, is already addressed in regulation. The proponent suggested a 25 muskrat harvest limited until more is known about the population.

Existing Federal Regulation

Unit 20 —Muskrat Hunting

<i>Unit 20E, that portion within Yukon-Charley Rivers National Preserve—No limit</i>	<i>Sept. 20–June 10</i>
<i>Unit 20 remainder</i>	<i>No open season</i>

Proposed Federal Regulation

Unit 20—Muskrat Hunting

<i>Unit 20E, that portion within Yukon-Charley Rivers National Preserve— No limit</i>	<i>Sept. 20–June 10</i>
<i>Unit 20 remainder — 25 Muskrat</i>	<i>No open season Nov. 1–June 10</i>

Existing State Regulation

Unit 11—Muskrat (trapping)

<i>Unit 20 (except 20E) — No limit</i>	<i>Nov. 1–June 10</i>
<i>Unit 20E — No limit</i>	<i>Sept. 20–June 10</i>

Extent of Federal Public Lands

Federal public lands comprise approximately 18.9% of Unit 20. They consist of 14.8% Denali National Park and Preserve and Yukon-Charley Rivers National Preserve managed by the National Park Service (NPS), 0.1% Yukon Flats National Wildlife Refuge managed by US Fish and Wildlife Service (USFWS) and 4.0% Bureau of Land Management (BLM) administered land (**Unit 20 Map**).

Customary and Traditional Use Determinations

There has not been a customary and traditional determination made for muskrat in Unit 20, therefore, all rural residents are eligible to harvest muskrat in Unit 20.

Regulatory History

The State of Alaska authorizes the holder of a trapping license to harvest muskrat with a firearm under trapping regulations. State trapping regulations have not changed over the last 10 years for Unit 20E and 20 remainder. The State trapping seasons are September 20–June 10 for Unit 20E and November 1–June 10 and for Unit 20 remainder. The current Federal trapping regulations are identical to the States and have not changed over the past 10 years. In May 2006, the Federal Subsistence Board adopted proposal WP06-62 allowing for muskrat hunting in Unit 20E within Yukon-Charley Rivers National Preserve during the trapping season.

Biological Background

Muskrats are one of Alaska's most visible and numerous furbearers, but harsh environmental conditions and overpopulation result in periodic fluctuations in numbers. Since muskrat do not have to be sealed there is little information to evaluate current population trends. Results from the 2005/06 State Trapper Questionnaire report estimated the muskrat population in Unit 20 as scarce. This assessment continued through 2006/07 (Schumacher 2009, pers. comm.). Anecdotal observations suggest that muskrat populations are slowly rising from a long-term low and are beginning to occupy habitats that have not been occupied since the 1970s (Seaton 2007). Currently, the population in Unit 20 is stable or increasing and can sustain additional harvest (Seaton 2009, pers. comm.). Due to limited funding, neither ADF&G nor NPS staffs routinely conduct surveys or inventories for muskrats.

Harvest History

Most of the muskrat harvest takes place in the spring, when muskrats are actively looking for a mate and seeking food in open waters of thawing lakes and streams. Muskrat provide fresh meat for trappers and hunters. Historically, muskrats have been both economically and culturally important to local residents (Gross 2004). Currently, 12% of the muskrats harvested in Unit 20 are taken with .22-caliber rifles (ADF&G 2006).

Effects of the Proposal

This proposal would re-establish a traditional practice to harvest muskrats with a firearm for food and hides. Currently, free ranging muskrat in Unit 20 can be taken with firearms under a trapping license on State, USFWS and BLM lands and under hunting regulations in Yukon-Charley Rivers National Preserve. Existing Federal regulations do not allow the taking of free ranging furbearers with a firearm under a trapping license in Denali National Park and Preserve. This proposal would allow the taking of muskrats with a firearm under hunting regulations in Denali National Park and Preserve, thereby providing for

additional subsistence opportunity. The proposal would have minimal effects on the muskrat population, as the population is considered healthy and stable. Any possible small increase in harvest, which would result from this proposal, is considered sustainable.

OSM PRELIMINARY CONCLUSION

Support proposal WP 10-96 **with modification** to establish a muskrat hunting season from November 1 through 10 June in Unit 20C, that portion within Denali National Park and Preserve.

The regulations should read:

Unit 20–Muskrat

Unit 20E, that portion within Yukon-Charley Rivers National Preserve— Sept. 20–June 10
No limit

Unit 20C, that portion within Denali National Park and Preserve—25 Nov. 1–June 10
Muskrat

Unit 20 remainder *No open season*

Justification

Adoption of this proposal would provide for additional subsistence opportunity to harvest muskrat through use of a firearm in Denali National Park and Preserve under a hunting license. The current muskrat population levels for Unit 20 are stable, and could accommodate the small increase in harvest that may occur with passage of this proposal. Regulations were implemented in 2006 for Yukon –Charley Rivers National Preserve.

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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	
Written Public Comments	

**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	
<i>No limit</i>	<i>Nov. 1–April 30</i>
Unit 20A—Wolf Hunting	
<i>10 Wolves</i>	<i>Aug. 10–April 30</i>
Unit 12—Wolf Trapping	
<i>No limit</i>	<i>Oct. 1–April 30</i>
Unit 25A—Wolf Hunting	
<i>No limit</i>	<i>Aug. 10–April 30</i>

Proposed Federal Regulation

Proposal WP10-97

Unit 20A—Wolf Trapping	
<i>No limit</i>	<i>Nov. 1– Mar. 31 April 30</i>

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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WP10-101 Executive Summary	
General Description	Proposal WP10-101 requests that the moose harvest season be changed to August 20–September 30 in a portion of Unit 20E, matching the existing season in the other portion of the unit. <i>Submitted by Bronk Jorgensen of Tok, Alaska</i>
Proposed Regulation	<p>Unit 20E — Moose</p> <p>Unit 20E that portion within Yukon-Charley National Preserve- 1 bull. Aug. 20–Sept. 30</p> <p>Unit 20E, that portion drained by the Forty-mile River (all forks) from Mile 9½ to Mile 145 Taylor Highway, including the Boundary Cutoff Road—1 bull. Aug. 24–Aug. 28 Sept. 1–Sept. 15</p>
OSM Preliminary Conclusion	Support
Eastern Interior Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	

**DRAFT STAFF ANALYSIS
WP10-101**

ISSUE

Proposal WP10-101, submitted by Bronk Jorgensen of Tok, Alaska, requests that the moose harvest season be changed to August 20–September 30 in a portion of Unit 20E, matching the existing season in the other portion of the unit.

DISCUSSION

The proponent is requesting that the dates of the Federal fall moose season for Bureau of Land Management administered lands in Unit 20E, including the Fortymile Wild and Scenic River corridor, be changed to August 20–September 30 to match the season dates in the portion of Unit 20E within the Yukon-Charley Rivers National Preserve (Preserve). The proponent states that adoption of this proposal would benefit Federally qualified subsistence users by providing an additional 22 days to hunt moose in the affected area.

Proposal WP10-86 is related to this proposal, in that it is requesting that the dates of the Federal fall moose season for Unit 25C, a portion of which is in the Preserve, be changed to also match the August 20–September 30 season in adjoining portions of Units 25B and 20E within the Preserve.

Existing Federal Regulations

Unit 20E — Moose

*Unit 20E, that portion within Yukon-Charley National Preserve— 1 Aug. 20–Sept. 30
bull.*

*Unit 20E, that portion drained by the Forty-mile River (all forks) Aug. 24–Aug. 28
from Mile 9½ to Mile 145 Taylor Highway, including the Boundary Sept. 1–Sept. 15
Cutoff Road — 1 bull.*

Proposed Federal Regulations

Unit 20E — Moose

*Unit 20E that portion within Yukon-Charley National Preserve— 1 Aug. 20–Sept. 30
bull.*

*Unit 20E, that portion drained by the Forty-mile River (all forks) Aug. 24–Aug. 28
from Mile 9½ to Mile 145 Taylor Highway, including the Boundary Sept. 1–Sept. 15
Cutoff Road — 1 bull.*

Existing State Regulations

Unit 20E — Moose

<i>Unit 20E drainages of the Middle Fork of the Fortymile River upstream from and including the Joseph Creek drainage</i>	<i>Resident: One bull</i>	<i>Harvest permit</i>	<i>Aug. 24–Aug. 28 OR Sept. 8–Sept. 17</i>
	<i>Nonresident: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side.</i>	<i>Harvest permit</i>	<i>Sept. 8–Sept. 17</i>
<i>Unit 20E remainder</i>	<i>Resident: One bull by permit available in person in Tok, Delta Junction, Eagle and Fairbanks beginning Aug. 18; may not possess RC860 at the same time as RM865</i>	<i>RM865</i>	<i>Aug. 24–Aug. 28 OR Sept. 8–Sept. 17</i>
	<i>OR</i>		
	<i>Resident: One bull by permit in the Ladue River Controlled Use Area</i>	<i>DM-794/796</i>	<i>Nov. 1–Nov. 30</i>
	<i>Nonresident: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side by permit available in person in Tok, Delta Junction, Eagle and Fairbanks beginning Aug. 18; may not possess RC860 at the same time as RM865</i>	<i>RM865</i>	<i>Sept. 8–Sept. 17</i>

The Unit 20E State management goals and objectives for moose are as follows (Gross, 2008):

Management Goals

- Protect, maintain and enhance the moose population in concert with other components of the ecosystem
- Continue sustained opportunities for subsistence use of moose
- Provide for a sustained harvest and promote moose habitat enhancement by allowing natural fires to alter vegetation.
- Management Objective
- Maintain a post hunting ratio of at least 40 bulls:100 cows in all survey areas

Extent of Federal Public Lands

Federal public lands comprise approximately 24% of Unit 20E; 4% Bureau of Land Management lands and 20% National Park Service lands (see **Unit 20 Map**).

Customary and Traditional Use Determination

Rural residents of Unit 20E, Unit 12 (north of Wrangell-St. Elias National Preserve), Circle, Central, Dot Lake, Healy Lake and Mentasta Lake have a positive customary and traditional use determination for moose in Unit 20E.

Regulatory History

In 2000, the State Board of Game created registration hunt RM865 in Unit 20E (excluding the Middle Fork Fortymile River) and split the moose season into two periods: 24–28 August and 8–17 September, except within the Yukon River drainage, where the season became 24–28 August and 5–25 September. The Board also stipulated that that a hunter could hunt both moose (RM865) and caribou (RC860), but not hold a registration permit for both species at the same time. These actions were in response to increased moose harvest, due to increasing numbers of caribou hunters in most of Unit 20E, and were designed to stabilize the moose harvest to maintain the bull:cow ratio within the management objective (listed above).

In 2002, the State Board of Game reduced the season within the Yukon River drainage to match the season in the remainder of Unit 20E (24–28 August and 8–17 September).

Prior to the 2004–2005 regulatory year, the State Board of Game changed to the present area descriptions (listed above), from the previous area descriptions of “*Unit 20E draining into the Middle Fork of the Fortymile River upstream from the drainage of the North Fork Fortymile River*” and “*Remainder of Unit 20E.*” The seasons and bag limits did not change.

In 2006, the Board identified the entire Unit 20E moose population as being important for providing high levels of human consumptive use under the Intensive Management law (AS 16.05.255[e]-[g]), and applied the intensive management objectives (listed above) to the entire unit. From 2000 to 2005, these intensive management objectives only applied to the moose populations within the drainages of the Fortymile and Ladue rivers.

Biological Background

The ADF&G conducted moose population estimation surveys in southern Unit 20E, within the Tok West and Tok Central survey areas during 1998—2006, using the geospatial population estimator (GSPE) moose survey technique (Ver Hoef 2001, Kellie and DeLong 2006). The data collected were utilized to determine population trends, herd composition in the survey areas and to estimate moose numbers in the entire unit by extrapolation (**Table 1**).

The highest densities of moose have been in a portion of southern Unit 20E, entirely within the Tok West and Tok Central moose survey areas, including the Mosquito Fork Fortymile River drainage downstream from and including Mosquito Flats, the West Fork Fortymile River drainage and the northern Mount Fairplay — lower Dennison Fork Fortymile River areas, where habitat availability and quality are also highest.

The bull:cow ratio remained above 40 bulls:100 cows each year, but varied across the unit. In the most popular hunting areas — Nine Mile Trail, Mitchell’s Ranch, and along the Yukon River and the Taylor Highway — bull populations were noticeably lower, but still remained \geq 40 bulls:100 cows (**Tables 1 and 2**) (Gross 2008; Burch 2006, 2009).

Table 1. Moose population estimates for portions of Unit 20E using GSPE, fall 1998—2009 (Gross 2008; 2010).

Year	Bulls: 100 Cows	Yearling bulls:100 Cows	Calves: 100 Cows	Percent Calves	Total moose observed	Density moose/mi ² (90% CI)	Population estimate (90% CI)
1998 ^a	64	18	19	10	278	0.56	1,086
1998 ^b	59	14	23	14	450	0.62	1,694
1999 ^a	80	16	22	10	365	0.47	901
2000 ^a	60	11	14	8	561	0.58	1,115
2000 ^c	49	11	21	13	347	0.70	1,272
2001 ^a	76	9	14	7	531	0.47	915
2001 ^d	51	6	10	6	624	0.75	2,026
2002 ^a	59	10	25	14	364	0.60	1,166
2002 ^d	71	8	20	10	396	0.63	1,707
2003 ^e	64	9	15	9	355	0.58	1,128
2003 ^d	53	5	11	6	297	0.51	1,379
2004 ^f	61	11	26	14	283	0.59	1,435
2004 ^g	48	11	23	14	233	0.37	802
2005 ^f	55	13	30	16	543	0.73	1,801
2005 ^g	48	8	16	10	344	0.50	1,097
2006 ^f	39	9	37	20	584	0.98	2,398
2006 ^g	46	3	24	14	520	0.45	979
2007 ^f	50	11	30	16	503	0.86	2,098
2007 ^g	46	11	22	13	440	0.62	1,348
2008 ^f	47	11	27	16	509	.83	2040
2008 ^g	72	16	31	16	356	.72	1571
2009 ^f	63	18	34	18	585	1.00	2445
2009 ^g	51	11	25	14	461	0.68	1471

^a Tok West Survey Area, 1,932 mi²) sampled

^b Tok Central Survey Area, 2,750 mi²) sampled

^c Tok Central Survey Area, 1,821 mi²) sampled

^d Tok Central Survey Area, 2,703 mi²) sampled

^e Tok West Survey Area, 1,944 mi²) sampled

^f Tok West Survey Area, 2,452 mi²) sampled

^g Tok Central Survey Area, 2,178 mi²) sampled

Twinning rates in the southern portion of Unit 20E were moderate at 24–30% in 2004, 2005 and 2007, but higher in 2006 at 47% (Gross 2008). These twinning rates indicate that nutritional status is adequate to support an increase in the moose population (Boertje et. al. 2007).

Recent, unpublished data indicates that the moose population is increasing in Unit 20E (Gross 2010).

National Park Service (NPS) staff has periodically conducted moose surveys in the Yukon-Charley Rivers National Preserve, results from which are shown in **Table 2**. In 1997, a population estimation survey in a portion of northern 20E within the Preserve found a density of 0.27 moose/mi² (Burch and Demma 1997). In 1999 and 2003 the NPS surveys , included a 1,200-mi² portion of Unit 20E, and estimated the moose density for the entire survey area at 0.36 moose/mi² in 1999 and 0.26 moose/mi² in 2003 (Burch 2006). All NPS surveys from 1997 to 2009 with portions of the preserve in Units 20E (northern portion), 25B and 25C, were conducted in a designated 3,096 mi² survey area consisting of 555 units along a 30–40 mile

Table 2. Moose survey results for Yukon-Charley Rivers National Preserve, 1997-2009 (Burch, 2006 & 2009).

Year	Bulls per 100 Cows	Calves per 100 Cows	Density moose/mi ²	Population estimate (CI 90%)
1997	60	28	0.27	737
1999	51	36	0.36	979
2003 ⁺	61	25	0.27	835
2006 ⁺	73	33	0.23	726
2009 ⁺	59	26	0.43	1331

⁺ Sightability correction factor of 1.2 applied to Geo Spatial Estimates.

wide corridor of the Yukon River drainage between Eagle and Circle, Alaska, which includes the lower sections of the Charley, Nation and Kandik rivers. Moose densities were 0.23 moose/mi² in 2006 and 0.43 moose/mi² in 2009 (**Table 2**). (Burch, 2006 & 2009).

Analysis of the population survey data in the Preserve, for the survey years between 1997 and 2006, show the moose population has been relatively stable. However, 2009 data indicates that the population has grown, as there were notable increases in the yearling bull:cow ratio, population density and population size compared to 2006 data (**Table 2**). Survey data (1997–2009) indicates that the bull:cow ratios have been well above the State management objective of 30:100 in areas with aerial surveys, and well above the State management objective of 40:100 in all survey areas of Unit 20E (Gross 2008).

Harvest History

Unit 20E

Between 1998 and 2007, the reported number of hunters in Unit 20E averaged 647 per year, with a range of 472–913 (**Table 3**). The reported harvest averaged 140 moose per year, with a range of 95–174 (**Table 4**). Unreported legal harvest is estimated at 0–5 moose per year and illegal harvest is estimated at 5–10 moose per year (Gross 2008).

The harvest amount and the number of hunters were lower in 2004–2005 compared to other years. Much of interior Alaska was covered in a thick blanket of smoke in the fall due to record-setting wildfires. This may have contributed to the fewer number of hunters in the field and reduced moose harvest.

Yukon-Charley Rivers National Preserve — Units 20E, 25B and 25C

Moose hunting in the Preserve occurs primarily along the main rivers; the Yukon, Kandik, Nation and Charley. Federally qualified users who hunt in the Units 25B and 25C portions of the Preserve do so under Federal regulations, but report under a state registration permit. Federally qualified users who hunt in the Unit 20E portion of the Preserve report under State registration permit RM865.

Between 1983 and 2006, the number of hunters increased, however the number of moose harvested remained fairly stable (**Table 5**). Harvest reports indicate that approximately 178 moose were harvested in Unit 20E, 317 moose in Unit 25B and 27 moose in Unit 25C in the Preserve (Burch, 2006). Harvest in Unit 25C is somewhat proportional to the amount of land in the Preserve compared to the other two units, but may also be an indication that the more favorable and/or preferred hunting locations are outside the boundaries of Unit 25C.

Table 3. Unit 20E reported moose hunter residency and success, regulatory years 1998–1999 through 2006–2009 (Gross 2008; 2010).

Regulatory year	Successful hunters				Unsuccessful hunters				Total hunters
	Local ^a res	Non local Res	Non res /Ukwn	Total (%)	Local ^a res	Non local res	Non res /Unkwn	Total (%)	
1998–1999	47	91	12	150 (32)	76	205	39 / 2	322 (68)	472
1999–2000	36	77	17 / 1	131 (23)	98	299	30 / 4	431 (77)	562
2000–2001	36	84	15	135 (26)	98	255	33 / 1	387 (74)	522
2001–2002	33	88	16 / 1	138 (19)	222	323	58 / 4	607 (81)	745
2002–2003	29	119	20 / 1	169 (18)	200	449	92 / 3	744 (82)	913
2003–2004	21	81	26 / 1	129 (16)	143	448	74 / 4	669 (84)	798
2004–2005	20	55	19	94 (19)	102	238	47 / 3	390 (81)	484
2005–2006	25	83	29	137 (22)	129	311	58 / 1	499 (78)	636
2006–2007	27	85	18	130 (19)	131	364	68 / 2	565 (81)	695
2007–2008	25	107	12	144	141	374	90	605	749
2008–2009	26	130	23	179	134	375	81	591	767

^a Residents of Unit 12 and Unit 20E and eastern 20D are considered local residents. Major population centers are Eagle, Chicken, Boundary, Northway, Tetlin, Tok, Tanacross, Slana and Dot Lake.

Table 4. Unit 20E reported moose harvest, regulatory years 1998–1999 through 2008–2009 (Gross 2008; 2010).

Regulatory Year	General and registration				Drawing permits			TOTAL
	M	F	Unk	Total	DM794	DM796	Total	
1998–1999	145	0	5	150	1	10	11	161
1999–2000	127	0	4	131	3	9	12	143
2000–2001	135	0	0	135	2	6	8	143
2001–2002	137	0	1	138	5	3	8	146
2002–2003	169	0	1	170	1	3	4	174
2003–2004	129	0	0	129	0	0	0	129
2004–2005	93	0	1	94	1	0	1	95
2005–2006	137	0	0	137	1	0	1	138
2006–2007	129	1	0	130	0	0	0	130
2007–2008	144	0	0	144	0	0	0	144
2008–2009	176	0	0	176	1	2	3	179

Table 5. Moose hunting information from Yukon-Charley Rivers National Preserve, 1983–2006. (Burch 2006).

Year	Number of Hunters	Number of Reported Moose Harvest	Percent Success
1983	59	21	36
1984	46	19	41
1985	41	19	46
1986	48	13	27
1987	57	14	25
1988	66	17	26
1989	61	17	28
1990	81	35	43
1991	90	31	34
1992	100	12	12
1993	93	36	39
1994	126	32	25
1995	99	33	33
1996	94	24	26
1997	100	24	24
1998	80	37	46
1999	116	41	35
2000	102	38	37
2001	145	25	17
2002	129	34	26
2003	168	20	12
2004	104	26	25
2005	87	24	28
2006	83	29	35
Total	2,175	621	n/a
Mean	91	26	30
1 st 10-yr mean	65	20	32
last 10-yr mean	110	29	28
Last 5-yr mean	114	27	25

Effects of the Proposal

If the proposal were adopted, the fall season dates of August 20–September 30 would become uniform for all of Unit 20E which would allow for a single area description in regulation.

Federally qualified subsistence users would be provided an additional 22 days of harvest opportunity in the affected portion of Unit 20E (outside the Preserve), with more days to hunt without competition from non-subsistence users. However, Federally qualified subsistence users would continue to need separate permits; State registration permit RM865 in Unit 20E on Preserve lands, and a State (green) harvest ticket on Bureau of Land Management lands. Permit RM865 has a stipulation that hunters may not possess State permit RC860, for hunting caribou in Unit 20E at the same time as RM865 (see Regulatory History). Federally qualified subsistence users are allowed to hunt caribou and moose concurrently on Federal lands outside the Preserve only when the State moose season is closed September 1–7.

There would likely be an increase in the number of moose harvested, due to the season extending into the rut, when moose are more vulnerable, and because this is a road-accessible moose population. This vulnerability necessitates improved harvest reporting to accurately determine the amount of harvest and to closely monitor the population for conservation purposes. Note: Reporting compliance for RM865 has been much greater than for State green harvest tickets in Unit 20E (Gross 2010, pers. comm.).

Other Alternative Considered

One alternative considered was to support the proposal with modification, by breaking out the proposed single, all encompassing Unit 20E area description into two area descriptions to match State regulations for purposes of permit administration and harvest reporting. In the State's remainder portion of Unit 20E, hunters may not possess registration permits for caribou (RC860) and moose (RM865) at the same time, which means they can only hunt for one species at a time (see Regulatory History). While it is unclear whether permit administration has been a problem in the past under current regulations, it may now be necessary to make permit and reporting requirements more explicit in Federal regulations.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-101.

Justification

The fall season dates would become uniform in all of Unit 20E for Federally qualified subsistence users.

Federally qualified subsistence users would be provided an additional 22 days of harvest opportunity in the affected portion of Unit 20E (outside the Preserve), with more days to hunt without competition from non-subsistence users.

The population appears healthy enough to allow for a few more bulls to be harvested.

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Ver Hoef, J. M. 2001. Predicting finite populations from spatially correlated data. 2000 Proceedings of the Section on Statistics and the Environment of the American Statistical Association. pp. 93–98.

WP10-102 Executive Summary	
General Description	<p>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></p>
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	
Written Public Comments	

**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>
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<i>Unit 12 remainder—1 bull</i>	<i>Sept. 1– Sept. 20</i>
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<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>
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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>
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<i>Unit 12 remainder—1 bull</i>	<i>Sept. 1– Sept. 20</i>
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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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ADF&G 2009a. Caribou Annual Survey and Inventory. Federal Aid Annual Performance Report Grant W-33-7, Anchorage, AK.

ADF& G 2009b. Harvest ticket database. Microcomputer database, updated January 6, 2010.

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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		
	2002-2003	2552	58%	14%	349	2	12	363		
	2003-2004	2598	56%	12%	318	2	1	321		
513/514 ^b Federal	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		
	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		
RC412 ^c Federal	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).

Tobey, B. 2003. Units 13 and 14B caribou management report. Pages 108–124 in C. Healy, editor. Caribou management report of survey and inventory activities 1 July 2000–30 June 2002. Alaska Department of Fish and Game. Juneau, Alaska.

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USFWS. 2009. Federal registration permit database. Microcomputer database, updated January 6, 2010.

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			
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 (Risdahl 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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WP10-104 Executive Summary

General Description	<p>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></p>
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	
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'maey 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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WP10-105 Executive Summary	
General Description	<p>Proposal WP10-105 requests the Federal Fortymile Caribou Hunt Manager be given discretionary inseason hunt management authority. This includes the authority to modify or restrict harvest limits, season dates, methods, means and access to hunt the Fortymile Caribou Herd (FCH) in Units 20E and 25C. <i>Submitted by Terry Brigner on behalf of the Upper Tanana/40 Mile Fish and Game Advisory Committee in conjunction with the Fortymile Caribou Herd working group</i></p>
Proposed Regulation	<p>Unit 20E—Caribou</p> <p><i>Unit 20E— 1 caribou by joint State-Federal registration permit only. Up to 900 caribou may be taken under a State-Federal harvest quota. During the winter season, area closures or hunt restrictions may be announced when Nelchina caribou are present in a mix of more than 1 Nelchina caribou to 15 Fortymile caribou, except when the number of caribou present is low enough that less than 50 Nelchina caribou will be harvested regardless of the mixing ration for the two herds</i></p> <p style="text-align: right;"><i>Aug. 10–Sept. 30 Nov. 1–Feb. 28</i></p> <p style="text-align: right;"><i>The season closures will be announced by the BLM Eastern Interior Field Office Manager after consultation with the NPS and ADF&G.</i></p> <p>Unit 25C—Caribou remainder</p> <p><i>Unit 25C remainder—1 caribou by joint State-Federal registration permit only. Up to 600 caribou may be taken under a State-Federal harvest quota.</i></p> <p style="text-align: right;"><i>Aug. 10–Sept. 30 Nov. 1–Feb. 28</i></p> <p style="text-align: right;"><i>The season closures will be announced by BLM Eastern Interior Field Office Manager after consultation with the NPS and ADF&G</i></p>
OSM Preliminary Conclusion	<p>Support Proposal WP10-105 with modification to change the harvest limit from one caribou to one bull for the fall hunt and to limit the number of caribou harvested in the first 19 days of the Federal subsistence fall hunt to 100 animals. In conjunction with these regulatory changes, it is also recommended that a letter of delegation be issued allowing the Federal subsistence manager the authority to modify or restrict bag limits, season dates, methods and means. The closure authority will be taken out of regulation because that authority is included in the letter of delegation. The access portion of the proposal is not addressed because the Federal Subsistence Board does not have the authority to restrict access. Access to Federal lands can only be addressed by the Federal agencies that manage the lands.</p>

continued on next page

P10-105 Executive Summary (continued)	
Eastern Interior Regional Council Recommendation	
Interagency Staff Committee Comments	
ADF&G Comments	
Written Public Comments	None

DRAFT STAFF ANALYSIS WP10-105

ISSUES

Proposal WP10-105 submitted by Terry Brigner on behalf of the Upper Tanana/40 Mile Fish and Game Advisory Committee in conjunction with the Fortymile Caribou Herd (FCH) working group requests the Federal Fortymile Caribou Hunt Manager be given discretionary inseason hunt management authority. This includes the authority to modify or restrict harvest limits, season dates, methods, means and access to hunt the FCH in Units 20E and 25C.

DISCUSSION

Currently, there is a similar wildlife proposal (Proposal 14) submitted to the Alaska Board of Game (BOG) requesting harvest changes and limits to prevent excessive harvest of the FCH when the herd is migrating past major roads. Both proposals were submitted with the intent of aligning State and Federal hunting regulations. Since 1995 State and Federal managers in Units 20E and a portion of 25C (east and south of Preacher Creek) have managed the fall and winter FCH hunts using a joint Federal-State registration permit. One permit is used for all hunts and harvest reports are returned to ADF&G. Federally qualified subsistence users can begin hunting on Federal public lands 15–30 days before other hunters. A short reporting period allows State and Federal managers to closely monitor the State and Federal season and determine when the harvest quota are met.

The proposal states that the Federal Fortymile Caribou Hunt Manager should be given the authority to modify or restrict bag limits, season dates, methods and means, including access and weapons. The Federal Fortymile Caribou Hunt Manager is the Bureau of Land Management's eastern interior field office manager. A letter of delegation not the regulatory process is the vehicle for granting management authority. The authority to manage the hunt would be granted with a letter of delegation from the Federal Subsistence Board. Under 36 CFR 242.10 (d)(6) and 50 CFR 100.10 (d)(6) the Federal Subsistence Board has the authority to delegate authority to modify or restrict bag limits, season dates, methods and means. The proponent refers to units 20B, 20D, 20E and 25C in the proposal. There is no Federal open season in 20B, and 20D, therefore, any delegated authority would apply only to units 20E and 25C.

The Federal subsistence manager and the Federal Subsistence Board cannot regulate access to lands that are used for subsistence hunting. Access to Federal lands can only be addressed by the Federal agencies that manage the lands.

Existing Federal Regulation

Unit 20E—Caribou

Unit 20E— 1 caribou by joint State-Federal registration permit only. Up to 900 caribou may be taken under a State-Federal harvest quota. During the winter season, area closures or hunt restrictions may be announced when Nelchina caribou are present in a mix of more than 1 Nelchina caribou to 15 Fortymile caribou, except when the number of caribou present is low enough that less than 50 Nelchina caribou will be harvested regardless of the mixing ration for the two herds.

*Aug. 10–Sept. 30
Nov. 1–Feb. 28*

The season closures will be announced by the BLM Eastern Interior Field Office Manager after consultation with the NPS and ADF&G.

Unit 25C remainder—Caribou

Unit 25C remainder—1 caribou by joint State-Federal registration permit only. Up to 600 caribou may be taken under a State-Federal harvest quota.

*Aug. 10–Sept. 20
Nov. 1–Feb. 28*

The season closures will be announced by the BLM Eastern Interior Field Office Manager after consultation with the NPS and ADF&G.

Proposed Federal Regulation

Unit 20E—Caribou

Unit 20E— 1 caribou by joint State-Federal registration permit only. Up to 900 caribou may be taken under a State-Federal harvest quota. During the winter season, area closures or hunt restrictions may be announced when Nelchina caribou are present in a mix of more than 1 Nelchina caribou to 15 Fortymile caribou, except when the number of caribou present is low enough that less than 50 Nelchina caribou will be harvested regardless of the mixing ration for the two herds

*Aug. 10–Sept. 30
Nov. 1–Feb. 28*

The season closures will be announced by the BLM Eastern Interior Field Office Manager after consultation with the NPS and ADF&G.

Unit 25C—Caribou remainder

Unit 25C remainder—1 caribou by joint State-Federal registration permit only. Up to 600 caribou may be taken under a State-Federal harvest quota.

*Aug. 10–Sept. 30
Nov. 1–Feb. 28*

The season closures will be announced by BLM Eastern Interior Field Office Manager after consultation with the NPS and ADF&G

Existing State Regulation

Unit 20E—Caribou

*Residents Only: 1 caribou (RC860)
Or 1 caribou (RC867)
Nonresidents Only: 1 bull (RC860)*

*Aug. 10–Sept. 30
Dec. 1–Feb. 28
Aug. 10–Sept. 20*

Unit 25C remainder—Caribou

*Residents Only: 1 caribou (RC860)
Or 1 caribou (RC867)
Nonresidents: 1 bull (RC860)*

*Aug. 10–Sept. 30
Dec. 1–Feb. 28
Aug. 10–Sept. 20*

Extent of Federal Public Lands

Federal public lands comprise approximately 24% of Unit 20E and consist of 4% Fortymile River Corridor managed by the Bureau of Land Management and 20% Yukon-Charley Rivers National Preserve managed by the National Park Service.

Federal public lands comprise approximately 74% of Unit 25C and consists of 64% Steese National Conservation Area managed by the Bureau of Land Management 9% Yukon Charley Rivers National Preserve managed by the National Park Service and 1% Yukon Flats National Wildlife Refuge managed by US Wildlife Service (**Unit 20 and 25 Map**).

Customary and Traditional Use Determinations

Rural residents of Units 12 (north of Wrangell-St. Elias National Preserve), 20D and 20E have a positive customary and traditional use determination for caribou in Unit 20E. There has not been a customary and traditional determination made for caribou in Unit 25C, therefore, all rural residents are eligible to harvest caribou in Unit 25C.

Regulatory History

The FCH is an international herd shared between Alaska and Yukon, Canada. It is an important herd for consumptive and nonconsumptive uses in Interior Alaska and southern Yukon. The FCH historically provided much of the food needed by residents within its range. Because of the importance of the FCH, increasing competition among hunters and complex harvest regulations a planning team was established to develop a management plan. The original *Fortymile Caribou Herd Harvest Plan* was completed in October 1995 by the FCH Planning Team. The original plan provided guidance from 1995 through 2000 for governing overall herd harvest levels, with the goal of restoring FCH to its former range and abundance. In accordance with the *Fortymile Caribou Herd Harvest Plan*, the Federal Subsistence Board, in cooperation with ADF&G, established a joint quota for Units 20E and 25C of “up to 150 bulls” beginning in regulatory year (RY) 1996–1997. In 2001, a new Harvest Plan was developed for 2001–2006. This plan increased the harvest quota from 150 bulls per year to 850 caribou with up to 25% cows until the herd reaches 50,000 caribou (ADF&G 1999). This annual harvest quota was maintained when the current 2006–2012 Harvest Plan was adopted (ADF&G 2006). The intent of the 2006–2012 Harvest Plan is to maintain an average annual harvest quota of 850 caribou, but allow up to 15% variation in a single year. If the quota is either not reached or exceeded in one year, the harvest allocation may be adjusted the following year to compensate. Currently, 75% of the harvest quota is allocated to the fall hunt (RC860) and 25% to the winter hunt (RC867).

In the past three years, 2007–2009, the State has issued multiple Emergency Orders to close hunting of the FCH due to high harvest near the road system. Several of these Emergency Orders have been followed by Federal hunt closers. The State and Federal registration permit hunts for the FCH is divided into 3 zones. In 2007, the State lands near the Taylor Highway (zone 3) were closed due to high harvest in the first four days of the fall hunt (ADF&G 2007). By August 16, 2008, State lands accessible from the Steese Highway and Chena Hot Springs Road (zone 1) and the area near the Taylor Highway (zone 3) were closed to hunting due to high harvests in the first few day of the hunting season (ADF&G 2008a, ADF&G 2008b). The closure was followed by a closure of the Federal public lands on September 22 (BLM 2009a). More recently, harvest was unexpectedly high in zone 1 and 3 during the first 3 days of the 2009 fall hunt. An emergency order was issued and State lands in both zones were closed to hunting on August, 12 (ADF&G 2009a). The Federal public lands were closed August 21, 2009 (BLM 2009b). The central portion of the FCH range (zone 2) was closed September 18 (ADF&G 2009b). Due to the

high harvest during the first 3 days of the 2009 fall hunt near the Steese and Taylor Highway, the annual harvest quota of 850 caribou was attained and no winter harvest of FCH was allowed (ADF&G 2009c) on State lands. A winter hunt on Federal public lands did occur in 2009.

Current events involving Species

The FCH working group, a joint coalition of Eagle, Central, Delta, Upper Tanana-Fortymile and Fairbanks Fish and Game Advisory Committees and the Eastern Interior Regional Advisory Council, developed a BOG proposal concerning the FCH to be considered at the February 2010 meeting. The intent of the proposal was to improve the field conditions caused by overcrowding of hunters and decrease the large harvest of FCH near the Steese and Taylor Highways. The BOG proposal requests a reduction in the harvest limit to one bull for the State FCH fall hunt (Aug. 10–Sept. 30) and requested the State fall hunt be delayed until September 29 (**Appendix I**). The working group also made a recommendation to be considered in conjunction with WP10-105 of reducing the Federal subsistence harvest limit to one bull for the fall hunt (August 10–September 29) aligning State and Federal hunting regulations for the FCH. They further requested the maximum allowable harvested before August 29 to not exceed 100 bull caribou.

Biological Background

Since implementation of the *Fortymile Caribou Herd Harvest Plan* in 1995, herd size has increased significantly. The FCH doubled in size between RY1995 and RY2002, with annual growth rates between 4 and 14% (Gross 2007). This increase was due to adult and calf survival, reduced overall predation on the herd, increases in growth rates, favorable climate, good range conditions and reduced harvest. In RY2004 and RY2005 the herd began to experience a decline likely due to poor climate conditions and wolf predation on both adults and calves (**Table 1**). Good survival rates among calves since RY2006 allowed for a 19% increase in the estimated population. Most recent herd composition surveys show a decrease in the bull:cow ratio (37 bulls:100 cows) and increase in the calf:cow ratio (33 calves:100 cows) in RY2008.

Harvest History

Under both the 2001–2006 and 2006–2012 Harvest Plans, if a herd growth rate of approximately 10% is achieved in a particular year the harvest objective for that hunting season is 2–3% of the herd (ADF&G 1999 & 2006). When that growth rate is not achieved the harvest objective is reduced to the level of the previous year. Because the FCH grew at less than 10% per year and showed some declines after 2003, the annual harvest quota has remained at 850 animals except for RY2002, when the quota was set before an accurate population estimate was made. For RY2002 the quota was set at 950 caribou. Since RY2002 the total harvest has ranged from 741 to 860 caribou (**Table 2**). The cooperative management of the working group has allowed the harvest to stay within the harvest quota providing for continued conservation of the herd. Guidance provided by the 2006–2012 Harvest Plan ensures harvest quotas will remain conservative through 2012 allowing for continued herd growth and a stable bull:cow ratio (ADF&G 2006).

Effects of the Proposal

A letter of delegated authority to the inseason Federal Manager would provide the ability to work in conjunction with the State to reduce heavy roadside harvest. Since submission of this proposal the FCH working group has developed specific recommendations that improve field conditions cause by overcrowding of hunters along the road system and align State and Federal management with the *Fortymile Caribou Herd Harvest Plan*. In the proposal the proponent states that the recommendations of the working group should be adopted. Therefore the recommendations of the FCH working group are

Table 1. Fortymile caribou fall composition counts and estimated herd size, regulatory years 2001–2002 through 2008–2009 (modified from Gross 2007 and Gross 2009)

Regulatory Year	Bulls: 100 Cows	Calves: 100 Cows	Calves (%)	Cows (%)	Total Bulls (%)	Composition Sample Size	Estimate of Herd Size
2001–2002	49	38	20	53	27	6878	40,800 ^a
2002–2003	43	39	21	55	24	6088	44,100 ^a
2003–2004	50	17	10	60	30	6296	42,300 ^a
2004–2005	45	28	16	59	25	4157	39,700 ^a
2005–2006	51	18	10	59	30	2350	39,000 ^a
2006–2007	43	34	19	57	24	4995	41,000 ^a
2007–2008	36	37	22	58	21	5228	42,000 ^a
2008–2009	37	33	19	59	22	4119	46,509 ^{ab}

^a Herd estimates were derived from population models using data from summer census counts, fall composition counts, spring parturition surveys and monthly mortality surveys of collared caribou. Population estimate for 15 May of current regulatory year.

^b Preliminary data.

Table 2. Reported Fortymile caribou harvest by joint State-Federal registration permit, regulatory years 2002–2003 through 2008–2009^a (modified from Gross 2007)

Regulatory Year	Permits Issued	Total Hunters	Bulls (%)	Cows (%)	Unknown	Total Harvest		
2002–2003 ^b	4155	2620	663	77	185	22	12	860
2003–2004 ^b	5718	3440	612	77	181	23	6	799
2004–2005 ^b	4217	2497	592	70	243	29	11	846
2005–2006 ^b	4438	2483	556	75	182	25	3	741
2006–2007 ^b	3975	2602	601	71	247	29	4	852
2007–2008	4576	3182	746	74	262	26	4	1012
2008–2009	3582	2493	679	76	217	24	16	912
2009–2010	2764	1999	876	82	192	18	12	1080

^a Data from RC860, R3582C863, RC865, RC866, and RC867 harvest reports.

^b Includes RC860 and RC2867.

considered in conjunction with this proposal. A reduced harvest limit of 1 bull will lessen the hunting pressure on FCH and help boost population growth. A reduced harvest would be consistent with the *Fortymile Caribou Herd Harvest Plan's* primary goal of promoting continued growth of the FCH. Furthermore, the reduced harvest limit would align State and Federal hunting regulations for the fall FCH hunt. Capping the early harvest at 100 animals would spread the harvest over time, ensuring that the harvest quota is not filled before the State fall hunt begins.

OSM PRELIMINARY CONCLUSION

Support Proposal WP10-105 **with modification** to change the harvest limit from one caribou to one bull for the fall hunt and to limit the number of caribou harvested in the first 19 days of the Federal subsistence fall hunt to 100 animals. In conjunction with these regulatory changes, it is also recommended that a letter of delegation be issued allowing the Federal subsistence manager the authority to modify or restrict bag limits, season dates, methods and means. The closure authority will be taken out of regulation because that authority is included in the letter of delegation. The access portion of the proposal is not

addressed because the Federal Subsistence Board does not have the authority to restrict access. Access to Federal lands can only be addressed by the Federal agencies that manage the lands.

The modified regulation would read:

Unit 20E—Caribou

*Unit 20E— 1 caribou by joint State-Federal registration permit only. Aug. 10–Sept. 30
Up to 900 caribou may be taken under a State-Federal harvest quota. Nov. 1–Feb. 28*

During the fall season the harvest will be restricted to 1 bull and the harvest will not exceed 100 caribou between August 10 and August 29. During the winter season, area closures or hunt restrictions may be announced when Nelchina caribou are present in a mix of more than 1 Nelchina caribou to 15 Forty mile caribou, except when the number of caribou present is low enough that less than 50 Nelchina caribou will be harvested regardless of the mixing ration for the two herds *The season closures will be announced by the BLM Eastern Interior Field Office Manager after consultation with the NPS and ADF&G.*

Unit 25C—Caribou remainder

*Unit 25C remainder—1 caribou by joint State-Federal registration permit only. Aug. 10–Sept. 30
During the fall season the harvest will be restricted to 1 bull and the harvest will not exceed 100 caribou between August 10 and August 29. Up to 600 caribou may be taken under a State-Federal harvest quota. Nov. 1–Feb. 28*

The season closures will be announced by the BLM Eastern Interior Field Office Manager after consultation with the NPS and ADF&G.

Justification

A letter of delegated authority to the inseason Federal Manager would provide the ability to work in conjunction with the State to reduce heavy roadside harvest. Current FCH population data and composition surveys suggest that the FCH population is steady but not increasing. A more conservative harvest limit will lessen the hunting pressure on this caribou herd and help boost population growth. All necessary safeguards for monitoring inseason harvest of FCH will be maintained. Total Federal-State harvest levels will continue to comply with the population and harvest objectives in the 2006–2012 *Fortymile Caribou Herd Harvest Plan*. Season closures and harvest limits would continue to be coordinated between State and Federal managers. A limit of 100 caribou would be placed on the first 19 days of the Federal subsistence fall hunt spreading the harvest over time ensuring the overall harvest quota is not taken before the State fall hunt begins.

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Appendix I: Proposal Submitted to the Alaska Board of Game concerning harvest of the Fortymile Caribou Herd.

**ALASKA BOARD OF FISHERIES AND ALASKA BOARD OF GAME
REGULATION PROPOSAL FORM
PO BOX 115526, JUNEAU, ALASKA 99811-5526**

<p>BOARD OF FISHERIES REGULATIONS</p> <p><input type="checkbox"/> Fishing Area</p> <p><input type="checkbox"/> Subsistence <input type="checkbox"/> Personal Use</p> <p><input type="checkbox"/> Sport <input type="checkbox"/> Commercial</p> <p>JOINT BOARD REGULATIONS</p> <p><input type="checkbox"/> Advisory Committee <input type="checkbox"/> Regional Council <input type="checkbox"/> Rural</p>	<p>BOARD OF GAME REGULATIONS</p> <p>Game Management Unit (GMU) <u>20B, D, E 25C</u></p> <p><input checked="" type="checkbox"/> Hunting <input type="checkbox"/> Trapping</p> <p><input type="checkbox"/> Subsistence <input type="checkbox"/> Other</p> <hr/> <p><input checked="" type="checkbox"/> Resident</p> <p><input checked="" type="checkbox"/> Nonresident</p>
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Please answer all questions to the best of your ability. All answers will be printed in the proposal packets along with the proposer's name (address and phone numbers will not be published). Use separate forms for each proposal.

1. Alaska Administrative Code Number 5 AAC 85.025 **Regulation Book Page No.** _____

2. What is the problem you would like the Board to address?

Changes are needed to the 2006-2012 Fortymile Caribou Herd Harvest Plan (plan) to improve season openings and closings for the fall hunt and improve field hunting conditions caused by overcrowding and hunting of large groups of caribou close to the road systems. The recent short duration of the fall hunt near the Steese and Taylor Highways has resulted in hunting conditions that the plan (approved by the Board of Game and the Federal Subsistence Board) directs the Department to avoid. The approved plan should be changed only as necessary to clarify the Board's intent for the Department's management strategy. The Department should manage more conservatively within the options available in the plan.

Early hunt closures for the Fortymile Caribou herd have become common place in the past 5 years, with seasons often lasting less than 4 days. In addition, the harvest has exceeded the annual quota set in the plan on several occasions. This proposal should help the harvest management and provide hunters a longer fall season.

The primary goal for the Fortymile Herd is herd growth. The annual quota in the plan is set at a conservative level to achieve this goal. Overharvest will slow potential growth.

Harvest management is difficult during early August when vegetative cover, herd dispersal and segregation of bulls from cows (only cows are radio collared) makes herd monitoring difficult. In areas near the road systems (Zone 1, accessible from the Steese Highway and Zone 3, accessible from the Taylor Highway) it is critical to assess caribou numbers to accurately predict harvest to ensure quotas are not exceeded. During fall 2009, harvest management was ineffective during early August because of the aforementioned factors, which resulted in the entire annual quota being taken in only 3 days in Zones 1 and 3. This caused the cancellation of the winter season. The plan is not due for revision until 2012, and we need to regain control of the harvest before 2012.

The best solution for managing for a longer season is to begin the season later in August when caribou are not scattered in smaller groups. Radio tracking the movements of the herd will be more effective.

3. What will happen if this problem is not solved?

Hunt closures by Emergency Order will remain common place; the risk of exceeding the harvest quota will remain high, which could affect herd growth; and seasons could continue to last only a few days or be canceled, bring about the loss of opportunity. Hunters will be subject to field conditions that the approved plan directs the Department to avoid. The Fortymile Caribou Herd harvest will lose its almost unique ability to provide joint use of permits and management structure for both state and federal hunts.

4. What solution do you prefer? In other words, if the Board adopted your solution, what would the new regulation say?

Under discretionary permit hunt conditions and procedures 5AAC 92.052(7), (10), (12), (17), and (21), the Department shall implement the following changes to the Fortymile Registration Hunt (RC860):

In Zone 1 (portions of Units 20B and 25C accessible from the Steese Highway and Chena Hot Springs Road) and Zone 3 (portions of Unit 20E accessible from the Taylor Highway)

Residents: shorten the season to Aug. 29 - Sept. 30 from Aug 10 - Sept. 30, and change the bag limit from one caribou to one bull.

Nonresidents: shorten the season to Aug. 29 - Sept. 20 from Aug 10 - Sept. 20. The bag limit will remain one bull.

In Zone 2, the roadless area between the Steese and Taylor Highways in parts of Units 20B, 20D, 20E and 25C.

Residents and Nonresidents: The season will remain Aug 10 - Sept. 30 for Residents and Aug. 10 - Sept 20 for Nonresidents, the resident bag limit will be changed from one caribou to one bull, the nonresident bag limit will remain one bull.

In addition, the Department shall implement temporary closures and weapons restrictions in specific areas where harvest management problems occur and to reduce heavy roadside harvest. Furthermore, under the Fortymile Caribou seasons in the Hunting Regulations Booklet, wording should be added stating "Hunt subject to delayed opening, weapons restrictions or cancellation on short notice. Call Fortymile Hotline (267-2310) before departing for the field."

The Board, Advisory Committees, and hunters need full disclosure on the effects of each requested action. To answer the concern of state hunters who believe that federally qualified hunters may take the full fall quota of 480 caribou before the state season opens, the coalition (which has three members on the Eastern Interior Regional Advisory Council - EIRAC) recommends using the place-holder federal proposal WP10-105 to ask for a maximum number of caribou "to be announced" before the season, but not to exceed 100 caribou, that can be taken by federally qualified hunters on federal land between August 10 and August 29. Also they will ask the federal board to consider a bulls only season in the fall so that the federal and state hunts can continue a joint permit. The fall state hunt quota would provide approximately 400 caribou for Zones 1 and 3.

5. Does your proposal address improving the quality of the resource harvested or products produced? If so, how?

Yes. The risk of over harvesting in August will be reduced when the herd is often concentrated nears roads and harvest management is difficult as mentioned in Section 1. By maintaining harvest levels within the quota, the goal of herd growth will more likely be achieved. Opening the hunting season later in August, when the herd is generally less concentrated near the roads, should allow for more effective harvest management and longer, more predictable seasons, with fewer cancellations. August 29 was a date picked deliberately to reduce hunting pressure and thereby disburse the harvest over time.

Minimal changes are being suggested because the plan is still in effect, and is for the most part working successfully. When the plan is revisited in 2012, it is the desire of the coalition to retain the parts of the plan that are successfully working such as the joint federal-state permits and the fall and winter zone quotas.

6. Solutions to difficult problems benefit some people and hurt others:

A. Who is likely to benefit if your solution is adopted?

All users should benefit through effective harvest management will afford better hunting conditions and conservation of the herd. Fewer early season closures and cancelations will allow for more predictable seasons and additional opportunity to hunt Fortymile caribou. Alaskan hunters who would both like to harvest a caribou close to the road system and still have reasonable access and good hunting conditions will benefit. A bulls only bag limit in the fall will reduce the "flock shooting" that has become prevalent and should result in a decrease in wounding loss. The accidental cow loss will probably be less than the wounding loss now experienced with the "flock shooting."

B. Who is likely to suffer if your solution is adopted?

Those who will suffer could be people who have traditionally hunted Fortymile caribou in mid August and hunters who prefer to harvest cows during the fall hunt. Others who could suffer are those who might have to choose between going caribou hunting and moose hunting.

7. List any other solutions you considered and why you rejected them.

Nonmotorized hunts (walk-in); different season dates and/or shooting hours; road and/or vehicle restrictions; weapons restrictions; no-shoot road corridors. (All were rejected for various reasons

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including eliminating user groups, not a solution that would work with our joint management agreement with Federal subsistence; unenforceable.

Submitted By: Joint Coalition of Eagle, Central, Delta, Upper Tanana-Fortymile, Fairbanks
Name / Signature Advisory Committees and Eastern Interior Regional Advisory Council (Federal)
Individual or Group

Contact ADF&G 1300 College Road Fairbanks AK 99701
Address **City, State** **ZIP Code**

459-7345
Home Phone **Work Phone** **Email**

WP10-27 Executive Summary	
General Description	<p>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.</p> <p><i>Submitted by the Paxson Fish and Game Advisory Committee</i></p>
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	
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

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

<i>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.</i>	<i>Aug. 10–Sept. 30 Oct. 21–Mar. 31</i>
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*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.

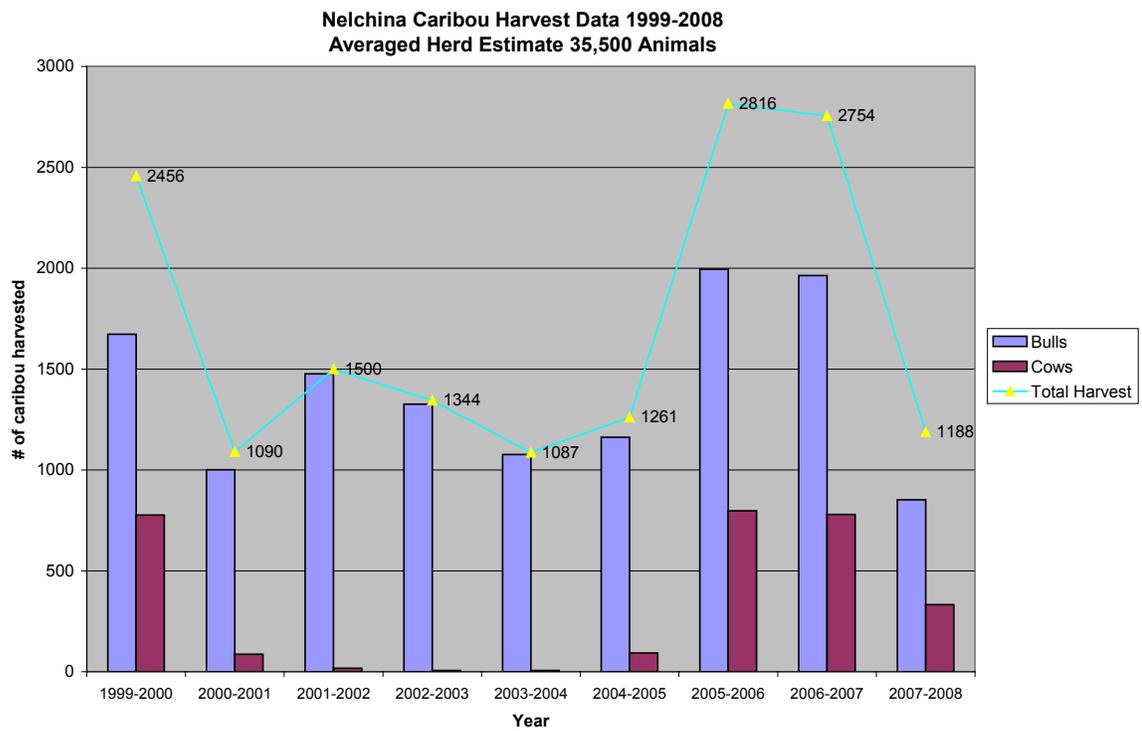


Figure 1. Nelchina Caribou Harvest Data (1999-2008) by sex of harvested animal and total harvest of all animals.

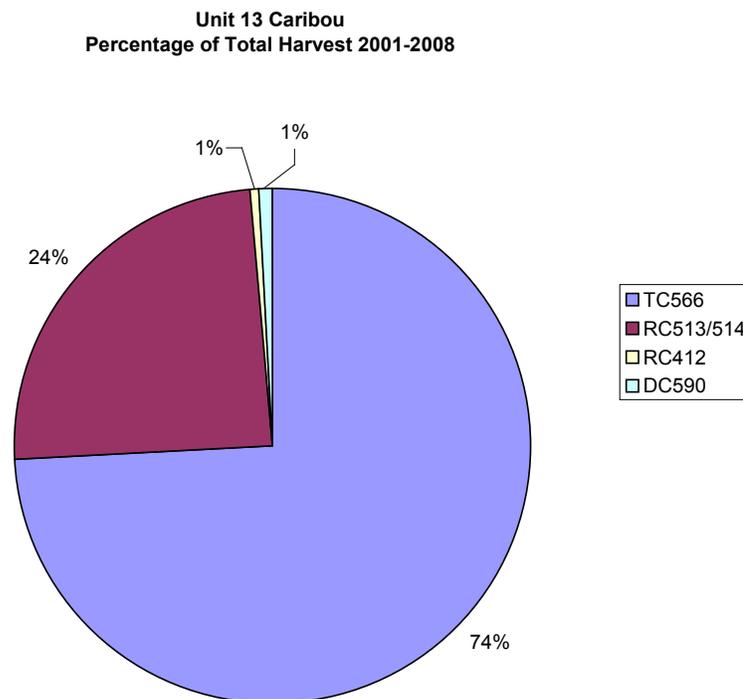


Figure 2. Unit 13, Percentage of Total Harvest by State and Federal Hunts, 2001-2008.

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

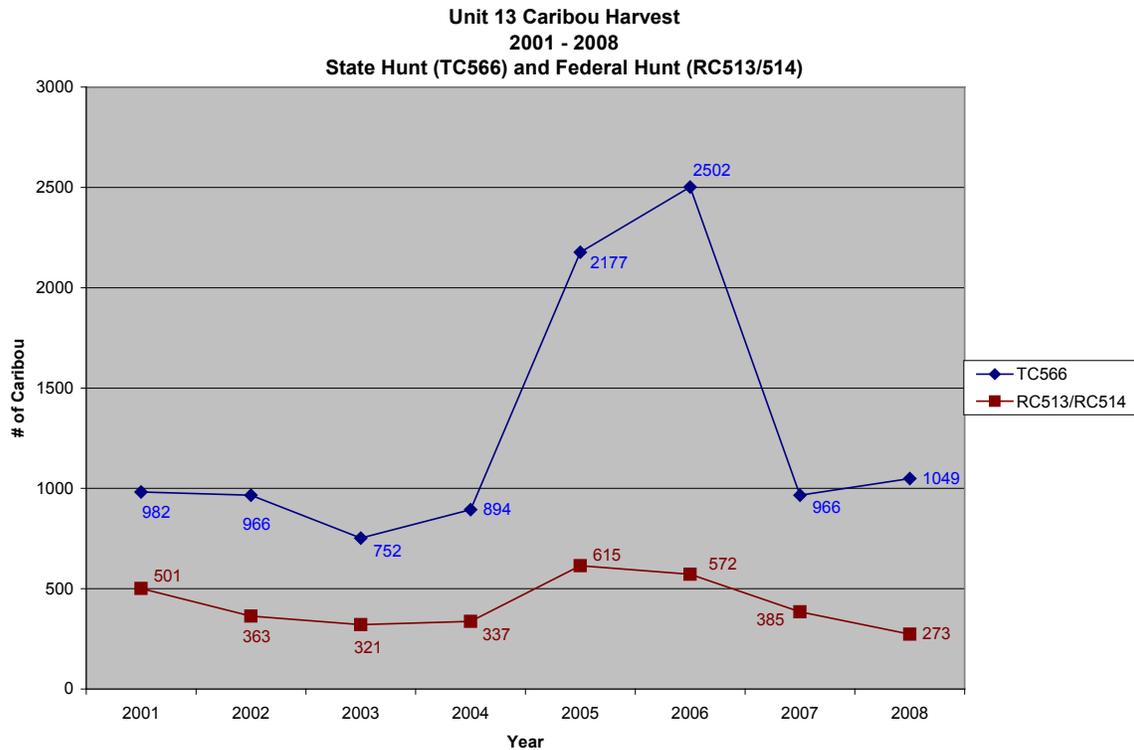


Figure 3. Unit 13, Harvest by predominate State and Federal Hunts (TC566, RC513/514), 2001-2008.

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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**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

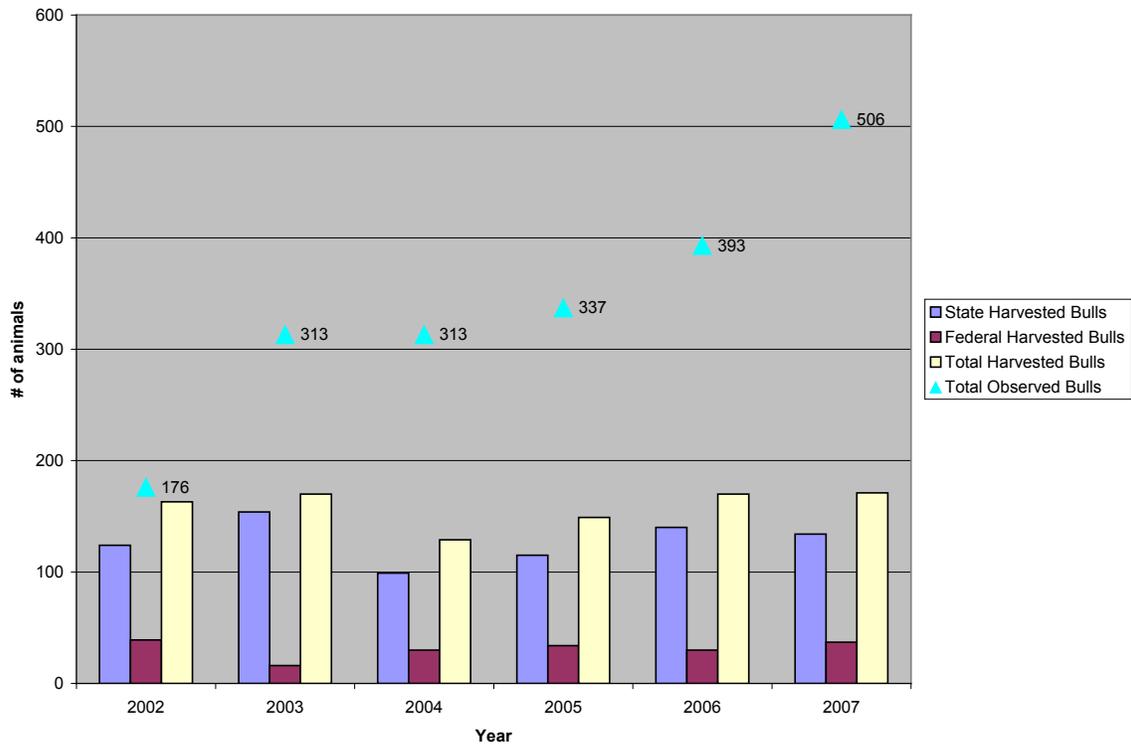


Figure 1. Unit 13B Bull Moose Harvest Data (2002-2007) and total number of bulls observed for a portion of Unit 13B. (Total observed bull data courtesy of Schwanke 2009, pers. comm.).

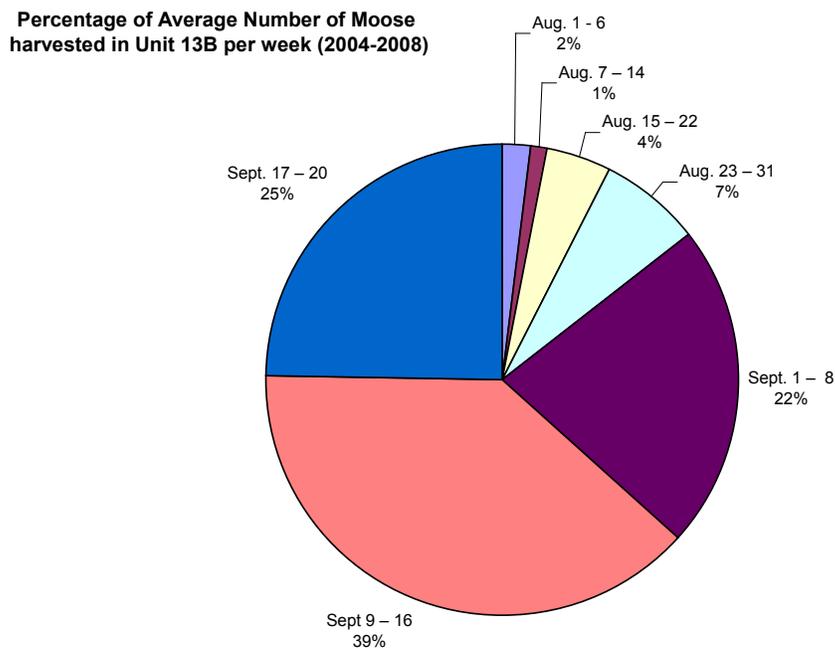


Figure 2. Unit 13B Average Moose Harvest per week (2004-2008).

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 and length of the season reducing 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 and length of the season to August 20 to September 30 would negatively affect Federally qualified subsistence users by reducing the season 10 days compared to the State harvest system. 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 caveat.

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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).

WP10-38 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	
Written Public Comments	

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 2007/08, 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 194 wolves taken in Unit 11 during regulatory years 1999/2000 to 2007/08, 19 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							

Unit 12

From regulatory years 1999/2000 to 2007/08, 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 376 wolves taken in Unit 12 during regulatory years 1999/2000 to 2007/08, 37 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

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

Regulatory	Reported Total	Shot Aug.-Oct. & April	Method of take for total harvest from Unit 12				
Year	Harvest	Harvest	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							

31 and April 1-30, thereby shortening the existing season by 113 days. Between regulatory years 1999/2000 and 2007/08, in both Unit 11 and Unit 12, 10% of the reported wolf harvest occurred in the months 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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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	

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.*

Biological report from Yukon Flats Refuge, February 24, 2010

Wolf Study:

In November 2008, the Yukon Flats Refuge and Alaska Department of Fish and Game initiated a study to investigate the kill rate of wolves on moose. Based on previous studies in Alaska, there is an expectation that the kill rate is reduced in low density moose populations (i.e., wolves take fewer moose), but this has not been investigated. VHF collars were deployed on wolves in the first year, and daily tracking was conducted with small Supercub type airplanes in February and March. During the 59 days of February and March, 2009, wolves in the study packs removed an estimated 38 moose (95% CI: 21-54). Assuming constancy in the kill rate, wolves in the study packs removed an estimated 118 moose (95% CI: 68-168) over the 184 days of winter (October 15-April 15).

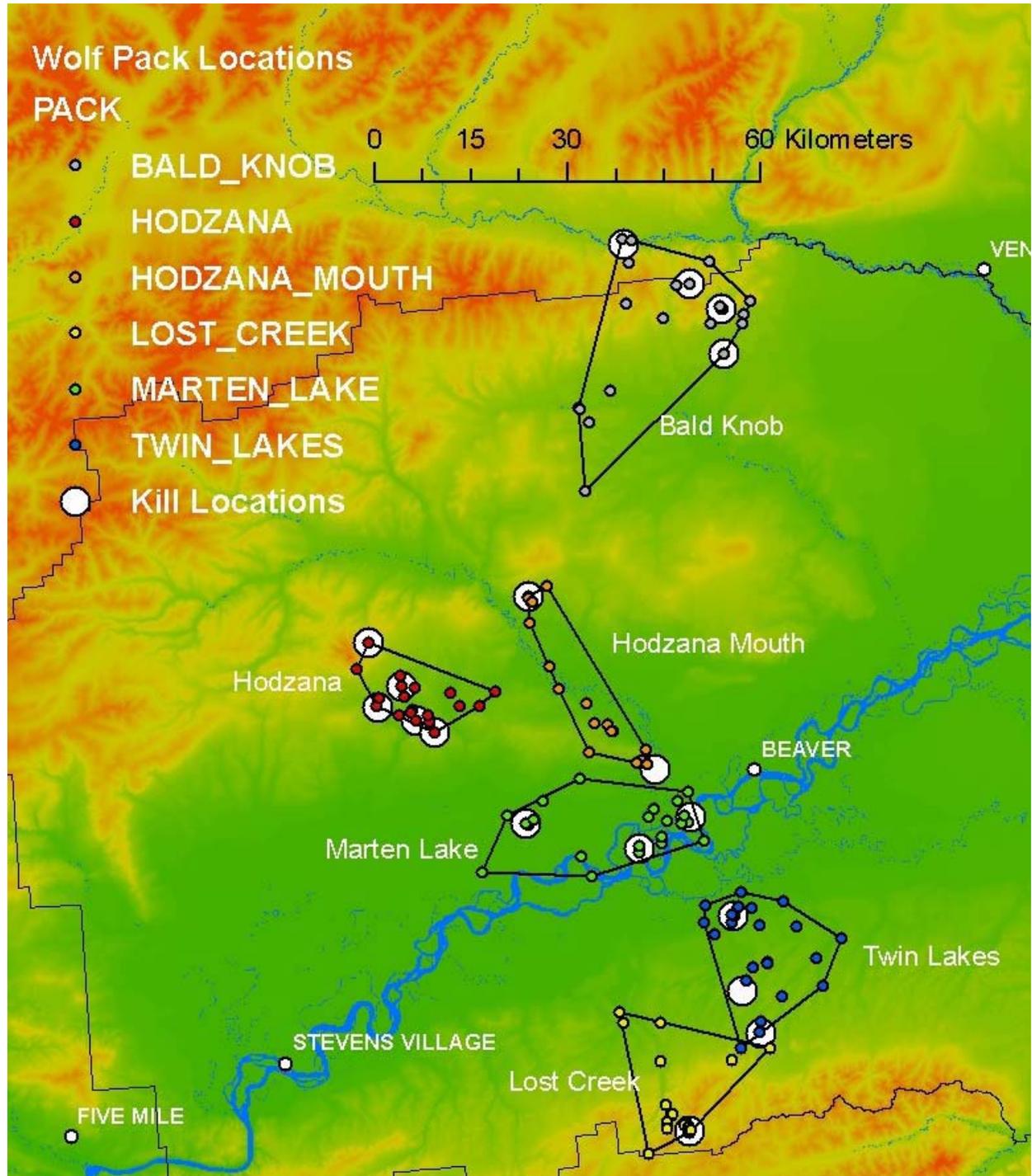
In the second year (November 2009), GPS collars that record a location every three hours were deployed on 10 wolves in 7 packs. GPS collars will provide information on kill rate across the winter (November-April) instead of just two months as with the VHF collars (February and March). We will calculate the 2009/2010 winter kill of moose by collared wolves later this spring. This study is expected to finish in April 2011.

Moose Management Planning:

In 2002 the Yukon Flats Cooperative Moose Management Plan was established to guide moose management decisions for the Yukon Flats. In March 2010 efforts will be made by ADFG, USFWS, and CATG to organize the first of several meetings focusing on ways to amend the current regulations for moose and predator seasons in the Yukon Flats to best meet the needs of local hunters. The meeting will include a comprehensive review of seasons, bag limits, game management unit boundaries, current information on population status of moose and predators, and discussion of intensive management. These meetings are proposed, in part, to address moose hunting concerns that were raised by members of ERAC at the October 2009 meeting in Fort Yukon. Follow up meetings are also proposed for August and October of 2010 if funding permits.

Please direct any questions about these projects to Mark Bertram, Wildlife Biologist, Yukon Flats NWR, 907-456-0446.

Figure 1. Daily locations of wolf packs during February and March, 2009 and locations of wolf kills made during those time periods. A minimum convex polygon is depicted for each wolf pack based on daily locations.



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 NWA— Kotzebue	Sept. 2	Sept. 3	Sept. 4
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 <small>END OF FY2010</small>	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	Oct. 16
			EI—Central		WINDOW CLOSES	
			SC—Cordova			
			SP—Nome			

Winter 2011 Regional Advisory Council Meeting Window

February 15–March 24, 2011 current as of 01/25/10

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>