



**Office of  
Subsistence Mgmt  
Board Room**

**3601 C Street,  
Suite 1030  
Anchorage, Alaska**

# **Federal Subsistence Board**

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**Wildlife Meeting Materials  
May 16-18, 2006**



**FEDERAL SUBSISTENCE BOARD  
PUBLIC MEETING**

May 16–18, 2006

8:30 a.m.–5:00 p.m. Daily

Downtown Anchorage Marriott Hotel  
7<sup>th</sup> and I Street,  
Anchorage, Alaska

**AGENDA and CONTENTS**

<b>1. Call to Order and Introductions</b>	
<b>2. Corrections/Additions to the Agenda</b>	
<b>3. Public Comment Period on Non-Agenda Items</b>	
<i>(This opportunity is available at the beginning of each day)</i>	
<b>4. Public Comment Period on Consensus Agenda Items</b>	
<i>(This opportunity is available at the beginning of each day)</i>	
<b>5. Unit 2 Deer Report From Southeast Alaska Subsistence Regional Advisory Council</b>	
<b>6. 2006-2007 Subparts C&amp;D Proposals <i>(Wildlife Regulations)</i></b>	
(a) Announcement of Consensus Agenda	
(b) Board deliberation and action on Non-Consensus Proposals (marked with <b>bold</b> below)	
(c) Adoption of Consensus Agenda	
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7. **Yukon-Innoko Moose Management Plan**
8. **Fortymile Caribou Herd Harvest Plan**
9. **Update on Avian Flu**
10. **Other Business**
11. **Board Discussion of Council Topics with Chairs**
12. **Adjourn**

*Note: The meeting will be held daily from 8:30 a.m. to 5:00 p.m., or until the Federal Subsistence Board calls a recess for the day, or completes its work. Daily updates on Board progress through the agenda are available by calling 1-800-478-1456 (statewide toll-free) or 786-3888 in Anchorage.*

## FEDERAL SUBSISTENCE BOARD CONSENSUS AGENDA ITEMS

The following proposals have been included on the consensus agenda. These are proposals for which there is unanimous agreement among Federal Subsistence Regional Advisory Councils, the Federal Interagency Staff Committee, and the Alaska Department of Fish and Game concerning recommendations for Board action. Anyone disputing the recommendation on a proposal may request that the Board remove the proposal from the consensus agenda and place it on the regular agenda. The Board retains final authority for removal of proposals from the consensus agenda. The Board will take final action on the consensus agenda after deliberation and decisions on all other proposals.

<b>CONSENSUS AGENDA PROPOSALS</b>		
Proposal	Unit / Species	Recommendation
<b>Southeast Alaska (Region 1)</b>		
WP06-06	Unit 2 / Deer	Oppose
WP06-10	Unit 2 / Deer	Oppose
WP06-11a	Units 1-3 / Elk	Take No Action
WP06-11b	Units 1-3 / Elk	Take No Action
WP06-12	Unit 1C / Moose	Take No Action
<b>Southcentral Alaska (Region 2)</b>		
WP06-03	Unit 13 / Caribou and Moose	Oppose
WP06-04	Units 11, 13 & 15 / Moose	Oppose
WP06-05	Units 11, 13 & 15 / Moose	Oppose
WP06-13	Unit 6D / Goat	Support with Modification
WP06-14	Unit 6D / Goat	Take No Action
WP06-15	Unit 6C / Moose	Oppose
<b>Kodiak/Aleutians (Region 3)</b>		
WP06-21	Unit 8 / Deer	Support
<b>Bristol Bay (Region 4)</b>		
WP06-22	Unit 9C remainder & 9E / Caribou	Support
WP06-23	Unit 9B / Sheep	Support with Modification
WP06-24	Unit 9C / Moose	Support with Modification
WP06-25	Unit 9E / Moose	Oppose
WP06-26	Unit 9E / Moose	Oppose
<i>continued on next page</i>		

**FEDERAL SUBSISTENCE BOARD**  
**CONSENSUS AGENDA ITEMS (continued)**

<b>CONSENSUS AGENDA PROPOSALS</b>		
<b>Proposal</b>	<b>Unit / Species</b>	<b>Recommendation</b>
<b>Yukon-Kuskokwim Delta (Region 5)</b>		
WP06-28	Unit 18 / Moose	Support
<b>Western Interior Alaska (Region 6)</b>		
WP06-33	Unit 19D / Moose	Support
WP06-35	Unit 21B / Moose	Take No Action
WP06-36	Unit 24 / Moose	Support
WP06-69	Unit 24 / Sheep	Support
<b>Seward Peninsula (Region 7)</b>		
WP06-37	Units 22B & 22D / Caribou	Support with Modification
WP06-38	Unit 22A remainder/ Moose	Support
WP06-39	Unit 22A / Moose	Support
WP06-40	Unit 22 / Moose	Support with Modification
WP06-41	Unit 22 / Muskox	Support
WP06-42 thru 52	Unit 22 / Multiple Species	Defer
<b>Northwest Arctic (Region 8)</b>		
WP06-54	Unit 23 / Moose	Support
WP06-55	Unit 23 / Muskox	Support
<b>Eastern Interior Alaska (Region 9)</b>		
WP06-56	Units 12, 20 & 25 / Permits	Oppose
WP06-61	Unit 20C / Moose	Oppose
WP06-62	Units 20E, 25B & 25C / Muskrat	Support
<b>North Slope (Region 10)</b>		
WP06-65	Unit 26A / Caribou	Support
WP06-66	Unit 26A / Moose	Support
WP06-67a	Unit 26C / Moose	Oppose
WP06-67b	Unit 26C / Moose	Oppose

## FEDERAL SUBSISTENCE BOARD NON-CONSENSUS AGENDA ITEMS

### Procedure for considering proposals:

1. Analysis (*lead author*)
2. Summary of written public comments (*Regional Council Coordinator*)
3. Open floor to public testimony
4. Regional Council recommendation (*Chair or designee*)
5. Interagency Staff Committee recommendation (*ISC Chair*)
6. Alaska Department of Fish and Game comments
7. Board discussion with Council Chairs and State Liaison
8. Federal Subsistence Board action

<b>NON-CONSENSUS AGENDA PROPOSALS</b>	
Proposal	Unit / Species
<b>Statewide</b>	
WP06-01	All Units / Bear Handicrafts
WP06-02	All Units / Wildlife Handicrafts
<b>Southeast Alaska (<i>Region 1</i>)</b>	
WP06-07	Unit 2 / Deer
WP06-08	Unit 2 / Deer
WP06-09	Unit 2 / Deer
<b>Southcentral Alaska (<i>Region 2</i>)</b>	
WP06-16	Unit 7 / Moose
WP06-17	Unit 7 / Moose
WP06-18	Unit 6C / Moose
WP06-68	Unit 15 / Moose
<b>Kodiak/Aleutians (<i>Region 3</i>)</b>	
WP06-19	Unit 9D / Caribou
WP06-20	Unit 9D / Caribou
<b>Yukon-Kuskokwim Delta (<i>Region 5</i>)</b>	
WP06-27	Unit 18 / Moose
WP06-29	Unit 18 / Moose
WP06-30	Unit 18 / Moose
<b>Western Interior Alaska (<i>Region 6</i>)</b>	
WP06-34	Units 21 & 24 / Moose
<b>Seward Peninsula (<i>Region 7</i>)</b>	
WP06-53	Unit 22 / Wolf
<i>continued on next page</i>	

**FEDERAL SUBSISTENCE BOARD**  
**NON-CONSENSUS AGENDA ITEMS (continued)**

<b>NON-CONSENSUS AGENDA PROPOSALS</b>	
<b>Proposal</b>	<b>Unit / Species</b>
<b>Eastern Interior Alaska (<i>Region 9</i>)</b>	
WP06-57	Unit 25A / Sheep
WP06-58	Unit 12 / Moose
WP06-59	Unit 12 / Moose
WP06-60	Unit 12 / Moose
WP06-63	Units 12, 20 & 25 / Wolf
WP06-64	Units 12, 20 & 25 / Wolf

**ADF&G WRITTEN COMMENTS**

The Federal Subsistence Board meeting book is being published prior to development of final recommendations and comments by the Alaska Department of Fish and Game. This information will be posted on the Department’s website on May 3, 2006. See the “Highlights” section on the ADF&G homepage [www.adfg.state.ak.us/](http://www.adfg.state.ak.us/) and the Division of Subsistence homepage <http://www.subsistence.adfg.state.ak.us/>. Persons without computer access should call (907) 459-7256 for further information.

<i>WP06-01 Executive Summary</i>	
<b>General Description</b>	To provide regulatory language addressing the commercial sales of handicrafts made from bear claws (deferred proposal WP05-01). <i>Submitted by the Federal Subsistence Board.</i>
<b>Proposed Regulation</b>	<p>§ __.25(j)8(a) <i>You may not sell handicrafts made from the claws of a black or brown bear to an entity operating as a business as defined in Alaska Statute 43.70.110(1), unless the bear was taken in Units 1–5.</i></p> <p>§ __.25(j)8(b) <i>If you are a business as defined under Alaska Statute 43.70.110(1) you may not purchase handicrafts made from the claws of a black or brown bear as part of your business transactions, unless the bear was taken in Units 1–5.</i></p> <p>§ __.25(j)8(c) <i>The sale of handicrafts made from the nonedible byproducts of brown and black bears, when authorized in this part, may not constitute a significant commercial enterprise.</i></p>
<b>North Slope Regional Council Recommendation</b>	Support with modification.
<b>Bristol Bay Regional Council Recommendation</b>	Oppose.
<b>Yukon-Kuskokwim Delta Regional Council Recommendation</b>	Support.
<b>Seward Peninsula Regional Council Recommendation</b>	Oppose.
<b>Southeast Alaska Regional Council Recommendation</b>	Oppose.
<b>Eastern Interior Alaska Regional Council Recommendation</b>	Support with modification.
<b>Northwest Arctic Regional Council Recommendation</b>	Support with modification.
<b>Western Interior Alaska Regional Council Recommendation</b>	Support with modification.
<b>Southcentral Alaska Regional Council Recommendation</b>	Oppose.
<b>Kodiak-Aleutians Regional Council Recommendation</b>	Support with modification.

*continued on next page*

<i>WP06-01 Executive Summary</i>	
<b>Interagency Staff Committee Recommendation</b>	<b>Support with modification.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support with modification–2 Support–1 Oppose–2</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-01**

**NORTH SLOPE SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification** to remove the Southeast exemption. Removal of the proposed Southeast exception is necessary because of the difficulty of enforcing such a regulation. Allowing commercial sales of bear claw handicrafts made from bears taken in any part of the State, without a tracking system, will have a significantly detrimental affect on the ability of enforcement officers to differentiate between legitimate sales and the commercial sale of products from poached bears, bears harvested under State regulations and bears harvested under Federal regulations in Eastern Interior and Bristol Bay Regions.

The modified proposed regulation should read:

*§ \_\_.25(j)8(a) You may not sell handicrafts made from the claws of a black or brown bear to an entity operating as a business as defined in Alaska Statute 43.70.110(1).*

*§ \_\_.25(j)8(b) If you are a business as defined under Alaska Statute 43.70.110(1) you may not purchase handicrafts made from the claws of a black or brown bear as part of your business transactions.*

*§ \_\_.25(j)8(c) The sale of handicrafts made from the nonedible byproducts of black and brown bears, when authorized in this part, may not constitute a significant commercial enterprise.*

**BRISTOL BAY SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose** the proposal. The Bristol Bay Subsistence Regional Advisory Council voted to oppose the proposal. The Council did not hear any biological information conveying to them that there is a conservation concern of too many bears being harvested. The Council heard concerns from other user groups that after the Federal Subsistence Board had approved a portion of the proposal which allowed the use of claws in handicrafts that brown bear harvests would increase. Brown bear harvests have not increased. The Council also stated that sport hunters may go out and harvest a brown bear, then have it tanned out of the hunt area without any restrictions placed upon them. Therefore, Council members felt the restrictions in WP06-01 would be a burden to subsistence users.

### **YUKON-KUSKOKWIM DELTA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support** the proposal. The Yukon-Kuskokwim Delta Subsistence Regional Advisory Council supports Proposal WP06-01. We honor the beliefs and culture from other parts of Alaska. Bear claws are used for handicraft and skin sewing. There is a desire to maintain traditional sales opportunity, while preventing commercialization of sales. There is a desire to be able to display handicrafts in village stores for sale by the person that produced the handicraft.

### **SEWARD PENINSULA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose** the proposal. The Seward Peninsula Subsistence Regional Advisory Council was uncomfortable supporting this proposal because they could see a connection between this proposal and the customary trade of fish regulations. The Council was worried that if they supported this proposal, it may apply to other resources in the future (i.e., polar bears).

### **NORTHWEST ARCTIC SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification** presented by staff. The Northwest Arctic Subsistence Regional Advisory Council voted to support the proposal with modification to remove the Southeast exemption. See the North Slope Regional Advisory Council recommendation for the modified proposed regulation.

### **WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification** presented by staff. Because of our cultural beliefs, the Western Interior Alaska Subsistence Regional Advisory Council defers to the home regions. There are concerns about commercialization of sales. There are concerns about the impact on the bear resources. The Council is also concerned about the sale of bear parts and would like to restrict that sale. The Council supported the staff recommendation to support the proposal with modification to remove the Southeast exemption. Passage of the Council's recommendation would remove commercial incentives for harvesting bears thereby providing additional protection from over harvest of bear populations. Removal of the proposed Southeast exception is necessary because of the difficulty of enforcing such a regulation. See the North Slope Regional Advisory Council recommendation for the modified proposed regulation.

### **SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose** the proposal. The Southcentral Alaska Subsistence Regional Advisory Council opposed the proposal unanimously. The council commented that the burden of proof should not be on the subsistence users.

### **EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification** presented by staff, with the additional modification to remove reference to black bears. The Eastern Interior Alaska Subsistence Regional Advisory Council Council wanted regulations that avoid commercialization and incentives to kill bears just to sell their claws. Sale of bear parts is a sensitive issue in some Native cultures. There is a need for measures with some controls. The Council wants subsistence users to be able to fully utilize the harvested resource. There is not a resource problem at this time. If there are problems in the future, the Council can address them at that time.

The modified proposed Federal regulation should read:

~~§ .25(j)8(a) You may not sell handicrafts made from the claws of a black or brown bear to an entity operating as a business as defined in Alaska Statute 43.70.110(1).~~

~~§ .25(j)8(b) If you are a business as defined under Alaska Statute 43.70.110(1) you may not purchase handicrafts made from the claws of a black or brown bear as part of your business transactions~~

~~§ .25(j)8(c) The sale of handicrafts made from the nonedible byproducts of brown and black bears, when authorized in this part, may not constitute a significant commercial enterprise.~~

#### KODIAK/ALEUTIANS SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support with modification.** The Kodiak/Aleutians Subsistence Regional Advisory Council was concerned about potential for abuse if the sale of handicrafts made from bear claws was allowed. The resource and local communities could suffer from over harvest of bears due to the allowed sale of handicrafts made from bear claws. There are many legal points to consider and a lack of the ability to track any sales. Only trade, barter, and sharing should be allowed. The resource is too valuable to subject to potential problems involved with sales.

The modified proposed regulation should read:

~~§ .25(j)8(a) You may not sell handicrafts made from the claws of a black or brown bear. to an entity operating as a business as defined in Alaska Statute 43.70.110(1).~~

~~§ .25(j)8(b) If you are a business as defined under Alaska Statute 43.70.110(1) you may not purchase handicrafts made from the claws of a black or brown bear as part of your business transactions~~

~~§ .25(j)8(c) The sale of handicrafts made from the nonedible byproducts of brown and black bears, when authorized in this part, may not constitute a significant commercial enterprise.~~

#### SOUTHEAST ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Oppose** the proposal. The Southeast Alaska Subsistence Regional Advisory Council discussed provisions concerning commercial sales and purchases of handicrafts made from bear claws during the 2005 regulatory cycle. The Council's position concerning the proposed regulatory restrictions on subsistence handicraft sales and purchases remains essentially the same as when it made its recommendations on the earlier proposal. Council comments on WP05-01 are presented below.

No information was presented to the Council that indicated that this regulatory change was needed to address any significant problem in Southeast Alaska. Forest Service Enforcement provided information during discussion of this proposal in the 2006 cycle. Mr. Myers reported, "Currently, there are no issues that we are aware of under these circumstances in the Southeast or in relations to the selling of bear parts." He also said that Forest Service enforcement was not contacted concerning this proposal. The Council would support actions needed to address any actual problems with sale of bear parts should they take place.

The Council heard that the Alaska Board of Game has authorized sale of whole bear hides from certain predator control units. In light of this Board action, State of Alaska support for restrictions on subsistence use of bear claws for handicrafts is disingenuous.

The Council prefers that proposals originate with subsistence users, other members of the public, or with Regional Councils in their statutory role. The Council questions the top down attempt to change regulations, and would have preferred not to revisit this issue during the present regulatory cycle.

The Council recognizes that in some regions of Alaska, sale of bear parts may be culturally inappropriate. Use of bear parts, including bear claws, for handicrafts is an acceptable practice in Southeast Alaska, and should not be curtailed or unduly restricted. ANILCA recognizes regional and cultural variations.

**Proposal WP05-01 (Statewide). Support with modification.** Motion Passed: Support the proposal as modified 11-1.

The Southeast Alaska Subsistence Regional Advisory Council modified the proposed statewide definition of handicraft and clarified what bear parts may be used for handicrafts in Units 1, 2, 3, 4, and 5. Council changes to the originally proposed language are shown in ~~strikeout~~ and **bold**.

§ \_\_\_\_.25(a) *Handicraft means a finished product made ~~in Alaska~~ by a rural Alaskan resident from nonedible byproducts of fish or wildlife, which is composed wholly or in some significant respect of natural materials. **The shape and appearance of the natural material must be** substantially changed by the skillful use of hands by sewing, weaving, lacing, beading, carving, **drilling**, etching, scrimshawing, painting, or other means, **and incorporated into a work of art, regalia, jewelry, clothing or other creative expression, which can be either traditional or contemporary in design.** ~~A handicraft must have substantially greater monetary and aesthetic value than the unaltered natural material alone.~~*

*Skin, hide, pelt or fur means any tanned or untanned external covering of an animal's body: However, for bear, the skin, hide, pelt or fur means the external covering with claws attached.*

§ \_\_\_\_.25(j)(6) *If you are a Federally qualified subsistence user, you may sell handicraft articles made from the skin, hide, pelt, or fur of a black bear (including claws). **(A) In Units 1, 2, 3, 4, and 5, you may sell handicraft articles made from the skin, hide, pelt, fur, claws, bones, teeth, sinew, or skulls of a black bear taken in those units.***

§ \_\_\_\_.25(j)(7) *If you are a Federally qualified subsistence user, you may sell handicraft articles made from the skin, hide, pelt, or fur of a brown bear (including claws) taken from Units 9A-C, 9E, 12, 17, 20, and 25. **(A) In Units 1, 2, 3, 4, and 5, you may sell handicraft articles made from the skin, hide, pelt, fur, claws, bones, teeth, sinew, or skulls of a brown bear taken in those units.***

§ \_\_\_\_.25(j)(8) *If you are a business as defined under Alaska Statute 43.70.110(1), you may not purchase, receive, or sell handicrafts made from the skin, hide, pelt or fur of a black or brown bear (including claws):*

**Rationale:** The Council heard staff presentations on WP05-01 and the related proposal submitted by the Council, WP05-03. The Council is on record supporting regulations that allow full utilization of bears taken for subsistence purposes, use of bear parts in traditional regalia and craft items, and appropriate handicraft sale of items made from bear parts. The Council statement submitted as part of proposal WP05-03 accurately expresses Council intentions. It is reproduced in its entirety below.

The Council has two concerns at this time. First, the State of Alaska has submitted a Request for Reconsideration that would reverse the Board action concerning the sale of handicrafts made from black and brown bear fur and claws.

Secondly, the Council reviewed the *Bear Fur and Claw Q&A* public announcement that has been circulated by the Office of Subsistence Management. This public announcement accurately reprints the Board regulatory action, however, its interpretations of what sales may be allowed under this regulation are far from clear and may deviate both from the recommendation of the Southeast Alaska Subsistence Regional Advisory Council and from what was authorized in regulation by the Federal Subsistence Board. The Council believes that subsistence bear harvesters should be permitted to make full use of the bears that they take under Federal subsistence regulations, including the sale of handicrafts that incorporate bear parts. Further, the Council supports the continued use of bear parts in traditional Tlingit, Haida, and Tsimshian regalia that are incorporated in cultural and religious ceremonies. The repair of old regalia and the creation and consecration of new regalia requires sale and purchase of items made from bear parts.

The Council recommendation on proposal WP05-01 reflects this clearly stated Council intention. The Council deliberation drew on the strong analyses provided by the staff anthropologists and the Forest Service biologist. The recommended modifications provide a clearer, more understandable, and more complete wording of Council intent.

The Council deliberated each paragraph of the proposed regulation and then voted on the resulting language shown above. The following provides Council thinking on the sections of this regulation.

§ \_\_.25(a) Definition of Handicraft. The Council appreciates the work done by the Interagency Staff Committee and others to craft an accurate and complete definition of handicraft that will have statewide applicability. The Council recognizes the desirability of having a statewide definition and prefers a statewide definition to regionalized definitions.

Recommended Council modifications:

*product made in ~~Alaska~~ by a rural Alaskan.* The Council notes that rural Alaskans may travel and need to spend time outside Alaska for personal, family, medical or other reasons. Requiring all work on a handicraft to take place in Alaska serves no useful purpose and would likely be unenforceable.

*nonedible byproducts of fish or wildlife, which is composed wholly or in some significant respect of natural materials. The...* The Council believes that this wording is awkward and that its meaning is unclear. The recommended language is closer to the intent of ANILCA.

carving, ***drilling***, etching, scrimshawing, painting, or other means, ***and incorporated into a work of art, regalia, jewelry, clothing or other creative expression, which can be either traditional or contemporary in design*** This recommended language adds “drilling” as a method and provides a clearer definition of what items may be considered handicraft.

***design. A handicraft must have substantially greater monetary and aesthetic value than the unaltered natural material alone.*** The Council heard from staff that there are markets in some parts of the world for “the unaltered natural materials <of bears> alone.” However, the Council notes that selling unaltered bear parts in Alaska is illegal and that, under the proposed regulation, selling unaltered bear parts would continue to be illegal. The Council believes that this provision is unclear, unenforceable, and arbitrary, and, for these reasons, unnecessary.

§ \_\_.25(j)(6) and § \_\_.25(j)(7) would allow Federally qualified subsistence users in Units 1, 2, 3, 4, and 5 to sell handicraft articles made from the skin, hide, pelt, fur, claws, bones, teeth,

sinew, or skulls of black bears and brown bears (respectively) taken in those units. This definition explicitly allows the use of claws, bones, teeth, sinew or skulls for handicraft. The Council reviewed documentary evidence presented by staff and heard Council testimony showing the use of claws, bones, teeth, sinew or skulls for handicraft. Since these bear parts have been and are used in handicrafts, including regalia and cultural items, their use needs to be allowed in Federal regulation.

~~§ 25(j)(8) If you are a business as defined under Alaska Statute 43.70.110(1), you may not purchase, receive, or sell handicrafts made from the skin, hide, pelt or fur of a black or brown bear (including claws).~~ The Council reviewed the provisions of the cited Alaska Statute. While the intent of the proposed 25(j)(8) language may be to prohibit only certain types of commercial sale, the effect of adopting this language would be to disallow many, if not most, of the sales of handicrafts and regalia. Native and non-Native craftspeople sell things they make at local and regional craft fairs, at booths at Alaska Federation of Natives conventions, at Celebration in Southeast Alaska, at the Centennial Hall Christmas fair in Juneau, and in many other venues. Artists and craftsmen sell things they make at shops they own and run in Sitka, and at artist cooperatives in Hoonah, Juneau, and other locations. Transactions may use credit cards; local sales taxes may apply; and craftspeople are required to report income to the Internal Revenue Service. Many or most people who are selling handicrafts in these selling situations may well be businesses as defined by Alaska Statute, and the Council believes that many craftspeople license their handicraft operations.

The effect of incorporating 25(j)(8) in regulation as written, would be to disallow or severely limit the handicraft provisions provided in the other sections of this regulation, 25(a), 25(j)(6), and 25(j)(7). The Council believes that this language is intended to greatly restrain if not eliminate sales of handicraft made from nonedible parts of bears that have been taken for subsistence purposes. As such this regulation is in conflict with the spirit, and perhaps with the language, of ANILCA. Data were not presented showing which sales of handicrafts would be affected; reasoning to support such a restriction was not developed.

Staff referred to the following ANILCA provisions.

ANILCA Sec.803 provides relevant definitions that guide this analysis:

As used in this Act, the term “subsistence uses” means the customary and traditional uses by rural Alaskan residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; ***for the making of handicrafts articles out of nonedible by-products of fish and wildlife resources taken for personal or family consumption***; for barter, or sharing for person or family consumption; and for customary trade (emphasis added).

The Council strongly supports regulations that conserve species used for subsistence—conservation of natural resources is not a new concept to the subsistence community. However, we do not believe that the sale of handicrafts that incorporate bear parts will result in any adverse effect on the bear populations on which subsistence hunters depend. Should a demonstrable problem arise from sale of handicrafts incorporating the nonedible parts of bears, the Council will urge action to protect bear resources. In the Council’s reasoning, however, a putative, possible, speculative problem is not a demonstrated resource problem and does not warrant the excessive protective measures of this regulatory provision.

In summary, the Council supports the modified proposal. The proposed regulation will benefit subsistence users because they will be allowed to make full use of bears they may take for consumptive subsistence uses. Of equal importance, the regulation will allow traditional use of bear parts used in regalia, ceremonial objects, and traditional crafts to continue unfettered.

The proposal as modified has strong supporting data. Staff provided excellent summaries of harvest and use data, regulatory history, and management issues. Very importantly, the staff analyses provided documentation of traditional use of bear parts in handicrafts. Council testimony confirmed much of the staff analysis. No data were presented showing that there were conservation concerns for black or brown bears at this time. Similarly no data were presented showing that bear parts were not used for handicrafts, regalia, and cultural items. Data were not presented that would support limiting handicraft sales to nonbusinesses.

The Council does not believe that there is an existing conservation concern for bears in the units affected by the proposed regulation. Because the proposed change is not expected to change harvest patterns in any significant way, the Council does not believe that it raises a conservation concern. Should an actual, demonstrated conservation concern arise through the implementation of this regulation, the Council would support special action by the Board, in consultation with the Council, and regulatory changes in future regulatory cycles that may be needed to address real problems should they occur.

The recommended modified proposal will have minimal effect on non-Federally qualified hunters. Black bears are abundant in Southeast Alaska; existing and potential subsistence harvests are low relative to the harvest levels that may be maintained over time. Brown bear harvests are closely managed. The subsistence component of this harvest has been very low and is expected to remain at current levels. Region wide, data show that only a small number of bears are taken for consumption by Federally qualified subsistence hunters. The Council believes that only a small subset of Federally qualified hunters taking bears will use nonedible parts for handicrafts. The Council does not believe that this regulation will affect future harvest levels significantly.

## INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-01

### Option A: Majority Recommendation

**Support with modification**, contrary to the recommendations of all Federal Subsistence Regional Advisory Councils, to delete paragraphs 8(a) and 8(b) from the proposed regulation.

The modified regulation should read:

*§ .25(j)8( ) The sale of handicrafts made from the nonedible byproducts of brown and black bears, when authorized in this part, may not constitute a significant commercial enterprise.*

### Justification

Proposal WP06-01 is a statewide proposal. The Councils were not in agreement on their recommendations. This recommendation does not coincide with any of the Council recommendations, however it does propose a compromise position with which it seems likely most all the Councils could agree (except Southcentral Alaska, perhaps).

#### A summary of the Council positions is as follows:

- One council supported the proposal as written
- Four councils supported the proposal, with modification to remove the exception for Southeast Alaska

- One council supported the proposal, with modification to disallow the sale of handicrafts made from the claws of a black or brown bear
- Four councils opposed the proposal in its entirety.

The recommendation of the Kodiak-Aleutians Council, requesting a modification to disallow the sale of handicrafts made from bear claws, would be a reversal of actions previously taken by the Board and is not within the scope of this proposal.

All councils, with the exception of Southcentral Alaska, support proposal WP06-02, in its entirety. WP06-02 includes similar § \_\_.25(j)8(c) language as WP06-01. WP06-02 states, “The sale of handicrafts made from the nonedible byproducts of wildlife, when authorized in this part, may not constitute a significant commercial enterprise.” Southcentral Alaska Council said that this language is “vague and the burden of proof should not be left with the subsistence users, additionally there should be some sort of control over sales.”

This recommendation suggests that the Board consider the part of WP06-02 which all Councils except one found agreeable, and adopt the parallel language from proposed § \_\_.25(j)8(c) of WP06-01. The regulatory language would only include:

***§ \_\_.25(j)8(c) The sale of handicrafts made from the nonedible byproducts of brown and black bears, when authorized in this part, may not constitute a significant commercial enterprise.***

Although the sales specified in proposed parts § \_\_.25(j)8(a) and (b) are currently allowed, no information has been presented that indicates that a problem exists. For instance, in Southeast Alaska, Forest Service Enforcement stated, “Currently, there are no issues that we are aware of under these circumstances in the Southeast or in relations to the selling of bear parts” (Southeast Alaska Subsistence Regional Advisory Council winter 2006 meeting). In the event a problem does come forward, the proposed § \_\_.25(j)8(c) can deal with the demonstrably egregious. At least one case regarding the sales of herring roe on kelp has been successfully prosecuted partially because of similar language as proposed in part § \_\_.25(j)8(c).

The majority of the Interagency Staff Committee believe that proposed § \_\_.25(j)8(c) language contributes to maintaining the subsistence, rather than commercial, nature of the sales of handicrafts in the Federal subsistence program. In the future, if an actual problem develops which is not covered by the proposed § \_\_.25(j)8(c) language, Councils in any affected area could initiate a new proposal.

### **Option B: Minority Recommendation**

**Support with modification** to remove the Southeast Region exemption from the prohibition on commercial purchases and sales, as recommended by the North Slope, Northwest Arctic, and Western Interior Subsistence Regional Advisory Councils, and with respect to brown bears, by the Eastern Interior Subsistence Regional Advisory Council. In addition, the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council supported prohibition of commercialized sales of bear claws.

The modified regulation should read:

***§ \_\_.25(j)8(a) You may not sell handicrafts made from the claws of a black or brown bear to an entity operating as a business as defined in Alaska Statute 43.70.110(1).***

***§ \_\_.25(j)8(b) If you are a business as defined under Alaska Statute 43.70.110(1) you may not purchase handicrafts made from the claws of a black or brown bear as part of your business transactions.***

***§ \_\_.25(j)8(c) The sale of handicrafts made from the nonedible byproducts of black and brown bears, when authorized in this part, may not constitute a significant commercial enterprise.***

### **Justification**

The language in § \_\_.25(j)8(a) and (b) prevents commercialization of handicrafts made with bear claws by prohibiting sales to and purchases by businesses. This prohibition will apply only to the purchase/sale of handicrafts containing claws, not other parts of bears. This language supports the view of several Regional Councils who are concerned with potential abuses of the regulations and seek limits on commercialization of handicrafts made with bear claws. Small scale sales from craft producers (some of whom have business licenses) to consumers are authorized, while sales to entities operating as a business are not.

This regulation will remove commercial incentives for harvesting bears, thereby reducing the potential for illegal take of bears and excessive harvest of vulnerable bear populations. The Board's intent in allowing the sale of bear handicrafts should be to provide for the customary and traditional making and selling of handicrafts from bears taken for subsistence, not to provide a commercial incentive to harvest bears. The proposed restriction on commercial sales of bear claw handicrafts is consistent with the intent expressed by Congress to not permit the establishment of significant commercial enterprises under the guise of subsistence uses (Senate Report 413 P.234, 96th Congress, Second Session). The restriction of commercial sales is also consistent with the responses in a Question & Answer brochure approved by the Board in July 2005.

Removal of the proposed Southeast exception is recommended because the exemption would have the effect of making unenforceable the restrictions on commercialization of bear claw handicrafts from bears taken in other areas of the state. There is no means of determining that bear claw handicrafts purchased and resold by businesses anywhere in the state actually came from bears legally taken in southeast Alaska and not from other areas. In addition, enforcement officers would be unable to differentiate between legitimate sales and the commercial sale of products from illegally taken bears or bears harvested under State regulations.

Reliance only on regulatory language prohibiting sales that constitute a significant commercial enterprise overlooks the difficulty of enforcing terminology that is undefined, leaving it up to the courts to determine what constitutes a "significant commercial enterprise." A similar concern prompted the Board to adopt regulations prohibiting commercial purchases and sales of subsistence taken fish.

**WRITTEN PUBLIC COMMENTS**  
**WP06-01**

**Support WP06-01, with an amendment deleting Unit 1-5 exemption.** The sale of claws to businesses as defined in As 43.70.110 (1) should apply to all game management units. Without further justification, there is no reason to exempt Units 1–5. The sale of claws has been closely restricted in State regulation for the obvious commercial incentive involved and the relative ease of procurement, handling and transfer of these desired items in the broad commercial market. Exceptions for parts of the State are inconsistent and raise serious monitoring and enforcement problems for State and Federal agencies.

*–Defenders of Wildlife*

**We do not support** WP06-01 as proposed; however, we support small sales by rural residents of handicrafts made from claws of Black and Brown bears taken under Federal subsistence hunting regulations.

*–Ahtna Tene Nene’ Subsistence Committee, Linda Tyone, Chair, Glennallen*

**Oppose** WP06-01, and oppose the proposed modification to remove the Southeast exemption. Wrangell-St. Elias National Park Subsistence Resource Commission opposes the proposal as modified in the staff recommendation. Because the vote on this proposal was very close (4 votes to support and 5 votes to oppose), the concerns of both sides are presented here. We would also note that a vote was taken on the proposal as modified in the staff recommendation because there was general consensus that an exemption for one region would make the proposed regulation unenforceable. The prevailing opinion is that the proposal is unnecessary. Commercialization is not felt to be common or to cause a conservation concern in the Wrangell-St. Elias area. Thus, the proposal would unnecessarily limit the opportunity for subsistence users to sell handicrafts made from the claws of subsistence-harvested bears. Those in the minority support the proposal both for concerns about the potential for commercial sales to lead to over harvest and for cultural reasons. Bears are of great cultural significance to some people, and the commercialization of handicrafts made from their claws is disrespectful to the bear and its spirit.

*–Wrangell-St. Elias National Park Subsistence Resource Commission*

**Support** WP06-01. The Lake Clark SRC supports measures that allow qualified subsistence users to maximize the benefits derived from legally harvested bears taken in the subsistence hunt.

*–Lake Clark Subsistence Resource Commission*

**Support with modification.** The proposed regulation as modified by the staff recommendation [to remove the Southeast exemption] will remove commercial incentives for harvesting bears thereby providing additional protection from over harvest of bear populations.

*–Denali National Park & Preserve Subsistence Resource Commission*

**STAFF ANALYSIS  
WP06-01**

**ISSUES**

This proposal was deferred by the Federal Subsistence Board (Board) during their May 2005 meeting, to be addressed during the 2006 regulatory cycle. The original proposal (WP05-01), submitted by the U.S. Fish and Wildlife Service, addressed regulations concerning the sale of handicrafts made from bear parts. The Board acted on all elements of that proposal except the language addressing commercial sales, which they deferred until 2006. Therefore, this proposal only addresses the element from WP05-01 which pertains to commercial sales.

**DISCUSSION**

At its May 2005 meeting, the Board moved to adopt the following regulation, however, that action was deferred until 2006 to allow Regional Advisory Councils an opportunity to review this proposed language. This proposed Federal regulation is a modification of language originally proposed in WP05-01 and presented at Regional Advisory Council meetings during the 2005 winter meetings.

**Existing Federal regulation:**

There is currently no existing regulatory language addressing the commercial sales of handicrafts made from bear parts.

**Proposed Federal regulation:**

*§ \_\_.25(j)8(a) You may not sell handicrafts made from the claws of a black or brown bear to an entity operating as a business as defined in Alaska Statute 43.70.110(1), unless the bear was taken in Units 1–5.*

*§ \_\_.25(j)8(b) If you are a business as defined under Alaska Statute 43.70.110(1) you may not purchase handicrafts made from the claws of a black or brown bear as part of your business transactions, unless the bear was taken in Units 1–5.*

*§ \_\_.25(j)8(c) The sale of handicrafts made from the nonedible byproducts of brown and black bears, when authorized in this part, may not constitute a significant commercial enterprise.*

**Existing State regulations:**

*Sec. 16.05.920. Prohibited conduct generally.*

*(a) Unless permitted by AS 16.05-AS 16.40 or by regulation adopted under AS 16.05-AS 16.40, a person may not take, possess, transport, sell, offer to sell, purchase, or offer to purchase fish, game, or marine aquatic plants, or any part of fish, game, or aquatic plants, or a nest or egg of fish or game.*

## Extent of Federal Public Lands

Proposed regulations would apply to all Federal public lands, as defined by Federal Subsistence hunting regulations, in Alaska. Federal public lands represent approximately 60% of Alaska or 380,900 square miles.

## CUSTOMARY AND TRADITIONAL USE DETERMINATIONS

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

## Regulatory History

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

- May 2002—The Board adopted regulations allowing the sale of handicrafts made from the “fur” of black bear (statewide regulation).
- May 2004—The Board adopted regulations allowing the sale of handicrafts made from the “fur” of brown bear taken in Eastern Interior, Bristol Bay and Southeast regions. The Board also clarified their intent to maintain the Federal definition of “fur”, which includes claws.
- May 2005—The Board adopted regulations that:
  - Modified the definition of the term *handicraft*.
  - Modified the definition of the terms *skin, hide, pelt and fur*.
  - Modified regulatory language to clarify that bear claws can be used in handicrafts for sale. (The previous language allowing the sale of handicrafts made with bear claws specifically referred to bear fur, with the reference to claws contained in the definition of fur. With the old language it was not obvious to most readers that the use of claws was permitted. This action by the Board did not authorize any new uses.)
  - Adopted regulations to allow the sale of handicrafts in Units 1–5 made from bones, teeth, sinew, or skulls of bears taken in those units.

During the May 2005 meeting, the Board discussed, but did not adopt, any regulatory language addressing commercial sales of handicrafts. The absence of regulatory language addressing commercial sales of handicrafts made with bear parts continues. A detailed regulatory history can be found in the analysis of the original proposal (WP05-01).

## Biological Background

Brown bears range throughout most of Alaska, except the islands of the Aleutian Chain west of Unimak and the southeast Alaska islands south of Frederick Sound. Brown bear populations throughout most of Alaska are generally stable and occupy all of their historic range (Miller 1993). The statewide average density of brown bear normally ranges from 7–140 individuals per hundred square miles. The 1993 statewide population of brown bears was estimated to be 25,000–39,000 bears with a best estimate of 31,700 (Miller 1993). In northern Alaska, brown bear do not successfully reproduce until they are older than 5 years (Reynolds 1980). This delay in reproduction as well as small litter sizes (1.6 cubs/litter), long

intervals between successful reproductive events, and a short potential reproductive period, cause the low rates of successful production in brown bear in northern Alaska (U.S. Fish and Wildlife Service 1982).

Today black bears range over three-quarters of the State of Alaska. The majority of the black bear's distribution is closely associated with forested areas. The black bear is absent from the Seward and Alaska Peninsulas, the North Slope, portions of the Yukon Kuskokwim Delta, the Kodiak Island group, and Southeast Alaska islands north of Frederick Sound. Black bear abundance varies throughout Alaska and is keyed to habitat quality (Schwartz et al. 1983b, Schwartz 1987, Hicks 1999). High densities of black bears occur on Prince of Wales Island, in Prince William Sound, and the Kenai Peninsula areas. Density of black bears may range from 10–100 individuals per hundred square miles (Hecktel 1991, Hicks 1999 and 2000a); localized densities of black bear may be higher or lower depending on the quality of the habitat. While there are no solid estimates of the statewide population of black bears (Hicks 1999), Sherwonit (1998) speculated that their numbers might range from 30,000 to 100,000 animals. Black bears are omnivorous with 80%–90% of their diet vegetarian (Sherwonit 1998). Black bears eat a wide variety of foods including new growth of plants, berries, buds and seeds, salmon, birds, mammals, insects, carrion, and human garbage (Halter 1967, Schwartz et al. 1983b). Black bear were monitored on the western Yukon Flats between 1995 and 2002. Recruitment and reproductive intervals were 2 and 1.6 years, respectively. The survival rate for cubs weaned to one year was 0.45 (Bertram and Vivion 2002).

### **Effects of the Proposal**

The proposed restriction on commercial sales of bear claw handicrafts is consistent with the current interpretation of the Board's previous intent, as expressed in a *Question & Answer* brochure and approved by the Board July 2005.

This regulation will remove commercial incentives for harvesting bears, except in Southeast Alaska. The goal is to provide additional protection from over harvest of bear populations. The Board's intent in allowing the sale of bear handicrafts is to provide for the customary and traditional making and selling of handicrafts from bears taken for subsistence, not to provide a commercial incentive to harvest bears.

This action will have no affect on subsistence users who make and sell bear claw handicrafts to individuals as a noncommercial customary and traditional activity, even if they are required by the State to have a business license. However, they can not sell bear claw handicrafts to businesses, except in Unit 1–5. The proposed regulation also states that businesses can not purchase bear claw handicraft, except in Units 1–5, preventing gift shops and other businesses from resale activity.

This action will have no affect on sport/recreational users, however, it will reduce opportunities for commercial users or potential commercial users of the resource.

This proposed language will allow commercial sales of handicrafts made with bear claws, from bears taken in Units 1–5. This Southeast exception will result in difficulty with enforcement of the regulation, as neither the State nor the Federal Subsistence Management Program has a tracking system to monitor the source and sale of black or brown bear claws. Allowing commercial sales of handicrafts made from bear claws taken in any part of the State, without a tracking system, will have a significantly detrimental affect on the enforceability of the regulation. Enforcement officers will be unable to differentiate between legitimate commercial sales and the sale of products from poached bears, bears harvested under State regulations and bears harvested under Federal regulations in Eastern Interior and Bristol Bay Regions.

The proposed language prohibiting sales of bear handicrafts from becoming a significant commercial enterprise is also consistent with the Board's intent to allow the sale of bear handicrafts, consistent with

customary and traditional practices of making and selling of handicrafts from bears taken for subsistence, yet not to provide a commercial incentive to harvest bears. This restriction should have no effect on commercial sales because there are currently no known commercial businesses selling these products. The opportunity to sell bear handicrafts is relatively new and not widely known.

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APPENDIX

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

<b>Unit</b>	<b>C and T determination for Brown Bear</b>	<b>Harvest Limits for Brown Bear</b>	<b>C and T determination for Black Bear</b>	<b>Harvest Limits for Black Bear</b>
<b>1</b>	<p><i>Unit 1A—Rural residents of Unit 1A, except no Federal subsistence priority for residents of Hyder</i></p> <p><i>Unit 1B—Rural residents of Unit 1A, Petersburg and Wrangell, except no Federal subsistence priority for residents of Hyder</i></p> <p><i>Unit 1C—Rural residents of Unit 1C, Haines, Hoonah, Kake, Klukwan, Skagway, and Wrangell, except no Federal subsistence priority for residents of Gustavus</i></p> <p><i>Unit 1D—Rural residents of Unit 1D</i></p>	1 bear every four regulatory years by State registration permit only	<p><b>Units 1A, 1B, and 1D—All rural residents</b></p> <p><b>Unit 1C—Rural residents of Units 1C, 1D, and 3, Hoonah, Pelican, Point Baker, Sitka and Tenakee Springs</b></p>	2 bears, no more than one may be a blue or glacier bear
<b>2</b>			<b>All rural residents</b>	2 bears, no more than one may be a blue or glacier bear
<b>3</b>			<b>All rural residents</b>	2 bears, no more than one may be a blue or glacier bear

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<b>Unit</b>	<b>C and T determination for Brown Bear</b>	<b>Harvest Limits for Brown Bear</b>	<b>C and T determination for Black Bear</b>	<b>Harvest Limits for Black Bear</b>
<b>4</b>	<i>Rural residents of Unit 4 and Kake</i>	Unit 4, Chichagof Island south and west of a line that follows the crest of the island from Rock Point to Rodgers Point, including Yakobi and other adjacent islands; Baranof Island south and west of a line which follows the crest of the island from Nisnemi Point to the entrance of Gut Bay and including Kruzof and other adjacent islands— One bear every four regulatory years by State permit only		
<b>5</b>	<i>Rural residents of Yakutat</i>	1 bear by Federal registration permit only	<b><i>Rural residents of Unit 5A</i></b>	2 bears; no more than one may be a blue or glacier bear
<b>6</b>	<i>No Federal subsistence priority</i>	No Federal open season	<b><i>Unit 6A Rural residents of Yakutat and Units 6C and 6D, except no Federal subsistence priority for residents of Whittier</i></b>  <b><i>Unit 6 remainder—Rural residents of Units 6C and 6D, except no Federal subsistence priority for residents of Whittier</i></b>	1 bear
<b>7</b>	<i>No Federal subsistence priority</i>	No Federal open season	<b><i>All rural residents</i></b>	3 bears

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Unit	C and T determination for Brown Bear	Harvest Limits for Brown Bear	C and T determination for Black Bear	Harvest Limits for Black Bear
8	<i>Rural residents of Old Harbor, Akhiok, Larsen Bay, Karluk, Ouzinkie, and Port Lions</i>	1 bear by Federal registration permit only. Up to 1 permit may be issued in Akhiok; up to 1 permit may be issued in Karluk; up to 3 permits may be issued in Larsen Bay; up to 2 permits may be issued in Old Harbor; up to 2 permits may be issued in Ouzinkie; and up to 2 permits may be issued in Port Lions.		
9	<p><i>Unit 9A—Residents of Pedro Bay</i></p> <p><i>Unit 9B—Rural residents of Unit 9B</i></p> <p><i>Unit 9C—Rural residents of Unit 9C</i></p> <p><i>Unit 9D—Rural residents of Units 9D and 10 (Unimak Island)</i></p> <p><i>Unit 9E—Residents of Chignik, Chignik Lagoon, Chignik Lake, Egegik, Ivanof Bay, Perryville, Pilot Point, Ugashik, and Port Heiden/Meshik</i></p>	<p>Units 9A, 9C, and 9D: <i>see Special Provisions</i> for the communities of False Pass, King Cove, Cold Bay, Sand Point, and Nelson Lagoon.</p> <p>Unit 9B, Lake Clark National Park and Preserve—Residents of Nondalton, Iliamna, Newhalen, Pedro Bay, and Port Alsworth only—1 bear by Federal registration permit only. The season will be closed when 4 females or ten bears have been taken, whichever occurs first.</p> <p>Unit 9B remainder—1 bear by State registration permit only</p> <p>Unit 9E—1 bear by Federal registration permit only</p>	<p><b><i>Units 9A and 9B—Rural residents of Units 9A, 9B, 17A, 17B, and 17C</i></b></p> <p><b><i>Unit 9 remainder—All rural residents</i></b></p>	3 bears

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<b>Unit</b>	<b>C and T determination for Brown Bear</b>	<b>Harvest Limits for Brown Bear</b>	<b>C and T determination for Black Bear</b>	<b>Harvest Limits for Black Bear</b>
<b>10</b>	<i>Unit 10—Rural residents of Units 9D and 10 (Unimak Island)</i>	No Federal open season.  <i>See Special Provisions for the communities of False Pass, King Cove, Cold Bay, Sand Point, and Nelson Lagoon for Unit 10.</i>		
<b>11</b>	<i>Unit 11, north of the Sanford River—Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Units 11 and 12</i>  <i>Unit 11 remainder—Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Unit 11</i>	1 bear	<b><i>Unit 11, north of the Sanford River—Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Units 11 and 12</i></b>  <b><i>Unit 11 remainder—Residents of Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, Tazlina, Tonsina, and Unit 11</i></b>	3 bears
<b>12</b>	<i>Rural residents of Unit 12, Dot Lake, Chistochina, Gakona, Mentasta Lake, and Slana</i>	1 bear	<b><i>All rural residents</i></b>	3 bears
<b>13</b>	<i>Rural residents of Unit 13 and Slana</i>	1 bear—Bears taken within Denali National Park must be sealed within 5 days of harvest. That portion within Denali National Park will be closed by announcement of the superintendent after 4 bears have been harvested	<b><i>All rural residents</i></b>	3 bears
<b>14</b>	<i>Unit 14A—All rural residents</i>  <i>Units 14B and 14C—No Federal subsistence priority</i>	No Federal open season	<b><i>All rural residents</i></b>	Units 14A and 14B—No Federal open season  Unit 14C—1 bear

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<b>Unit</b>	<b>C and T determination for Brown Bear</b>	<b>Harvest Limits for Brown Bear</b>	<b>C and T determination for Black Bear</b>	<b>Harvest Limits for Black Bear</b>
<b>15</b>	No Federal Subsistence priority		<b>Units 15A and 15B—No Federal subsistence priority</b>  <b>Unit 15C—Residents of Port Graham and Nanwalek</b>	Unit 15C—3 bears  Unit 15 remainder—No Federal open season
<b>16</b>	No Federal subsistence priority		<b>Unit 16A—All rural residents</b>  <b>Unit 16B—Rural residents of Unit 16 B</b>	3 bears
<b>17</b>	<b>Unit 17A—Rural residents of Unit 17, and rural residents of Akiak, Akiachak, Goodnews Bay and Platinum</b>  <i>Units 17A and 17B, those portions north and west of a line beginning from the Unit 18 boundary at the northwest end of Nenevok Lake, to the southern point of Upper Togiak Lake, and northeast to the northern point of Nukakuk Lake, northeast to the point where the Unit 17 boundary intersects the Shotgun Hills—Rural residents of Kwethluk</i>  <i>Unit 17B, that portion draining into Nuyakuk Lake and Tikchik Lake—Rural residents of Akiak and Akiachak</i>  <i>Units 17B and 17C—Rural residents of Unit 17</i>	1 bear by State registration permit only  <i>Contact ADF&amp;G for permit details</i>	<b>Units 17A and that portion of 17B draining into Nuyakuk Lake and Tikchik Lake—Rural residents of Units 9A, 9B, and 17, Akiak and Akiachak</b>  <b>Unit 17 remainder—Rural residents of Units 9A, 9B, and Unit 17</b>	2 bears
<b>18</b>	<b>Residents of Akiachak, Akiak, Eek, Goodnews Bay, Kwethluk, Mountain Village, Napaskiak, Platinum, Quinhagak, St. Marys and Tuluksak</b>	1 bear by State registration permit only	<b>Rural residents of Units 18 and 19A living downstream of the Holokuk River), Holy Cross, Stebbins, St. Michael, Togiak, and Twin Hills</b>	3 bears

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<b>Unit</b>	<b>C and T determination for Brown Bear</b>	<b>Harvest Limits for Brown Bear</b>	<b>C and T determination for Black Bear</b>	<b>Harvest Limits for Black Bear</b>
<b>19</b>	<p><i>Units 19A and 19B—Rural residents of Units 19 and 18 within the Kuskokwim River drainage upstream from and including) the Johnson River</i></p> <p><i>Unit 19C—No Federal subsistence priority</i></p> <p><i>Unit 19D—Rural residents of Units 19A and 19D, Tuluksak, and Lower Kalskag</i></p>	<p>Units 19A and 19B, those portions which are downstream of and including the Aniak River drainage—1 bear by State Registration permit only</p> <p>Unit 19A remainder; Unit 19B remainder; and Unit 19D—1 bear</p> <p>Unit 19C—No Federal open season</p>	<b>All rural residents</b>	3 bears
<b>20</b>	<p><i>Unit 20E—Rural residents of Unit 12 and Dot Lake</i></p> <p><i>Unit 20F—Rural residents of Unit 20F, Stevens Village and Manley</i></p> <p><i>Unit 20 remainder—All rural residents</i></p>	<p>Unit 20A—1 bear</p> <p>Unit 20E—1 bear</p> <p>Unit 20 remainder—1 bear</p>	<p><b>Unit 20F—Rural residents of Unit 20F, Stevens Village, and Manley</b></p> <p><b>Unit 20, remainder—All rural residents</b></p>	3 bears
<b>21</b>	<i>Rural residents of Units 21 and 23</i>	<p>Unit 21D—1 bear by State registration permit only</p> <p>Unit 21 remainder—1 bear</p>	<b>All rural residents</b>	3 bears
<b>22</b>	<i>Unit 22—Rural residents of Unit 22</i>	<p>Units 22A, 22B, 22D, and 22E—1 bear by State registration permit only</p> <p>Unit 22C—1 bear by State registration permit only</p>		
<b>23</b>	<i>Rural residents of Units 21 and 23</i>	<p>Unit 23, except the Baldwin Peninsula north of the arctic Circle—1 bear by State registration permit only</p> <p>Unit 23 remainder—1 bear every four years</p>	<b>Rural residents of Unit 23, Alatna, Allakaket, Bettles, Evansville, Galena, Hughes, Huslia and Koyukuk</b>	3 bears

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<b>Unit</b>	<b>C and T determination for Brown Bear</b>	<b>Harvest Limits for Brown Bear</b>	<b>C and T determination for Black Bear</b>	<b>Harvest Limits for Black Bear</b>
<b>24</b>	<p><i>Unit 24, that portion south of caribou mountain and on public lands within and adjacent to the Dalton Highway Corridor Management Area—Rural Residents of Unit 24 and Stevens Village</i></p> <p><i>Unit 24 remainder—Rural residents of Unit 24</i></p>	1 bear by State registration permit	<p><b><i>Unit 24, that portion south of caribou mountain and on public lands within and adjacent to the Dalton Highway Corridor Management Area—Rural Residents of Unit 24, Anaktuvuk Pass, Stevens Village and Wiseman, but not including any other residents of the Dalton Highway Corridor Management Area</i></b></p> <p><b><i>Unit 24 remainder—Rural residents of Unit 24, Anaktuvuk Pass, and Wiseman but not including any other residents of the Dalton Highway Corridor Management Area</i></b></p>	3 bears
<b>25</b>	<p><i>Unit 25D—Rural residents of Unit 25D</i></p> <p><i>Unit 25 remainder—Residents of Unit 25 and Eagle</i></p>	<p>Units 25A and 25B—1 bear</p> <p>Unit 25C—1 bear</p> <p>Unit 25D—1 bear</p>	<p><b><i>Unit 25D—Rural residents of unit 25D</i></b></p> <p><b><i>Unit 25 remainder—All rural residents</i></b></p>	<p>Unit 25—3 bears</p> <p>Unit 25D—3 bears or 3 bears by State community harvest permit</p>
<b>26</b>	<i>Rural residents of Unit 26, except the Prudhoe Bay-Deadhorse Industrial Complex), Anaktuvuk Pass, and Point Hope</i>	<p>Unit 26A—1 bear by State registration permit only</p> <p>Unit 26B—1 bear</p> <p>Unit 26C—1 bear</p>	<b><i>All rural residents</i></b>	3 bears

<b>WP06-02 Executive Summary</b>	
<b>General Description</b>	To provide regulatory language authorizing the sale of handicrafts made from nonedible byproducts of wildlife, other than bears, harvested for subsistence uses; to have Federal regulations align with existing State regulations; and to accommodate existing practices. <i>Submitted by the Office of Subsistence Management.</i>
<b>Proposed Regulation</b>	<i>§ __.25(j)(9) If you are a Federally qualified subsistence user, you may sell handicraft articles made from non edible byproducts of wildlife harvested for subsistence uses (excluding bear) to include; skin, hide, pelt, fur, claws, bones (except skulls of moose, caribou, elk, deer, bear, sheep, goat and muskox), teeth, sinew, antlers and/or horns (if not attached to any part of the skull or made to represent a big game trophy) and hooves.</i>
<b>North Slope Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Bristol Bay Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Seward Peninsula Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Southeast Alaska Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Yukon-Kuskokwim Delta Regional Advisory council</b>	<b>Support.</b>
<b>Northwest Arctic Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Western Interior Alaska Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Kodiak-Aleutians Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support with modification.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.

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*WP06-02 Executive Summary*

<b>Written Public Comments</b>	<b>Support-4</b> <b>Support with modification-2</b>
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**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS**  
**WP06-02**

**NORTH SLOPE SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification** to remove the redundant reference to bear in the regulatory language. The North Slope Subsistence Regional Advisory Council voted to modify the proposed regulation as follows:

*§\_\_.25(j)(9) If you are a Federally qualified subsistence user, you may sell handicraft articles made from nonedible byproducts of wildlife harvested for subsistence uses (excluding bear) to include; skin, hide, pelt, fur, claws, bones (except skulls of moose, caribou, elk, deer, sheep, goat and muskox), teeth, sinew, antlers and/or horns (if not attached to any part of the skull or made to represent a big game trophy) and hooves.*

*§\_\_.25(a) Definitions.*

*“big game” means black bear, brown bear, bison, caribou, Sitka black-tailed deer, elk, mountain goat, moose, muskox, Dall sheep, wolf, and wolverine;*

*“trophy” means a mount of a big game animal, including the skin of the head (cape) or the entire skin, in a lifelike representation of the animal, including a lifelike representation made from any part of a big game animal; “trophy” also includes a “European mount” in which the horns or antlers and the skull or a portion of the skull are mounted for display;*

*§\_\_.25(?) The sale of handicrafts made from the nonedible byproducts of wildlife, when authorized in this part, may not constitute a significant commercial enterprise.*

**BRISTOL BAY SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification.** The Bristol Bay Subsistence Regional Advisory Council voted to support proposal WP06-02 with modification. The Council removed the redundant reference to bear in the regulatory language, to provide definitions of the terms big game and trophy, and to prohibit sales from constituting a significant commercial enterprise (consistent with the sale of bear claw handicrafts).

This practice is currently allowed by State regulation for wildlife harvested under the State’s general hunting provisions; however it is currently prohibited for wildlife harvested under Federal subsistence management regulations. Adoption of these new regulations will provide Federally qualified subsistence hunters the same opportunities that are currently available to those harvesting under State regulations, and it would accommodate existing practices. This Federal regulation addresses handicrafts only, consistent with the definition of subsistence uses in ANILCA Section 803. [See the North Slope Regional Advisory Council recommendation for modified proposed regulatory language.]

### **YUKON-KUSKOKWIM DELTA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support** the proposal. The Yukon-Kuskokwim Delta Subsistence Regional Advisory Council supports Proposal WP06-02. This would allow subsistence users to continue traditional practices.

### **SEWARD PENINSULA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification** as presented by Staff to remove the redundant reference to bear in the regulatory language, to provide needed definitions of the terms *big game* and *trophy*, and to prohibit sales from constituting a significant commercial enterprise (consistent with the sale of bear claw handicrafts). [See the North Slope Regional Advisory Council recommendation for modified proposed regulatory language.] The Council supported allowing subsistence users to sell handicraft articles made from nonedible byproducts of wildlife harvested for subsistence uses. This would benefit subsistence users by allowing them to fully utilize the resource and would allow this practice that is already allowed under State regulation.

### **NORTHWEST ARCTIC SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification.** The Northwest Arctic Subsistence Regional Advisory Council voted to support proposal WP06-02 with modification as presented by Staff to remove the redundant reference to bear in the regulatory language. [See the North Slope Regional Advisory Council recommendation for modified proposed regulatory language.]

### **WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification** as presented by staff. The Western Interior Alaska Subsistence Regional Advisory Council supports the adoption of this proposal as modified by staff because the practice is currently allowed by State regulation while currently it is prohibited under Federal subsistence regulations. Adoption of this proposal with the modifications would provide Federally qualified subsistence hunters the same opportunities that are currently allowed under State regulations. [See the North Slope Regional Advisory Council recommendation for modified proposed regulatory language.]

### **SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification.** The Southcentral Alaska Subsistence Regional Advisory Council supported the proposal with an amendment. The Council discussed that the current language is vague and the burden of proof should not be left with the subsistence users, additionally there should be some sort of control over sales.

~~§ \_\_\_\_.25(?) *The sale of handicrafts made from the nonedible byproducts of wildlife, when authorized in this part, may not constitute a significant commercial enterprise.*~~

### **EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification** as presented by staff and the additional modification for allowing the sale of capes, hides, and sheds as identified in State regulations. The Eastern Interior Alaska Subsistence Regional Advisory Council supported this proposal as modified by staff because the practice is currently allowed under State regulations but currently prohibited for wildlife harvested under Federal regulations. Adoption of this proposal would provide the same opportunity that currently exists under State regulations. The Council had concerns about not being able to sell capes, hides, and shed horns. Many

subsistence hunters currently sell capes and hides. Federal regulations need to align with State regulations and allow the sale of capes, hides, and sheds. This would allow full utilization of the resource.

The modified proposed Federal regulation should read:

\_\_\_ .25(j)9 *If you are a Federally qualified subsistence user, you may sell handicraft articles made from nonedible byproducts of wildlife harvested for subsistence uses (excluding bear) to include; skin, hide, pelt, fur claws, bones (except skulls of moose, caribou, elk, deer, sheep, goat and muskox), teeth, sinew, antlers and and/or horns, (if not attached to any part of the skull or made to represent a big game trophy) and hooves. You may also sell capes, hides, and shed horns.*

\_\_\_ .25(a) *Definitions*

*“big game” means black bear, brown bear, bison, caribou, Sitka black-tailed deer, elk, mountain goat, moose, muskox, Dall Sheep, wolf, and wolverine;*

*“trophy” means a mount of a big game animal, including the skin of the head (cape) or the entire skin, in a lifelike representation of the animal, including a lifelike representation made from any part of a big game animal; “trophy” also included a “European mount” in which the horns or antlers and the skull or a portion of the skull or a portion of the skull are mounted for display;*

\_\_\_ .25(?) *The sale of handicrafts made from the nonedible byproducts of wildlife, when authorized in this part, may not constitute a significant commercial enterprise.*

#### KODIAK/ALEUTIANS SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support with modification** presented by Staff to remove the redundant reference to bear in the regulatory language, to provide needed definitions of the terms *big game* and *trophy*, and to prohibit sales from constituting a significant commercial enterprise (consistent with the sale of bear claw handicrafts). [See the North Slope Regional Advisory Council recommendation for modified proposed regulatory language.] This proposal, as modified, satisfies subsistence needs and allows traditional practices.

#### SOUTHEAST ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support with modification** presented by Staff to remove the redundant reference to bear in the regulatory language, to provide needed definitions of the terms *big game* and *trophy*, and to prohibit sales from constituting a significant commercial enterprise. [See the North Slope Regional Advisory Council recommendation for modified proposed regulatory language.] The proposal would provide the opportunity for subsistence users to use nonedible byproducts of wildlife taken for subsistence purposes in handicraft.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-02**

**Support with modification** to remove the redundant references and to provide definitions currently lacking in Federal regulations in keeping with the recommendations of the North Slope, Bristol Bay, Seward Peninsula, Southeast Alaska, Yukon-Kuskokwim, Northwest Arctic, Western Interior Alaska, and Kodiak-Aleutians Subsistence Regional Advisory Councils.

**The modified regulation should read:**

§ \_\_.25(j)(9) *If you are a Federally qualified subsistence user, you may sell handicraft articles made from nonedible byproducts of wildlife harvested for subsistence uses (excluding bear) to include; skin, hide, pelt, fur, claws, bones (except skulls of moose, caribou, elk, deer, sheep, goat and muskox), teeth, sinew, antlers and/or horns (if not attached to any part of the skull or made to represent a big game trophy) and hooves.*

§ \_\_.25(a) *Definitions.*

*“big game” means black bear, brown bear, bison, caribou, Sitka black-tailed deer, elk, mountain goat, moose, muskox, Dall sheep, wolf, and wolverine;*

*“trophy” means a mount of a big game animal, including the skin of the head (cape) or the entire skin, in a lifelike representation of the animal, including a lifelike representation made from any part of a big game animal; “trophy” also includes a “European mount” in which the horns or antlers and the skull or a portion of the skull are mounted for display;*

§ \_\_.25(?) *The sale of handicrafts made from the nonedible byproducts of wildlife, when authorized in this part, may not constitute a significant commercial enterprise.*

**Justification**

This practice is currently allowed by State regulation (5 AAC 92.200) for wildlife harvested under the State’s general hunting provisions; however, it is currently prohibited for wildlife harvested under Federal subsistence management regulations. Adoption of these new regulations will provide Federally qualified subsistence hunters the same opportunities that are currently available to those harvesting under State regulations, and it would accommodate existing practices. This Federal regulation addresses handicrafts only, consistent with the definition of subsistence uses in ANILCA Section 803.

The Interagency Staff Committee recommendation does not include the Eastern Interior Alaska Subsistence Regional Advisory Council’s recommendation to add the sale of capes, hides, and shed antlers. Such sales, if allowed, would be covered under customary trade, not handicrafts, and therefore would require a separate proposal for analysis and public review. Otherwise, the recommendation is consistent with the recommendation by the Eastern Interior Alaska Subsistence Regional Advisory Council. Additionally, sales of shed antlers and capes may conflict with National Park Service regulations.

The Southcentral Alaska Subsistence Regional Advisory Council’s recommendation to strike the language prohibiting such sales from reaching the level of a “significant commercial enterprise” has not been supported. The Southcentral Alaska Subsistence Regional Advisory Council felt that the language was too vague to assist law enforcement efforts; however, the language is present in current regulations regarding customary trade of fish, and is recommended for inclusion in proposal WP06-01, as well as in regulations for the implementation of other Acts, such as the Marine Mammal Protection Act. At least one case

regarding the sales of herring roe on kelp has been successfully prosecuted, partially because of similar language. The Interagency Staff Committee believes that it does contribute to maintaining the subsistence, rather than commercial, nature of the sales of handicrafts in the Federal Subsistence Management Program.

The Interagency Staff Committee did consider that the use of the term “big game” has been avoided in the past for reasons of cultural sensitivity, because some users object to calling their food source “game,” but has retained the use in this instance. This reference applies to mounted wildlife trophies, not a normal subsistence use, and none of the ten Federal Subsistence Regional Advisory Councils objected to its use in this context.

## WRITTEN PUBLIC COMMENTS WP06-02

**Support.** We support WP06-02 so that rural residents may sell handicrafts made from nonedible byproducts of most wildlife. This practice has been done under State regulation, but not under the Federal regulation, since there is no regulation in place under Federal subsistence management.

*–Ahtna Tene Nene’ Subsistence Committee, Linda Tyone, Chair, Glennallen*

**Support.** We support Proposal WP06-02.

*–Mentasta Traditional Council, Carolyn David, First Chief*

**Support.** The Lake Clark SRC supports measures that allow subsistence users to maximize the benefits derived from legally harvested wildlife taken in subsistence hunts.

*–Lake Clark Subsistence Resource Commission*

**Support.** The Alaska National Interest Lands Conservation Act clearly states in Section 803 that “nonedible by-products” of subsistence-harvested wildlife can be used for handicrafts. Proposal #2 seems to be positively addressing this very issue.

*–National Parks Conservation Association*

**Support with modification** as presented by staff as it will provide Federally qualified subsistence hunters the same opportunities that are currently available to those harvesting under State regulations, and it would accommodate existing practices. This regulation will remove commercial incentives for harvesting bears, thereby providing additional protection from over harvest of bear populations.

*–Denali National Park & Preserve Subsistence Resource Commission*

**Support.** Wrangell-St. Elias National Park Subsistence Resource Commission unanimously supports the proposal as modified in the staff recommendation. The proposal should not cause a conservation concern, and it will allow subsistence users to more fully make use of the wildlife that they harvest. .

*–Wrangell-St. Elias National Park Subsistence Resource Commission*

**STAFF ANALYSIS  
WP06-02**

**ISSUES**

Proposal WP06-02, submitted by the Office of Subsistence Management, requests the Federal Subsistence Board (Board) to authorize the sale of handicrafts made from nonedible byproducts of wildlife, other than bears, harvested for subsistence uses. The proposed regulation will not affect previous regulations approved by the Board addressing the sale of bear handicrafts. The intent of this proposal is to have Federal regulations align more closely with existing State regulations, with respect to handicrafts, and accommodate existing practices. This proposal affects all regions of the State.

**DISCUSSION**

Many rural residents make and exchange (barter or sell) handicrafts made from nonedible byproducts of wildlife. This practice is currently allowed by State regulation (5 AAC 92.200) for wildlife harvested under the State's general hunting regulations, however, it is currently prohibited for wildlife harvested under Federal subsistence management regulations (§\_\_\_.7 (b) *You may not exchange in customary trade or sell fish or wildlife or their parts, taken pursuant to the regulations in this part, unless provided for in this part.*) Adoption of these new regulations will provide Federally qualified subsistence hunters the same opportunities that are currently available to those harvesting under State regulations.

**Existing Federal Regulation**

§\_\_\_.25(j) [Currently, only the sale of handicrafts made from certain bear parts is authorized.]

**Proposed Federal Regulation**

**§\_\_\_.25(j)(9) *If you are a Federally qualified subsistence user, you may sell handicraft articles made from nonedible byproducts of wildlife harvested for subsistence uses (excluding bear) to include; skin, hide, pelt, fur, claws, bones (except skulls of moose, caribou, elk, deer, bear, sheep, goat and muskox), teeth, sinew, antlers and/or horns (if not attached to any part of the skull or made to represent a big game trophy) and hooves.***

**Existing State Regulations:**

*5 AAC 92.200. Purchase and sale of game:*

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

*(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;*

*(2) a big game trophy;*

- (3) *a big game animal skull, except the skull of a wolf or wolverine, or a horn or antler that is still attached to any part of the skull;*
- (4) *the antler of a caribou taken in Unit 23, unless the antler is a naturally shed antler or has been made into an article of handicraft;*
- (5) *unsealed marten taken in Units 1–7, and 15, except as provided in 5 AAC 92.170(a);*
- (6) *unsealed beaver taken in Units 1–11 and Units 13–17;*
- (7) *unsealed land otter, lynx, wolf, or wolverine;*
- (8) *the meat of big game and small game, except hares and rabbits; however, caribou may be bartered in Units 22-26, but may not be transported or exported from those units (ADF&G 2004).*

### **Extent of Federal Public Lands**

The proposed regulations would apply to all Federal public lands, as defined by Federal subsistence hunting regulations, in Alaska. Federal public lands represent approximately 60% of Alaska or 380,900 square miles.

### **Regulatory History**

Subpart A regulations originally adopted in 1990 by the Secretaries of the Interior and Agriculture did not provide for the sale of subsistence harvested resources. Revisions to Subpart A regulations in 1999 contained the following language prohibiting all sales of fish or wildlife or their parts unless provided for in Subpart D: § \_\_.7 (b) *You may not exchange in customary trade or sell fish or wildlife or their parts, taken pursuant to the regulations in this part, unless provided for in this part.*

Section 7 language has remained unchanged since 1999, however, the Board has provided for the following Subpart D exceptions since 1999:

- Statewide—The sale of handicraft articles made from the skin, hide, pelt, or fur, including claws of a black bear.
- In Units 1–5—The sale of handicraft articles made from bones, teeth, sinew or skulls of black bear taken from Units 1, 2, 3, or 5.
- Statewide—The sale of handicraft articles made from the skin, hide, pelt, or fur, including claws of a brown bear taken in Units 1–5, 9A, 9B, 9C, 12, 17, 20, and 25.
- In Units 1–5—The sale of handicraft articles made from bones, teeth, sinew, or skulls of a brown bear taken from Units 1, 4 and 5.
- Raw fur or tanned pelt with or without claws attached from legally harvested furbearers.
- Subsistence-harvested fish, their parts, or their eggs, legally taken under Federal subsistence management regulations can be sold to other rural residents (with limitations in the Bristol Bay Fishery Management Area of \$500.00 annually and in the Copper River District a limit of 50% of the annual harvest by the household).
- Subsistence-harvested fish, their parts, or their eggs, legally taken under Federal subsistence management regulations can be sold to individuals other than rural residents if the individual who purchases the fish, their parts, or their eggs uses them for personal or family consumption (with

limitations in the Bristol Bay Fishery Management Area of \$400.00 annually and in the Copper River District a limit of \$500 annually or 50% of the annual harvest by the household).

- You may sell handicraft articles made from the nonedible byproducts (including, but not limited to, skin, shell, fins, and bones) of subsistence-harvested fish or shellfish.

### **Effects of the Proposal**

This action will not alter existing harvest limits or seasons and therefore, should have no impact on wildlife populations.

This action will provide those subsistence users who make handicrafts an opportunity to sell those handicrafts made from wildlife harvested under Federal subsistence management regulations. This change will be minimal because the activity is currently allowed for wildlife harvested under State regulations. This change will have no effect on other users.

This proposal will make Federal regulations more consistent with State regulations regarding the sale of handicrafts. State regulations, however, allow the purchase and sales of all game and provide a list of exceptions, whereas Federal subsistence management regulations begin from the position that all sales of fish and wildlife are prohibited (in Subpart A), except where allowed (in Subpart D). Without changing Subpart A language (which requires action by the Secretary) Federal language must express the regulations in terms of what is allowed instead of what is prohibited. The proposed Subpart D Federal regulations will allow the same types of handicraft sales that are currently not prohibited under State regulations, with the exception of differences between State and Federal regulations regarding bear handicrafts. State regulations, however, allow the purchase and sale of several other nonhandicraft wildlife byproducts, e.g., detached antlers and horns, capes of some species, etc., which would not be allowed under Federal regulations. This Federal regulation addresses handicrafts only, consistent with the definition of *subsistence uses* in ANILCA Section 803.

The proposed regulatory language introduces two terms not previously used in the Federal Subsistence Program regulations; *big game* and *trophy*. Definitions of these terms can be adopted from existing State regulations.

### **LITERATURE CITED**

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*WP06-06 Executive Summary*

<p><b>General Description</b></p>	<p>Remove the State of Alaska requirement that deer hunters in Unit 2 use deer harvest tickets in sequential order and all unused deer harvest tickets be in possession while hunting. <i>Submitted by the Craig Community Association.</i></p>
<p><b>Proposed Regulation</b></p>	<p>§ __.6 Licenses, permits, harvest tickets, tags, and reports.</p> <p>(a) <i>If you wish to take fish and wildlife on public lands for subsistence uses, you must be an eligible rural Alaska resident and:</i></p> <ol style="list-style-type: none"> <li>(1) <i>Possess the pertinent valid Alaska resident hunting and trapping licenses (no license required to take fish or shellfish, but you must be an Alaska resident) unless Federal licenses are required or unless otherwise provided for in Subpart D of this part;</i></li> <li>(2) <i>Possess and comply with the provisions of any pertinent Federal permits (Federal Subsistence Registration Permit or Federal Designated Harvester Permit) required by Subpart D of this part; and</i></li> <li>(3) <i>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.</i></li> </ol> <p><b>Subpart D</b></p> <p>§ __.25(h) <i>Permits. If a subsistence fishing or hunting permit is required by this part, the following permit conditions apply unless otherwise specified in this section:</i></p> <ol style="list-style-type: none"> <li>(1) <i>You may not take more fish, wildlife, or shellfish for subsistence use than the limits set out in the permit;</i></li> <li>(2) <i>You must obtain the permit prior to fishing or hunting;</i></li> <li>(3) <i>You must have the permit in your possession and readily available for inspection while fishing, hunting, or transporting subsistence-taken fish, wildlife, or shellfish;</i></li> <li>(4) <i>If specified on the permit, you shall keep accurate daily records of the harvest, showing the number of fish, wildlife, or shellfish taken by species, location and date of harvest, and other such information as may be required for management or conservation purposes; and</i></li> <li>(5) <i>If the return of harvest information necessary for management and conservation purposes is required by a permit and you fail to comply with such reporting requirements, you are ineligible to receive a subsistence permit for that activity during the following calendar year, unless you demonstrate that failure to report was due to loss in the mail, accident, sickness, or other unavoidable circumstances; and</i></li> <li>(6) <b><i>You are not required to comply with the provisions of harvest tickets for deer in Unit 2, requiring that all unused tickets be carried in the field and that they be validated in sequential order starting with harvest ticket number one.</i></b></li> </ol>

*continued on next page*

<i>WP06-06 Executive Summary</i>	
<b>Southeast Alaska Regional Advisory Council Recommendation</b>	<b>Oppose.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

## **REGIONAL ADVISORY COUNCIL RECOMMENDATION WP06-06**

### **SOUTHEAST ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose.** The Southeast Alaska Subsistence Regional Advisory Council opposes WP06-06. The requirement to use deer tags in sequential order was passed by the Alaska Board of Game to regulate hunting in areas of southeast Alaska where the seasonal harvest limit varies. While this regulation puts a burden on some hunters; particularly those hunters who may hunt in different parts of southeast Alaska and in Units 2 and 4 where harvest limits are 4 and 6 deer respectively; the harvest limits serve to protect the deer population and subsistence hunting opportunities in parts of Units 1 and 3.

## **INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-06**

**Oppose** the proposal as recommended by the Southeast Alaska Subsistence Regional Advisory Council.

### **Justification**

The requirement to use State deer harvest tickets in sequential order and possess all unused harvest tickets was determined by the Alaska Board of Game as necessary to enforce harvest limits where conservation concerns have resulted in reduced bag limits. Retaining the current regulations regarding use of harvest tickets will maintain alignment of Federal and State regulations and facilitate joint management of Unit 2 deer. A new mandatory reporting system for Unit 2 deer was in effect for the 2005/06 regulatory season, and the joint State/Federal harvest ticket requirement is an integral part of that plan. Excluding Federally qualified subsistence hunters in Unit 2 from some of the harvest ticket requirements would likely result in the continuation of conservation and enforcement concerns regarding harvest of deer in those areas with the lowest harvest limits (e.g., Units 1B and 3).

## STAFF ANALYSIS WP06-06

### ISSUES

The proposal, submitted by the Craig Community Association, removes the State of Alaska requirement that deer hunters in Unit 2 use deer harvest tickets in sequential order and all unused deer harvest tickets be in possession while hunting.

### DISCUSSION

Two significant changes to deer harvest regulations effecting Unit 2 were in effect during the 2005/06 season. The first is a State region-wide requirement that deer harvest tickets be used in sequential order and all unused deer harvest tickets be in possession while hunting. The second regulation is a joint Federal-State requirement for a mandatory deer harvest report for Unit 2. An important component of this second regulatory change is the requirement that both subsistence and other hunters use the State harvest ticket system.

The proponent believes existing regulations requiring all unused harvest tickets be on your person while hunting, places an undo burden on Federally qualified subsistence users in Unit 2. They believe deer hunting is opportunistic and the ability to harvest deer would be enhanced if harvest tickets could be stored in a boat, a vehicle, or elsewhere. Consultation with the proponent clarified their intent to change regulations for Unit 2 not all units in the Region.

The requirement to use harvest tickets in sequential order and possess all unused harvest tickets while hunting was adopted by the Alaska Board of Game to address a concern that reduced harvest limits for some areas could not be enforced without this requirement. The State issues six harvest tickets to each deer hunter, but the only location where six deer may be taken is Unit 4. Deer harvest limits for the remainder of the Southeast Alaska Area range between one and four animals.

### Existing Federal Regulation

#### Units 1–5—Harvest Tickets

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

(a) *If you wish to take fish and wildlife on public lands for subsistence uses, you must be an eligible rural Alaska resident, and:*

- (1) *Possess the pertinent valid Alaska resident hunting and trapping licenses (no license required to take fish or shellfish, but you must be an Alaska resident) unless Federal licenses are required or unless otherwise provided for in Subpart D of this part;*
- (2) *Possess and comply with the provisions of any pertinent Federal permits (Federal Subsistence Registration Permit or Federal Designated Harvester Permit) required by Subpart D of this part; and*

- (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.

§ \_\_\_\_.25(h) Permits. If a subsistence fishing or hunting permit is required by this part, the following permit conditions apply unless otherwise specified in this section:

- (1) You may not take more fish, wildlife, or shellfish for subsistence use than the limits set out in the permit;
- (2) You must obtain the permit prior to fishing or hunting;
- (3) You must have the permit in your possession and readily available for inspection while fishing, hunting, or transporting subsistence-taken fish, wildlife, or shellfish;
- (4) If specified on the permit, you shall keep accurate daily records of the harvest, showing the number of fish, wildlife, or shellfish taken by species, location and date of harvest, and other such information as may be required for management or conservation purposes; and
- (5) If the return of harvest information necessary for management and conservation purposes is required by a permit and you fail to comply with such reporting requirements, you are ineligible to receive a subsistence permit for that activity during the following calendar year, unless you demonstrate that failure to report was due to loss in the mail, accident, sickness, or other unavoidable circumstances.

No specific exceptions for Units 1–5 are currently provided for in Subpart D.

## **Proposed Federal Regulation**

### **Units 1–5—Harvest Tickets**

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

- (a) If you wish to take fish and wildlife on public lands for subsistence uses, you must be an eligible rural Alaska resident and:
- (1) Possess the pertinent valid Alaska resident hunting and trapping licenses (no license required to take fish or shellfish, but you must be an Alaska resident) unless Federal licenses are required or unless otherwise provided for in Subpart D of this part;
  - (2) Possess and comply with the provisions of any pertinent Federal permits (Federal Subsistence Registration Permit or Federal Designated Harvester Permit) required by Subpart D of this part; and
  - (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.

## **Subpart D**

§ \_\_\_\_\_.25(h) *Permits. If a subsistence fishing or hunting permit is required by this part, the following permit conditions apply unless otherwise specified in this section:*

- (1) *You may not take more fish, wildlife, or shellfish for subsistence use than the limits set out in the permit;*
- (2) *You must obtain the permit prior to fishing or hunting;*
- (3) *You must have the permit in your possession and readily available for inspection while fishing, hunting, or transporting subsistence-taken fish, wildlife, or shellfish;*
- (4) *If specified on the permit, you shall keep accurate daily records of the harvest, showing the number of fish, wildlife, or shellfish taken by species, location and date of harvest, and other such information as may be required for management or conservation purposes; **and***
- (5) *If the return of harvest information necessary for management and conservation purposes is required by a permit and you fail to comply with such reporting requirements, you are ineligible to receive a subsistence permit for that activity during the following calendar year, unless you demonstrate that failure to report was due to loss in the mail, accident, sickness, or other unavoidable circumstances; **and***
- (6) ***You are not required to comply with the provisions of harvest tickets for deer in Unit 2, requiring that all unused tickets be carried in the field and that they be validated in sequential order starting with harvest ticket number one.***

### **Existing State regulations**

The requirement for Units 1–5 to carry all harvest tickets and to validate them in sequential order (already in regulation for other parts of the State) was implemented by the Alaska Board of Game at its Nov. 2004 meeting.

#### **5 AAC 92.010 Harvest tickets and reports.**

- (f) *for deer, a person may not hunt deer, except in a permit hunt, unless the person has in possession a deer harvest ticket. All unused deer harvest tickets must be carried while hunting deer in Units 1–5 and must be validated in sequential order, beginning with harvest ticket number one.*

#### **5 AAC 92.130 Restrictions to bag limit.**

- (a) *Unless otherwise provided in 5 AAC 84–5 AAC 92, no person may take a species of game in any unit or portion of a unit if that person's total statewide take of that species already equals or exceeds the bag limit for that species in that unit or portion of a unit, except as provided in (d) of this section.*

### **Extent of Federal Public Lands**

There are approximately 2.3 million acres of land in Unit 2, of which 1.9 million acres (83%) are Federal public lands managed by the Tongass National Forest.

## **Customary and Traditional Use Determinations**

All rural residents of Units 1A, 2, and 3 have a positive customary and traditional use determination for deer in Unit 2. Rural residents of Unit 2 have a positive customary and traditional determination for deer in Units 1A, 1B and 2. Additionally, residents of Point Baker and Port Protection (located on North Prince of Wales Island) have a positive customary and traditional use determination for Units 3 and 4.

## **Regulatory History**

In 2003, the Federal Subsistence Board opened a week-long deer hunt in late July for Federally qualified subsistence users on Federal public land in Unit 2, and closed Federal public land on Prince of Wales Island to non-Federally qualified hunters for the first three weeks of August.

In 2004, the Federal Subsistence Board modified regulations and closed Federal public lands on Prince of Wales Island to non-Federally qualified subsistence users from Aug. 1–15.

The requirement to carry all harvest tickets and to validate them in sequential order was implemented by the Alaska Board of Game at its Nov. 2004 meeting.

The requirement was passed in response to repeated concerns from the Wrangell Fish and Game Advisory Committee, law enforcement officials and members of the public about hunters harvesting more than their legal harvest limits in Units 1B and 3. For all of Unit 1B and most of Unit 3, the annual harvest limit is two buck deer. The exception is Mitkof, Woewodski and Butterworth Islands (Unit 3) where the annual harvest limit is one buck. The general harvest rule is that if you hunt in an area with a one deer harvest limit (e.g., Units 1B and 3), you must harvest your first deer in that area.

The Alaska Bureau of Wildlife Enforcement acknowledged at the fall 2004 Alaska Board of Game meeting that these requirements would discourage hunters from illegally harvesting additional deer from units with lower harvest limits, and would also provide the Bureau with the means of readily determining compliance with site-specific harvest limits. For the regulation to serve its intended purpose, however, the requirement had to be applied region-wide.

## **Current Events Involving Species**

The regulations in place in 2003 and 2004 provided Federally qualified subsistence users an opportunity to better meet their needs for deer early in the season with less competition from non-Federally qualified hunters. However, the restrictions placed on non-Federally qualified subsistence deer hunters have continued to be controversial.

The Southeast Alaska Subsistence Regional Advisory Council Unit 2 Deer Planning Subcommittee met in Craig on Feb. 22 and 23, 2006. The Council received the subcommittee's report at its Feb. 27–Mar. 3, 2006 meeting in Saxman. The Council reviewed the report and adopted it with modification as a Council report to the Federal Subsistence Board. The final report of the Council to the Board includes recommendations to modify areas of Federal public lands closed to non-Federally qualified hunters during the Aug. 1-15 portion of the hunt, and to permit harvesting of a fifth deer under a Federal permit.

## **Harvest History**

In 2003, harvest data collected by the USDA Forest Service showed that 189 deer were harvested in Unit 2 during the last week of July and 170 deer were harvested in the month of August. Harvest data for 2004

showed that Federally qualified subsistence hunters harvested 172 deer during the last week of July and 180 deer in the month of August in Unit 2. Residents of Unit 2 do not normally utilize the designated hunter program, but it is common practice by residents of Unit 3 (Wrangell and Petersburg). Designated hunters residing in Unit 3 generally harvest deer for beneficiaries from Unit 2 and Unit 4. Harvest data will be available later in 2006 from the new 2005/06 State/Federal harvest reporting system.

### **Effects of the Proposal**

Adoption of the proposal would allow Federally qualified subsistence hunters in Unit 2 to carry only those harvest tickets they anticipate using that day, and removes from Federal subsistence management regulations the current State requirement to use harvest tickets in sequential order. Deer populations are healthy in Unit 2, but there are neighboring areas with reduced harvest limits due to conservation concerns (e.g., Units 1B and 3). Rescinding the harvest ticket regulation would have a negligible effect in Unit 2 because the majority of hunters do not take the allowable harvest limit. However, because of the use of Unit 2 by hunters from other areas (e.g., Units 1B and 3), rescinding the requirement may contribute to the conservation concern in those areas. Rescinding that regulation would not address the concern regarding controlling harvest limits expressed by the Alaska Board of Game. Under current regulations, a designated hunter is required to also use a beneficiary's harvest tickets in sequential order, and to possess all unused harvest tickets. Rescinding the harvest ticket requirements would produce a divergence between Federal and State regulations and place Federally qualified subsistence users at risk of being in violation of State regulations.

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<b>WP06-07/08 Executive Summary</b>	
<b>General Description</b>	<p>Proposal WP06-07 requests the closure of Federally managed public lands on Suemez Island to hunting by non-Federally qualified hunters from Aug. 1–15. It also requests the opening of Federally managed public lands in the southeast portion of Prince of Wales Island (POW) to hunting by non-Federally qualified hunters during the same period. <i>Submitted by the Southeast Alaska Subsistence Regional Advisory Council.</i></p> <p>Proposal WP06-08 requests the closure of Federally managed public lands on all islands in Unit 2 on the southwest side of POW to deer hunting by non-Federally qualified hunters from Aug. 1–15. It also requests the opening of Federally managed public lands in the southeast portion of POW to hunting by non-Federally qualified hunters during the same period. <i>Submitted by the Hydaburg Cooperative Association.</i></p>
<b>Proposed Regulation</b>	<p><b>WP06-07</b></p> <p><b>Unit 2—Deer</b></p> <p><i>4 deer; however, no more than one may be an antlerless deer. Antlerless deer may be taken only during the period Oct. 15–31. You are required to report all harvests using a joint Federal/State harvest report.</i> <span style="float: right;"><i>July 24–Dec. 31.</i></span></p> <p><i>Federal public lands on <b>Suemez Island</b> and <b>Prince of Wales Island</b>, excluding the southeast portion of the <b>Prince of Wales Island</b> (the area bounded on the west by <b>Cordova Bay/Hetta Inlet</b>, on the north by <b>Cholmondeley Sound</b>, and on the east by <b>Clarence Strait</b>) are closed to hunting of deer from Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.</i></p> <hr/> <p><b>WP06-08</b></p> <p><i>4 deer; however, no more than one may be an antlerless deer. Antlerless deer may be taken only during the period Oct. 15–Dec. 31. You are required to report all harvests using a joint Federal/State harvest report.</i> <span style="float: right;"><i>July 24–Dec. 31.</i></span></p> <p><i>Federal public lands on <b>all islands on the west side of Prince of Wales Island within Unit 2 south of 55° 17' N. Lat. and of east of 134° 20' W. Long. and west of Cape Chacan</b> (This area includes <b>Dall, Long, Sukkwan, and Barrier islands</b> and numerous other islands in the <b>Cordova Bay, Hetta Inlet, and Tlevak Strait area.</b>) and <b>Prince of Wales Island</b>, excluding the southeast portion of the <b>Prince of Wales Island</b>, (all Federal public lands draining eastward into <b>Clarence Strait north of Cape Chacon and south of Chasina Point</b>), are closed to hunting of deer from Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.</i></p>

*continued on next page*

<b>WP06-07/08 Executive Summary</b>	
<b>Southeast Alaska Regional Advisory Council Recommendation</b>	<b>WP06-07</b> Support with modification. <b>WP06-08</b> Support with modification.
<b>Interagency Staff Committee Recommendation</b>	<b>WP06-07</b> Take no action. <b>WP06-08</b> Support with modification.
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	None.

## REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

### SOUTHEAST ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

#### WP06-07

**Support with modification** to end the closure of Southeast Prince of Wales Island, but close Suemez Island. The Southeast Alaska Subsistence Regional Advisory Council voted to amend the proposed regulations as follows:

#### Unit 2—Deer

*4 deer; however, no more than one may be an antlerless deer. Antlerless deer may be taken only during the period Oct. 15–Dec. 31. You are required to report all harvests using a joint Federal/State harvest report. July 24–Dec. 31*

*Federal public lands on Suemez Island and Prince of Wales Island, excluding the southeast portion of the Prince of Wales Island (Federal public land north of Cape Chacon and south of Cholmondeley Sound that drains eastward into Clarence Strait (includes Wildlife Analysis Areas 1209, 1210, 1211, 1213)), are closed to hunting of deer from Aug. 1–Aug. 15, except by Federally qualified subsistence users hunting under these regulations.*

This proposal also includes Suemez Island in the portion of Unit 2 that is closed to non-Federally qualified hunters during the Aug. 1–15 portion of the deer hunting season. Over the years, the Council has worked closely with the Federal Subsistence Board, subsistence users, and urban residents to craft deer hunting regulations that conserve the Unit 2 deer population, allow subsistence hunters to meet their needs for deer in Unit 2, and have limited impact on non-Federally qualified hunters ability to use Unit 2.

The Council made regulatory recommendations in the 2004 regulatory cycle. After reviewing available harvest and biological data, quantitative data on whether subsistence needs were being met and on

public perception of the status of the deer population, and listening to extensive public testimony on deer management in Unit 2, the Council recommended that all Federal public lands in Unit 2 be closed to non-Federally qualified hunters during the Aug. 1–10 portion of the 5 month season and that the harvest limit for these hunters be set at two deer taken from Federal public lands. The Council believed that these restrictions were necessary for meeting subsistence needs and that they would minimize effects on urban hunters.

In the 2003 regulatory cycle, the Federal Subsistence Board responded to the Council recommendation by a) closing only Prince of Wales Island proper to non-Federally qualified hunters and leaving other islands in Unit 2 open, 2) setting the closure period at Aug. 1–21, and 3) leaving the harvest limit of 4 deer for non-Federally qualified hunters in place.

The Council appreciated these Board actions concerning Unit 2 subsistence deer hunting, although it preferred its original recommendation. In the 2004 regulatory cycle, the Council submitted a proposal and later recommended a reduction in the closed period from Aug. 1–21 to Aug. 1–15. The Council saw this as fine-tuning the 2004 closure to allow Ketchikan hunters more opportunity for family hunts before school begins. The Board accepted this Council recommendation.

Council proposal WP06-07 provides further fine-tuning on the closure passed by the Board in 2004. The overall objective of the fine-tuning is to insure that Federal subsistence management regulations allow Federally qualified subsistence users in Unit 2 to meet their needs for deer, while limiting restrictions on nonsubsistence hunters.

With Council proposal WP06-07, the Council modified the area in the southeast portion of Prince of Wales Island closed to nonsubsistence hunting during Aug. 1–15 to more accurately reflect the report the Council received from the Unit 2 Deer Planning Subcommittee. Opening this area will allow hunting by non-Federally qualified hunters to take place during the Aug. 1–15 time period when other areas of Prince of Wales Island are closed. This change will have very limited effect on subsistence hunters who do not appear to use this area heavily during this time period. It will provide more hunting opportunity to Ketchikan hunters using boats as a means of access.

The second fine-tuning closes Suemez Island during the Aug. 1–15 portion of the hunting season. Suemez Island is a key hunting area, particularly for subsistence hunters from Craig and Klawock. This island has been a major deer producer for these communities. The original 2004 Council recommendation called for a closure of all of Unit 2, not only Prince of Wales Island proper. This adjustment of the closed area boundary will benefit Federally qualified subsistence hunters by limiting competition from, and harvest by, urban hunters during the first part of the deer hunting season.

The Council bases its recommendation concerning Suemez Island on public testimony and personal knowledge of this area by Council members. This local knowledge provides the substantial data supporting the Council recommendation. The existing quantitative data, based on voluntary response to mail out surveys, does not provide an accurate picture of hunting on Suemez Island during the first 2 weeks of August; the data are not strong enough to either support or oppose this closure. Note that the Council supported a mandatory harvest reporting system, begun in 2005, to provide more accurate deer harvest data for Unit 2.

Both the Council's 2005 recommendation to shorten the time Federal public lands on Prince of Wales Island would be closed, and the current 2006 recommendation to adjust the closure boundaries, are minor adjustments to the Board's 2004 decision. The current recommendations need to be evaluated in this context.

**WP06-08**

**Support with modification** to close island areas in the southwest portion of Prince of Wales Island to non-Federally qualified users during the Aug. 1–15 portion of the deer hunting season. Modify the proposed closed area to exclude Long Island, close the western islands and Suemez Island (as recommended in WP06-07), and end the closure of Southeast Prince of Wales Island. The modified regulation should read:

**Unit 2—Deer**

*4 deer; however, no more than one may be an antlerless deer. Antlerless deer may be taken only during the period Oct. 15–Dec. 31. You are required to report all harvests using a joint Federal/State harvest report.* July 24–Dec. 31

*Federal public lands on all islands on the west side of Prince of Wales Island within Unit 2 south of 55° 17' N. Lat. and of east of 134° 20' W. Long. and west of Cape Chacan excluding Long Island (this area includes Dall, Sukkwan, and Barrier islands and numerous other islands in the Cordova Bay, Hetta Inlet, and Tlevak Strait area) and Suemez Island and Prince of Wales Island, excluding the southeast portion of the Prince of Wales Island (Federal public land north of Cape Chacon and south of Cholmondeley Sound that drains eastward into Clarence Strait (includes Wildlife Analysis Areas 1209, 1210, 1211, 1213)), are closed to hunting of deer from Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.*

The portion of the original proposal opening the southeast portion of Prince of Wales Island was acted upon in proposal WP06-07.

The area to be closed to nonsubsistence hunting during the Aug. 1–15 portion of the deer hunt, consists of island areas very close to Hydaburg and that are part of Hydaburg's core deer hunting area. The Council recommended closing these islands in its recommendations to the Board in the 2004 regulatory cycle.

Closing these islands would provide a benefit to Federally qualified subsistence hunters, primarily Hydaburg residents. Hydaburg residents have repeatedly provided testimony to the Council that they have difficulty meeting their subsistence needs. This proposal, submitted by the Hydaburg Cooperative Association, addresses this community concern. The Aug. 1–15 closure would help these residents meet their needs for deer. Long Island is excluded from the closure because this island has large amounts of non-Federal land, and because the island may be used by Ketchikan residents.

The Council bases its decision primarily on testimony and Council member knowledge of this area. Other sources of information are very weak for this small geographical area. The staff analysis relies primarily on harvest data from ADF&G's voluntary mail out survey reports. These harvest data are known to be inaccurate and incomplete for Hydaburg. The data are not able to present a clear picture of who hunts in the proposed closed area during Aug. 1–15. In this case, local knowledge provides stronger data than the fragmentary State of Alaska harvest data that is available.

## INTERAGENCY STAFF COMMITTEE RECOMMENDATIONS WP06-07/08

### WP06-07

**Take no action**, contrary to the recommendation of the Southeast Alaska Subsistence Regional Advisory Council.

#### Justification

There are two parts to this proposal:

1. Removal of the closure to non-Federally qualified hunters on the southern end of Prince of Wales Island, and
2. Implementation of a closure to non-Federally qualified hunters on Suemez Island.

The Interagency Staff Committee recommends that the Federal Subsistence Board take action on WP06-08, rather than on WP06-07, because it addresses both of these parts as well as an additional closure area.

### WP06-08

#### Option A: Majority Recommendation

**Support with modification**, as recommended by the Southeast Alaska Subsistence Regional Advisory Council for the southeast portion of Prince of Wales Island; and contrary to the Council recommendation for the southwest island. With this modification, all islands in Unit 2 on the southwest side of Prince of Wales Island would remain open to non-Federally qualified users.

The modified regulation should read:

#### Unit 2—Deer

*4 deer; however, no more than one may be an antlerless deer. Antlerless deer may be taken only during the period Oct. 15–Dec. 31. You are required to report all harvests using a joint Federal/State harvest report.*

*Federal public lands on Prince of Wales Island, **excluding the southeast portion (land south of Cholmondeley Sound that drains eastward into Clarence Strait)**, are closed to hunting of deer from Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.*

#### Justification

There are three parts to this proposal, each addressed below:

1. Removal of the closure to non-Federally qualified hunters on the southern end of Prince of Wales Island,

2. Implementation of a closure to non-Federally qualified hunters on Suemez Island, and
3. Implementation of a closure to non-Federally qualified hunters on the southwestern islands in Unit 2 (Suemez Island is part of this area, but will be treated as a separate part of the proposal for continuity with proposal WP06-07).

1. Closure removal. The entire Interagency Staff Committee supports the recommendation of the Southeast Alaska Subsistence Regional Advisory Council to reopen the east side of the south end of Prince of Wales Island to non-Federally qualified hunters. This is consistent with the recommendations made in the Council's Unit 2 deer planning report to the Federal Subsistence Board. Very few Federally qualified subsistence users hunt in this area, and therefore reopening this area the first 15 days of August should not detrimentally affect subsistence uses. The proposed regulatory language parallels the Council's recommendation, but simplifies the wording.

2. Suemez Island. The majority of the Interagency Staff Committee opposes the recommendation of the Council to close Suemez Island to non-Federally qualified hunters during the first 15 days in August. In order to close the Island, one of the criteria from ANILCA Section 815(3) must be met.

*§815 (3). Nothing in this title shall be construed as—.... 3) authorizing a restriction on the taking of fish and wildlife for nonsubsistence uses on the public lands (other than national parks and park monuments) unless necessary for the conservation of healthy populations of fish and wildlife, for the reasons set forth in §816, to continue subsistence uses of such populations, or pursuant to other applicable law;*

In essence, this Section says that a closure cannot be made unless there is a conservation concern or to continue subsistence uses. No conservation concern has been identified on Suemez Island. To justify closing an area to continue subsistence uses, it must be shown that Federally qualified subsistence users are unable to meet their needs as a result of competition from other users.

Data are presented in the analysis in **Tables 3 and 4**, which show that there is very little competition from non-Federally qualified hunters. During the period 2000–2003 (entire season), 30 of 150 hunters were non-Federally qualified and 28 of 156 deer were harvested by non-Federally qualified hunters. The non-Federally qualified hunters take was very inconsistent from year to year; in one year (2001) no non-Federally qualified hunters harvested deer. The only consistent use from year to year, and by far the majority of harvest, was from Craig hunters. These data come from hunter mail-out surveys and have some inherent inaccuracies, especially when measured against household surveys. It is likely that an accurate count would show that a greater percentage of hunters were Federally qualified subsistence users and a greater percentage of deer harvested were taken by Federally qualified subsistence users.

No testimony was provided at the Council meetings, either from the public or Council members, indicating that Federally qualified subsistence users were unable to continue their subsistence use as a result of competition with other users.

3. Southwest Unit 2 islands, excluding Suemez. The entire Interagency Staff Committee recommends that all of the southwest islands (except Suemez, which is covered in #2, above) should remain open to non-Federally qualified hunters during the first 15 days in August. The Council's recommendation is that all of these islands should be closed during this time period, except for Long Island. In order to close the islands, one of the criteria from ANILCA Section 815(3) must be met, as described above.

Like Suemez Island, no conservation concern has been identified on any of these islands. Therefore, to justify closing an area to continue subsistence uses, it must be shown that Federally qualified subsistence

users are unable to meet their needs as a result of competition from other users. The Interagency Staff Committee does not believe that the data show that users are unable to meet their needs as a result of competition.

Data are presented in the analysis in **Tables 9 and 10**, which show that there is very little competition from non-Federally qualified hunters, except for Long Island. Data for the period 2000–2003 (entire season, not just August 1–15) are summarized from Tables 9 and 10 below:

Location (WAA)	Federally qualified users	Non-Federally qualified hunters	Deer harvest by Federally qualified subsistence users	Deer harvest by non-Federally qualified hunters
Dall Island (901)	39	5	43	0
Long Island (1106)	21	56	10	119
Hydaburg (1107)*	214	50	188	28
*WAA 1107 includes both islands (primarily Sukkwan) and a considerable amount of road accessible area on Prince of Wales Island. The Prince of Wales Island portion is already closed during the August 1–15 period, and would not be subject to change with this proposal.				

The non-Federally qualified hunter's take has been inconsistent from year to year; in one year (2002) no non-Federally qualified hunters harvested deer in any of these areas. The only consistent use from year to year for WAA's 901 and 1107 was by residents of Craig and Hydaburg. These data come from hunter mail-out surveys and have some inherent inaccuracies, especially when measured against household surveys. It is likely that an accurate count would show that a greater percentage of hunters were Federally qualified subsistence users and a greater percentage of deer harvested were taken by Federally qualified subsistence users.

Long Island, with predominately private land, does appear to show competition from non-Federally qualified hunters. However a lot of hunting and harvest likely occurs on the private land and fluctuates with the presence of logging camps with residents from Ketchikan and other southeast Alaska areas. The Council did not recommend the August closure for Long Island, so the Interagency Staff Committee is not in conflict with that recommendation.

No testimony was provided at the Council meetings, either from the public or Council members, indicating that Federally qualified subsistence users were unable to continue their subsistence use as a result of competition with other users.

### **Option B: Minority Recommendation**

**Support with modification**, as recommended by the Southeast Alaska Subsistence Regional Advisory Council for the southeast portion of Prince of Wales Island, and contrary to the Council's recommendation for the southwest island. With this modification, all islands in Unit 2 on the southwest side of Prince of Wales Island, except Suemez Island, would remain open to non-Federally qualified users.

The modified regulation should read:

**Unit 2–Deer**

*4 deer; however, no more than one may be an antlerless deer. Antlerless deer may be taken only during the period Oct. 15–Dec. 31. You are required to report all harvests using a joint Federal/State harvest report.* July 24–Dec. 31

*Federal public lands on **Suemez Island and on Prince of Wales Island, excluding the southeast portion (land south of Cholmondeley Sound that drains eastward into Clarence Strait)**, are closed to hunting of deer from Aug. 1 to Aug. 15, except by Federally qualified subsistence users hunting under these regulations.* July 24–Dec. 31

**Justification**

**Support with modification**, consistent with the Southeast Alaska Subsistence Regional Advisory Council’s recommendation for Suemez Island and based on public testimony received and local knowledge. The staff analysis provides data supporting the Council recommendation. The estimated number of deer harvested by communities of Prince of Wales Island using Wildlife Analysis Areas 0901 (Suemez) reflect a 42% reduction from 2000 to 2003, and an almost 50% reduction in harvest by all hunters. Proposal WP06-08 also corrects the Unit 2 subcommittee proposal adopted by the Council that opens the southeast portion of Prince of Wales to non-Federally qualified subsistence users.

## STAFF ANALYSIS WP06-07/08

### ISSUES

This analysis addresses two proposals that request changes to the areas in Unit 2 that are closed and open to non-Federally qualified deer hunters from Aug. 1–15. The Southeast Alaska Subsistence Regional Advisory Council (Council) submitted proposal WP06-07. This proposal would close Federally managed public lands on Suemez Island to hunting by non-Federally qualified hunters from Aug. 1–15. It would open Federally managed public lands in the southeast portion of Prince of Wales Island (POW) (see **Map 1** and described below) to hunting by non-Federally qualified hunters during the same period. The Hydaburg Cooperative Association (Hydaburg) submitted Proposal WP06-08. This proposal would close Federally managed public lands on all islands in Unit 2 on the southwest side of POW to deer hunting by non-Federally qualified hunters from Aug. 1–15. It would remove the closure to non-Federally qualified deer hunters on Federally managed public lands in the southeast portion of POW (see **Map 2** and described below) to hunting by non-Federally qualified hunters during the same period.

### DISCUSSION

#### WP06-07

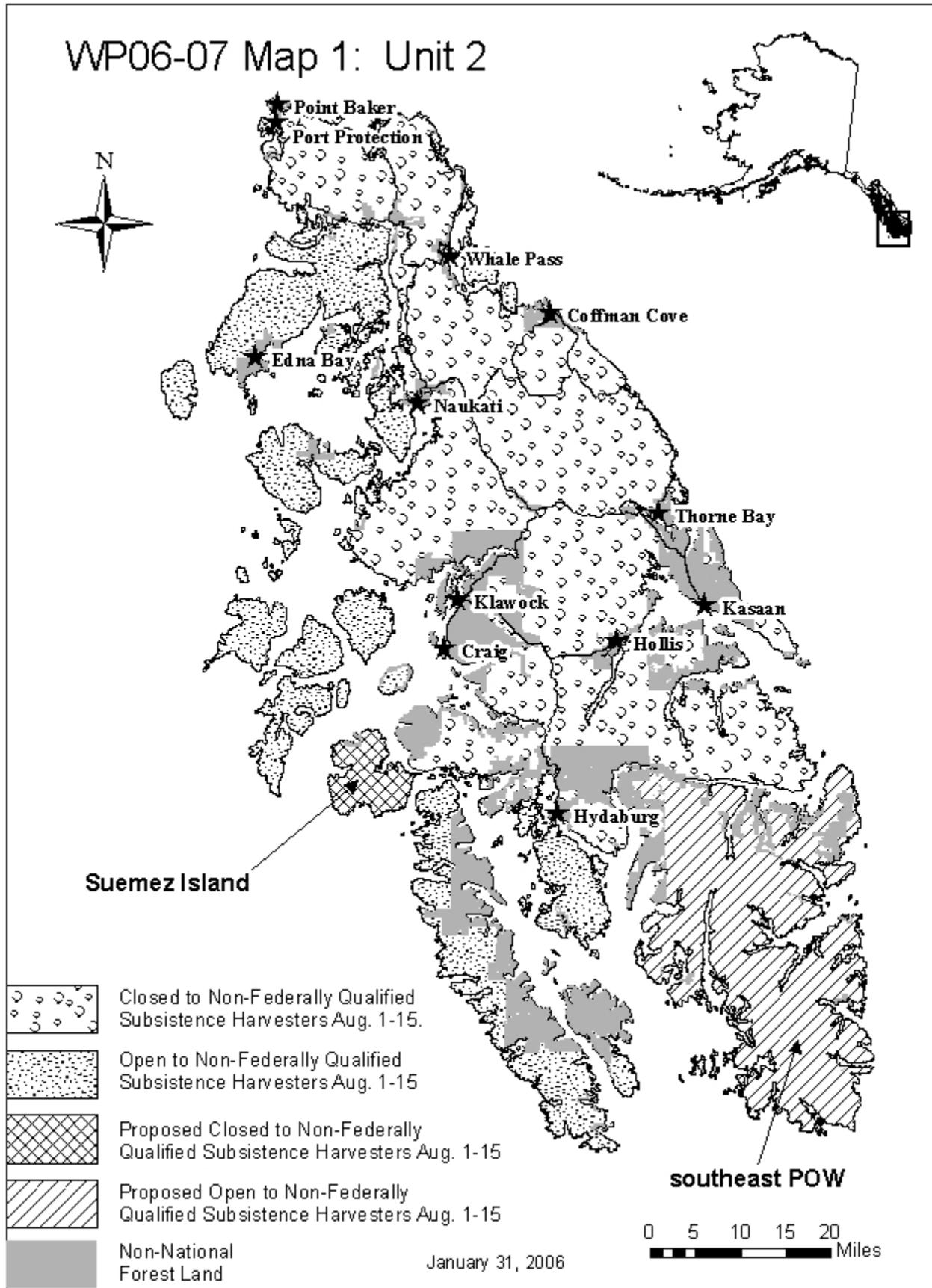
Residents of Craig and Klawock consider Suemez Island an important subsistence deer harvesting area because it is easily accessible from POW. The island is separated from POW by a narrow passage. Relatively easy access, good deer populations, low wolf predation, and mild maritime winters make the island an important subsistence hunting area. The proponent believes that closing Suemez Island to nonsubsistence hunting during this portion of the season would help Federally qualified subsistence hunters meet their needs for deer.

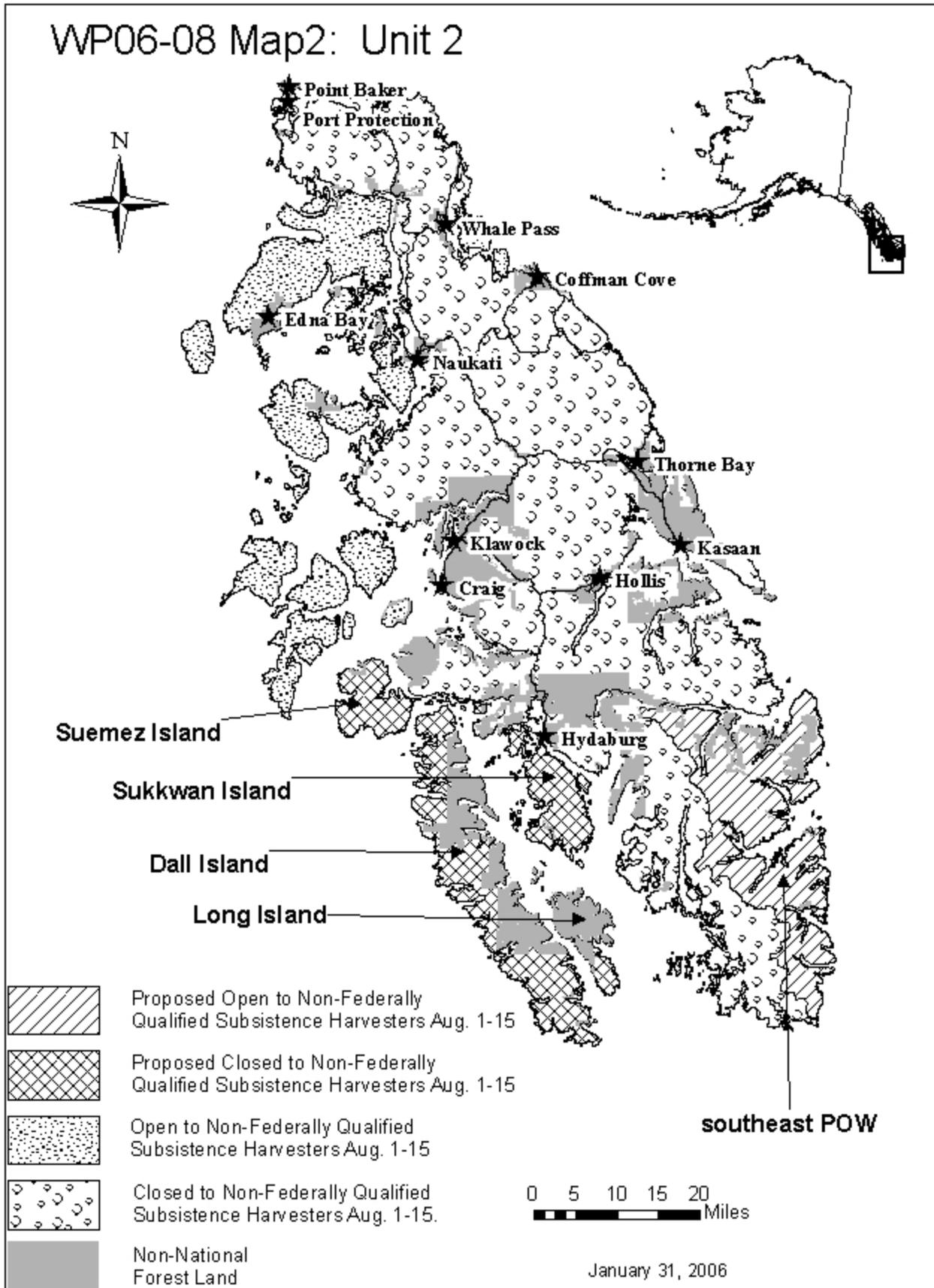
The Councils' Unit 2 Deer Cooperative Planning Subcommittee (Subcommittee) met over the past year and found that the southeast portion of POW is important to non-Federally qualified hunters and received relatively little deer hunting use by Federally qualified subsistence users during the Aug. 1–15 time period. The Federal Subsistence Board and the Council have received oral and written testimony in previous years indicating that the month of August is important for Ketchikan parents to take their children deer hunting on POW prior to the start of the school year. Thus, according to the proponent, the southeast portion of POW could be opened to all hunters during the Aug. 1–15 time period without having adverse effects on subsistence opportunity.

#### WP06-08

Residents of Hydaburg consider the islands to the southwest of POW to be traditional hunting areas important to meeting their subsistence deer harvest needs. They feel that the area is easily accessible from POW, has good deer populations, low wolf predation, and mild maritime winters. Hydaburg residents feel that competition from non-Federally qualified deer hunters has negatively affected their ability to get the deer they need from this area early in the season.

For the same reasons described above, this proposal opens a portion of southeast POW to non-Federally qualified hunters. However, the boundaries differ between proposals.





This proposal represents the Hydaburg Cooperative Association's clarification and fine-tuning of their understanding of the recommendations of the Unit 2 Deer Subcommittee. Hydaburg's representative to the Subcommittee was under the impression, at the time of the meetings, that the islands west of POW were closed to non-Federally qualified hunters from Aug. 1–15. The area proposed for closure closely matches the traditional area claimed by Hydaburg as shown in Chart 13 of Goldschmidt and Haas (1998).

To assure that the proposed boundaries were mapped correctly, a map was provided to Anthony Christianson of the Hydaburg Cooperative Association on Dec. 1, 2005 for review. Boundaries for the southeast POW area were discussed by phone with Anthony again on Dec. 9, 2005. The northern boundary (Cholmondeley Sound) as recommended by the Unit 2 Deer Planning Subcommittee was also clarified with Jan Caulfield (facilitator for the Unit 2 Deer Planning Subcommittee) on Dec. 13, 2005.

### **Existing Federal Regulation**

#### **Unit 2–Deer**

*4 deer; however, no more than one may be an antlerless deer. Antlerless deer may be taken only during the period Oct. 15–Dec. 31. You are required to report all harvests using a joint Federal/State harvest report.* July 24–Dec. 31

*The Federal public lands on Prince of Wales Island are closed to hunting of deer from Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.*

### **Proposed Federal Regulation**

#### **WP06-07**

#### **Unit 2–Deer**

*4 deer; however, no more than one may be an antlerless deer. Antlerless deer may be taken only during the period Oct. 15–31. You are required to report all harvests using a joint Federal/State harvest report.* July 24–Dec. 31

*Federal public lands on **Suemez Island** and Prince of Wales Island, **excluding the southeast portion of the Prince of Wales Island (the area bounded on the west by Cordova Bay/Hetta Inlet, on the north by Cholmondeley Sound, and on the east by Clarence Strait)** are closed to hunting of deer from Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.*

**WP06-08****Unit 2–Deer**

*4 deer; however, no more than one may be an antlerless deer. Antlerless deer may be taken only during the period Oct. 15–Dec. 31. You are required to report all harvests using a joint Federal/State harvest report.* July 24–Dec. 31.

*Federal public lands on all islands on the west side of Prince of Wales Island within Unit 2 south of 55°17' N. Lat. and of east of 134°20' W. Long. and west of Cape Chacan (This area includes Dall, Long, Sukkwan, and Barrier islands and numerous other islands in the Cordova Bay, Hetta Inlet, and Tlevak Strait area.) and Prince of Wales Island, excluding the southeast portion of the Prince of Wales Island, (all Federal public lands draining eastward into Clarence Strait north of Cape Chacon and south of Chasina Point), are closed to hunting of deer from Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.*

**Existing State Regulation****Unit 2–Deer**

*Residents and nonresidents: four bucks.* Aug. 1–Dec. 31.

**Extent of Federal Public Lands**

There are approximately 2.3 million acres of land in Unit 2 of which 1.9 million acres (83%) are Federal public lands managed by the Tongass National Forest. There is a small amount of land managed by FWS Alaska Maritime National Wildlife Refuge. State, municipal, and private land is scattered throughout Unit 2 and comprises approximately 398,000 acres (17%), of which Native corporations own 280,000 acres (12%).

**Customary and Traditional Use Determinations**

All rural residents of Units 1A, 2, and 3 have a positive customary and traditional use determination for deer in Unit 2. Rural residents of Unit 2 have a positive customary and traditional use determination for deer in Units 1A, 1B and 2.

**Regulatory History**

**Table 1** provides a summary of deer hunting regulations for Unit 2 under both State of Alaska and Federal regulations. Since statehood, State regulations have allowed a 3 or 4 deer harvest limit in Unit 2; the 4 deer limit has been in effect since 1988. The State hunting season has started Aug. 1 and closed sometime between Nov. 30 and Dec. 31 since 1969. Since 1988 the State hunting season has closed Dec. 31. The State allowed hunting of does or antlerless deer during a portion of the open season from 1957–77, and in 1987. Current State regulations do not allow the harvest of female deer, but antlerless male deer are legal.

Federal subsistence management regulations for Unit 2 mirrored the State regulations through 1994. In 1995 Federal regulations allowed a limited antlerless deer hunt. Since 1997, antlerless subsistence hunting

**Table 1.** Regulatory history of Unit 2 deer harvest regulations since 1925.

Year	Season Type	Season	Limit	Conditions and Limitations
1925	Open	Sept 16–Dec 15	3	Bucks with 3 inch or greater antler
1926–29	Open	Sept 1–Nov 30	3	Bucks with 3 inch or greater antler
1930–41	Open	Aug 20–Nov 15	3	Bucks with 3 inch or greater antler
1942–43	Resident	Sept 16–Nov 15	2	Bucks with 3 inch or greater antler
1942–43	Nonresident	Sept 16–Nov 15	1	Bucks with 3 inch or greater antler
1944–48	Resident	Sept 1–Nov 15	2	Bucks with 3 inch or greater antler
1944–48	Nonresident	Sept 1–Nov 15	1	Bucks with 3 inch or greater antler
1949	Resident	Sept 1–Nov 7	1	Bucks with 3 inch or greater antler
1949	Nonresident	Sept 1–Nov 7	1	Bucks with 3 inch or greater antler
1950–51	Resident	Sept 1–Nov 15	2	Bucks with 3 inch or greater antler
1950–51	Nonresident	Sept 1–Nov 15	1	Bucks with 3 inch or greater antler
1952	Open	Aug 20–Nov 15	1	Bucks with 3 inch or greater antler
1953–54	Open	Aug 20–Nov 22	2	Bucks with 3 inch or greater antler
1954	Open	Aug 20–Nov 22	3	Bucks with 3 inch or greater antler
1955	Open	Aug 20–Nov 22	3	3 bucks or 2 bucks and 1 doe; bucks 3 inch or greater antler.
1956	Open	Aug 20–Nov 26	3	3 bucks or 2 bucks and 1 doe; does 11/13–11/26, bucks 3 inch or greater antler.
1957–58	Open	Aug 20–Nov 30	4	Does allowed 10/15 to 11/30.
1959	Open	Aug 8–Nov 30	4	4 bucks or 3 bucks and one doe; bucks only before 10/15.
1960	Open	Aug 20–Dec 15	4	4 bucks or 3 bucks/ 1 doe, or 2 bucks/ 2 does, bucks only before 10/1.
1961	Open	Aug 1–Nov 30	4	Only 2 antlerless; Antlerless only from 9/15 to 11/30.
1962	Open	Aug 1–Dec 15	4	Antlerless deer from 9/15 to 12/15 only.
1963–67	Open	Aug 1–Dec 31	4	Antlerless deer from 9/15 to 12/31 only.
1968	Open	Aug 1–Dec 15	4	Antlerless deer from 9/15 to 12/15 only.
1969–70	Open	Aug 1–Dec 31	4	Antlerless deer from 10/1 to 12/31 only.
1971	Open	Aug 1–Dec 31	4	Antlerless deer from 10/1 to 12/31 only.
1972	Open	Aug 1–Dec 31	3	Antlerless deer from 11/1 to 11/30 only.
1973	Open	Aug 1–Nov 30	3	Not more than one antlerless deer from 11/1 to 11/30 only.
1974–77	Open	Aug 1–Nov 30	3	Not more than one antlerless deer from 11/1 to 11/30 only.
1978–84	Open	Aug 1–Nov 30	3	Antlered deer.
1985–86	State Subsistence/ General	Aug 1–Nov 30	3	Antlered deer.
1987	State Subsistence/ General	Aug 1–Nov 30	3	Not more than one antlerless deer from 10/10 to 10/31 only.
1988–90	State Subsistence/ General	Aug 1–Dec 31	4	Antlered deer.
1991–94	State Subsistence/ General, Federal Subsistence	Aug 1–Dec 31	4	Antlered deer.
1995–00	State Subsistence/ General	Aug 1–Dec 31	4	Antlered deer.
1995–02	Federal Subsistence	Aug 1–Dec 31	4	Not more than one antlerless deer from 10/15 to 12/31 only.
2003	Federal Subsistence	July 24–Dec 31	4	Not more than one antlerless deer from 10/15 to 12/31 only. Federal public lands closed to non- Federally qualified hunters Aug 1–21.
2000–05	State Subsistence/ General	Aug 1–Dec 31	4	Bucks
2004–05	Federal Subsistence	Jul 24–Dec 31	4	Not more than one antlerless deer from 10/15 to 12/31 only. Federal public lands closed to non-Federally qualified hunters Aug 1–15.

has required a Federal registration permit. In 2003, Federal regulations opened Federal public lands for subsistence deer hunting on July 24, and closed Federal public land on POW to non-Federally qualified deer hunters from Aug. 1–21. A Federal registration permit was required for anyone hunting under the Federal regulations during the entire season from July 24–Dec. 31. However, because Federally qualified hunters could also hunt under State regulations, those with State harvest tickets would have only needed a Federal permit when hunting from July 24–Aug. 15, when harvesting a doe, or when hunting as a designated hunter under the Federal permit system.

Thirteen regulatory proposals concerning Unit 2 deer were submitted in the 2004 Federal wildlife regulatory cycle. These included proposals to change the time when Federal public lands were closed to non-Federally qualified users; change the opening date of the subsistence season; reduce the harvest limit for non-Federally qualified hunters; end hunting of antlerless deer; and other hunting regulations. The Council stated that some of these proposals had merit; however, the Council recommended maintaining the regulations that were in place for 2003, with their only recommended change to reduce the time when Federal public lands would be closed to non-Federally qualified hunters. The Federal Subsistence Board changed the closure period to Aug. 1–15 for the 2004 season.

In 2005, based on work by the Unit 2 Deer Planning Subcommittee, the Federal Subsistence Board passed a regulation that all hunters hunting under Federal subsistence management regulations are required to report harvests using a joint State/Federal harvest report. The Alaska Board of Game passed a resolution supporting joint harvest reporting.

### **Current Events Involving the Species**

From 1997–2004, the Federal Subsistence Board received over 30 proposals for changes to Unit 2 Federal subsistence deer hunting regulations. Many of these proposals reflected that Federally qualified subsistence hunters do not feel they have been able to harvest enough deer to meet their needs. Many proposals asked for restrictions on non-Federally qualified users. At the request of the Southeast Alaska Subsistence Regional Advisory Council (Council), the Federal Subsistence Board authorized formation of a Council subcommittee to address Unit 2 deer issues and report back to the Council with management recommendations. The 12-member Unit 2 Deer Planning Subcommittee (Subcommittee) included residents of Craig, Hydaburg, Ketchikan, Petersburg, Point Baker, and Wrangell; and representatives from the Alaska Department of Fish and Game and USDA Forest Service. Subcommittee members were selected to reflect the range of deer users and perspectives, including Federally qualified subsistence hunters, non-Federally qualified hunters, Tribal representatives, guides, agency wildlife managers and the Southeast Alaska Subsistence Regional Advisory Council. The Subcommittee met six times between Nov. 2004 and Feb. 2006, issued a preliminary report to the Council in July 2005, and a final report in Feb. 2006.

At the Oct. 2005 Southeast Alaska Subsistence Regional Advisory Council meeting, the Council reviewed Subcommittee recommendations for regulatory change. The Council submitted a proposal to open southeast POW to non-Federally qualified hunters from Aug. 1–15 and to include Suemez Island in the portion of Unit 2 closed to non-Federally qualified hunters Aug. 1–15. Proposal WP06-07 reflects this Council action (SERAC 2005). Suemez Island was included because it is important to hunters from Craig. During discussion at the Oct. 2005 meeting, some Council members expressed interest in adding closures to areas important to Hydaburg. No one was present from Hydaburg to inform the Council on which areas to include, so the Council asked Federal staff to inform Hydaburg about Council proposal WP06-07 (SERAC 2005). Hydaburg submitted proposal WP06-08 calling for early season closure of islands near Hydaburg and removing the closure on southeast POW.

The Council reviewed the Subcommittee's final report at its Feb. 27–Mar. 3, 2006 meeting in Saxman. The Council adopted the final report with modifications as a Council report to the Federal Subsistence Board. The final report of the Council to the Board includes recommendations to modify areas of Federal public lands closed to non-Federally qualified hunters during the Aug. 1–15 portion of the hunt, and to permit harvesting of a fifth deer under a Federal permit. (SERAC 2006)

## **Biological Background**

### *Deer Population Status*

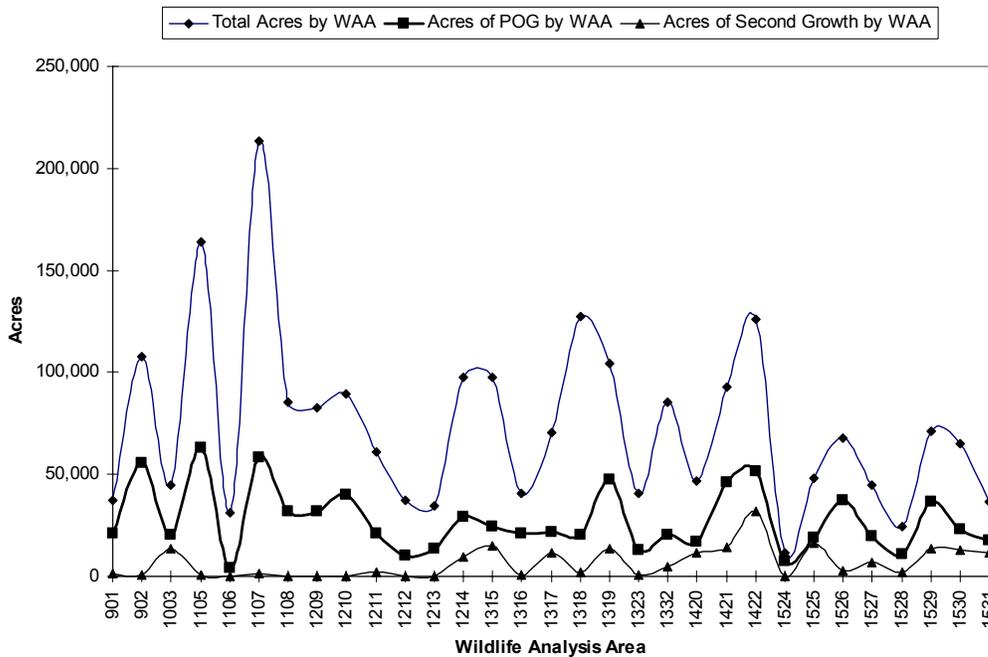
#### Habitat

Primary deer winter habitat depends on the quantity and quality of old-growth forest, which becomes critical during severe winters with heavy snowfall, when other habitats, incapable of intercepting snow (such as clear-cuts), fail to provide forage. Overall the availability of this habitat is thought to be the most limiting factor for deer populations in southeast Alaska. Old-growth forest habitat has been reduced by timber harvest in southeast Alaska. Furthermore, available forage in regenerating clear-cuts has less nutritional value to deer (Hanley et al. 1989). The amount of Productive Old-growth (POG) available in 1954 (as defined in the Tongass Land Management Plan, USDA Forest Service 1997) is depicted in **Figure 1**.

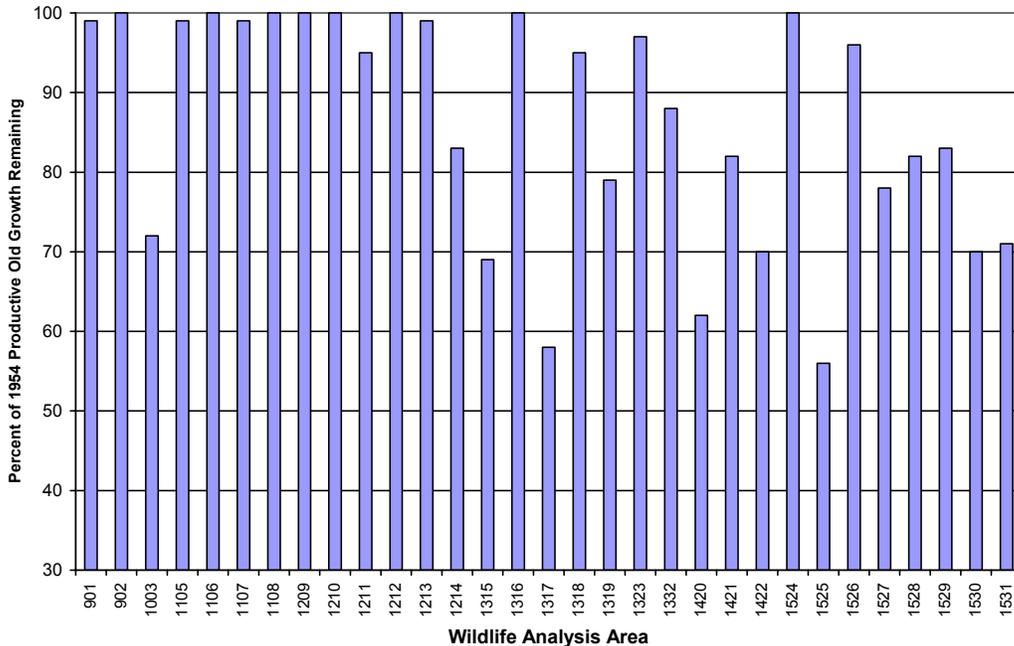
Habitat capability models (USDA Forest Service 1997) show that long-term habitat capability for deer in Unit 2 is declining due to harvest of productive old-growth forests, reduced value of clear-cuts, and further reduction in habitat suitability of the second-growth stands (USDA Forest Service 1997). Farmer (In Prep.) found 70 deer/mi<sup>2</sup> in old-growth forests, 40 deer/mi<sup>2</sup> in newly harvested stands (0–5 year old second-growth), and 3 deer/mi<sup>2</sup> in stem exclusion phase second-growth. The stem exclusion stage (Oliver and Larson 1996), which second-growth forests reach after 25–30 years, creates an understory with very little deer forage for up to 200 years, or until understory development advances (Alaback 1982, Oliver and Larson 1996). **Figure 2** shows the percentage of productive old-growth habitat remaining in each Wildlife Analysis Area (WAA) compared to 1954. WAAs are divisions of land used by the Alaska Department of Fish and Game for wildlife analysis and are the smallest area for which data is available. **Map 3** shows all Unit 2 WAAs.

Much of the 280,000 acres of Native Corporation land in Unit 2 has also been logged. Further declines in the deer population will result from Native Corporation logging. Continued timber harvest activities and associated road development in coming years are expected to cause further habitat degradation, as well as fragmentation and isolation of deer winter range. This may concentrate deer in fewer and smaller wintering areas and make them more susceptible to predation by wolves (Person et al. 1996). These forest management activities are likely to result in a reduced number of deer available for harvesting by subsistence and sport hunters. Wolves are present in Unit 2, and deer are their main prey. Wolf predation studies estimate that one wolf takes 26 deer per year in this environment (Person et al. 1996). The POW wolf population is thought to be stable or increasing with a likely population between 100 and 200 wolves; wolf predation is a significant factor in deer population status (Person 2001).

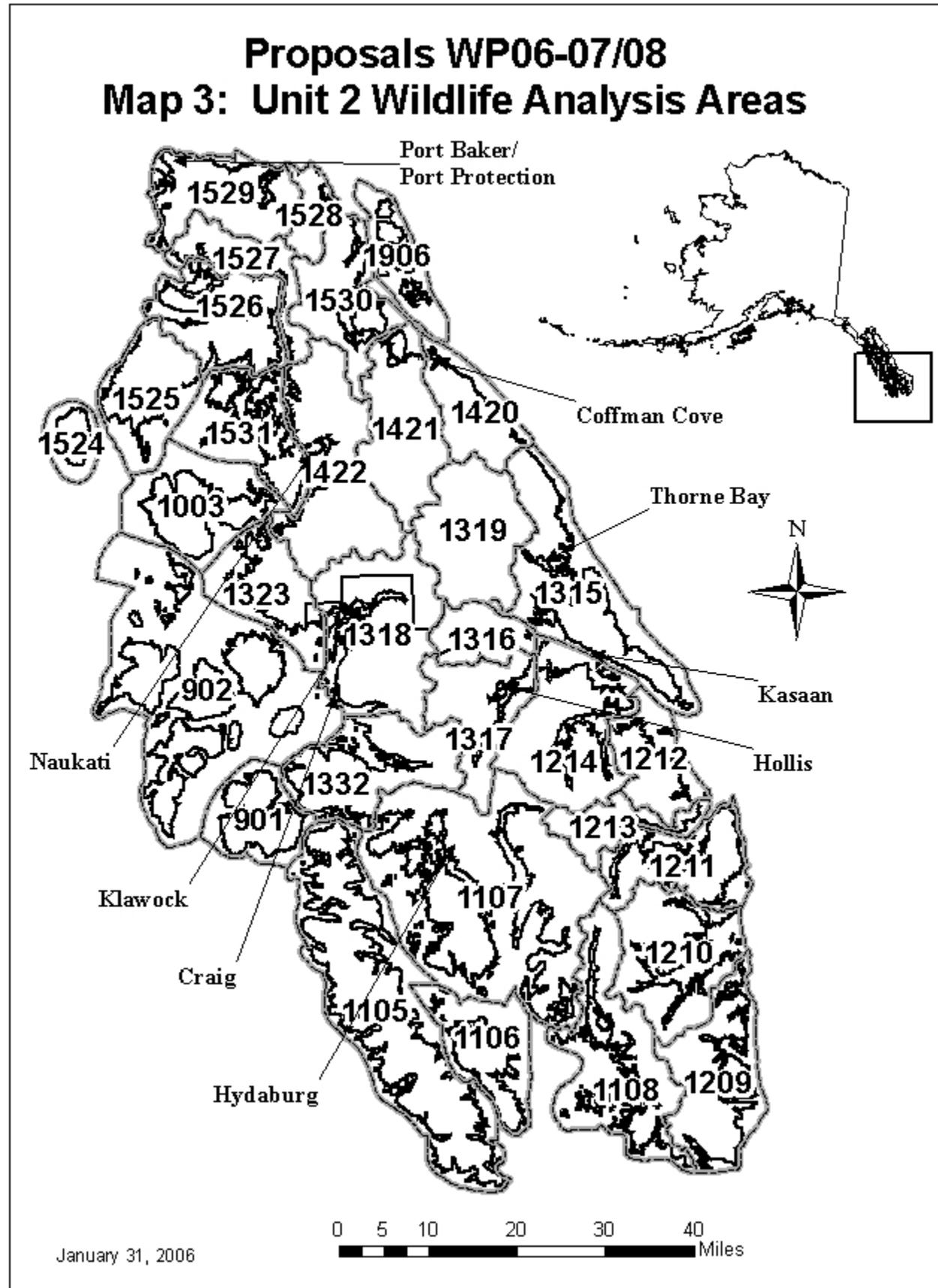
All WAAs specific to these proposals retain at least 95% of the productive old-growth forest that was available in 1954 on USDA FS managed public lands. However, WAAs 1105, 1106, and 1107 contain substantial Native Corporation lands on which timber may have been harvested.



**Figure 1.** Total acres, acres of productive old-growth deer habitat, and acres of second growth forest in each Wildlife Analysis Area in Unit 2. These acreage totals only include USDA FS managed public lands.



**Figure 2.** The percentage of productive old-growth deer habitat remaining on USDA FS managed public lands in Unit 2. This graph indicates the percentage of habitat lost between 1954 and 2002. Data from Tongass National Forest geographic information system files.



## Deer Pellet Group Data Trends

Since the 1980s, the ADF&G and USDA FS have collected deer pellet group data from selected field transects throughout Southeast Alaska. This long term monitoring effort was designed to provide an indication of overall deer population trends in the region. More direct deer population estimation techniques are difficult to apply. As such, the deer pellet data provide some of the best available information on deer populations throughout the region. **Figure 3** summarizes data for Unit 2 from 1983 to 2005 for the 13 transects that have four or more years of data. In general, pellet group densities in Unit 2 are low compared to those in other areas of southeast Alaska where wolves are not present and where there has been less timber harvesting. Winter weather conditions also affect deer use along these transects, and thus pellet group counts.

Deer densities on POW are estimated to be below ADF&G management objectives (45 deer per square mile or 1.4 pellet groups per plot) based on pellet group counts (Porter 2003, **Figure 3**). However, pellet group information is broad scale and there may be smaller scale changes by watershed or WAA that would not be detectable by the pellet group method. Thus, deer populations in certain watersheds may be lower or higher in recent years while the overall population has not changed substantially. There could also be changes in deer distribution due to timber harvest, hunting pressure, roads, behavioral disturbances along roads, or changes in habitat (e.g., clearcut to young growth).

**Figures 4 and 5** show the available pellet group information for two WAAs that would be affected by management changes in these proposals.

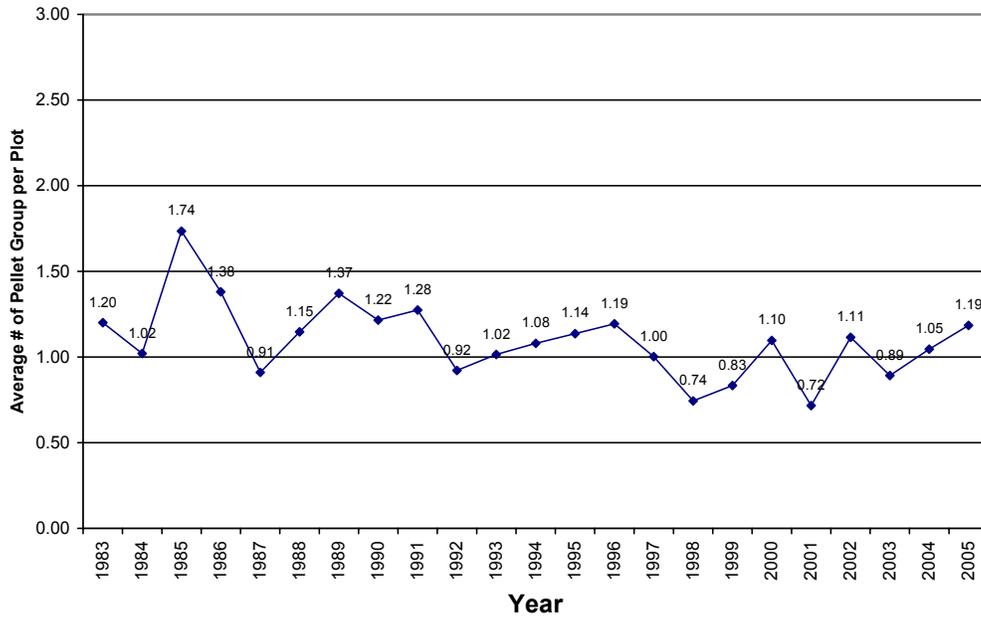
In summary, the ADF&G considers the Unit 2 deer population to be stable (Porter 2005, pers. comm.). However, the deer population on POW is likely to decline over time due to changes in habitat capability. This prediction is based on habitat models using severe winter weather habitat. Thus, the actual decline may not occur until a severe snow winter. In the meantime, the deer population may not show much of an effect as they can survive in lesser quality habitat. Any decline due to habitat would likely be specific to the harvested watersheds. However, since most of the roads used by hunters were created for logging, these areas would correlate strongly with current high harvest areas on POW. Wolf predation is a significant factor in this game management unit. There is not a conservation concern for the deer population at this time.

## **Harvest History**

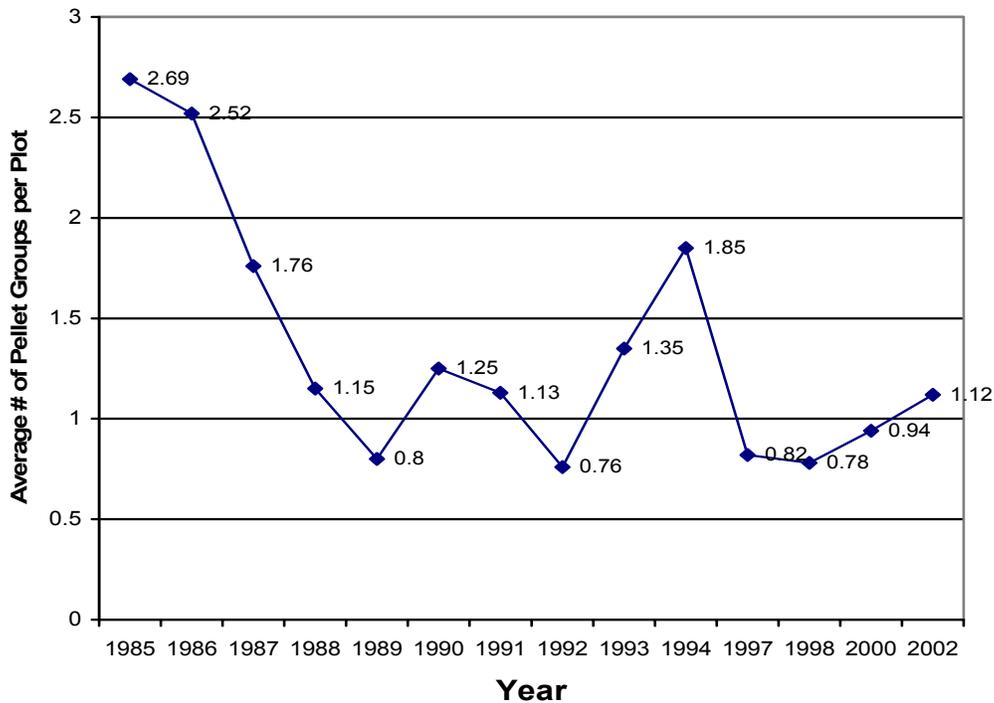
### *Unit 2 Overall*

The main data sources include public testimony concerning regulatory proposals, ADF&G Division of Subsistence household surveys and ethnographic studies, ADF&G Division of Wildlife Conservation voluntary mail-out surveys, and Federal registration permit reports.

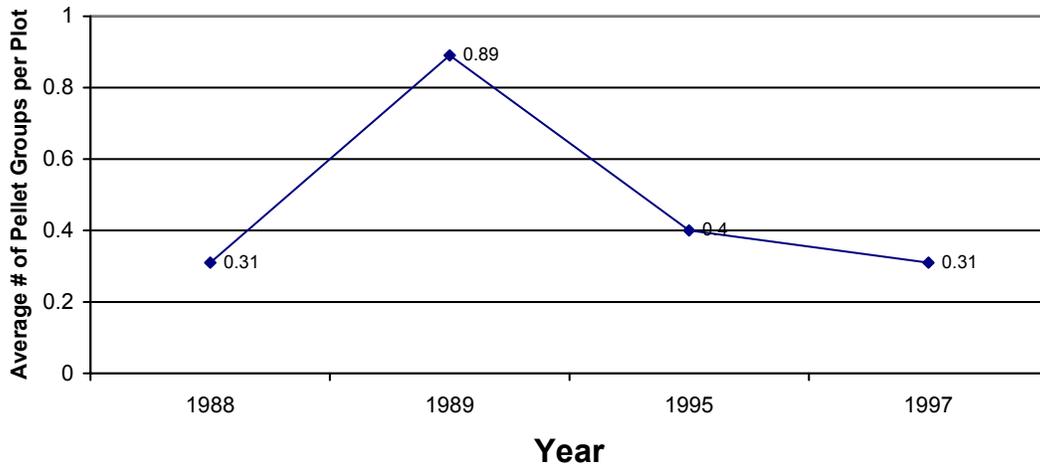
Many Federally qualified subsistence hunters who have traditionally hunted deer on POW have testified to the Council and Federal Subsistence Board at meetings over the 1996–2004 time period that their subsistence needs for deer are not being met, and they are no longer able to harvest as many deer with the level of effort they are accustomed to using. They have expressed concerns about increasing competition with non-Federally qualified hunters (who are primarily from Ketchikan), possible declines in deer population, and the near certainty that pressure on both the deer resource and the hunting experience will increase on POW.



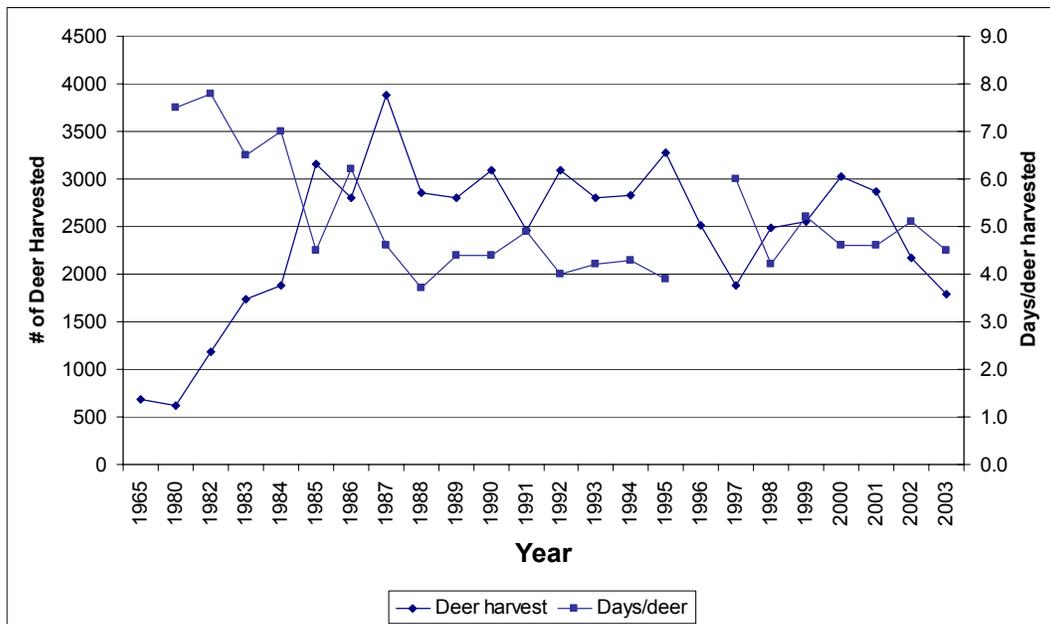
**Figure 3.** The average number of deer pellet groups per plot for all pellet group transects in Unit 2 with four or more years of data since 1983. Data are from the annual ADF&G pellet group survey reports (e.g., Converse 2005). Paul Converse and Doug Larsen of the ADF&G's Division of Wildlife Conservation provided unofficial results for 2005.



**Figure 4.** The average numbers of deer pellet groups per plot for the Suemez Island transect (WAA 901), Unit 2. Individual transects are not counted each year so this graph represents all data for this transect. Data from ADF&G Division of Wildlife Conservation annual pellet group survey reports (e.g., Converse 2005).



**Figure 5.** The average number of deer pellet groups per plot for the only transect in the Southeast Prince Of Wales Island area of Unit 2. This transect is located in Kitkun Bay, WAA 1210. Individual transects are not counted each year so this graph represents all data for this transect. Data are from the annual ADF&G pellet group survey reports (e.g., Converse 2005).



**Figure 6.** Number of deer harvested and the average number of days per deer harvested in Unit 2 by year. Data from annual ADF&G deer hunter survey summary statistics reports (e.g., Straugh et al 2004) and Turek et al 1998.

Under contract to the Tongass National Forest and in cooperation with the University of Alaska Institute for Social and Economic Research, ADF&G Division of Subsistence conducted household surveys in 1988 covering the 1987 harvest year in all POW communities. Under contract to the Tongass National Forest and the Juneau Forestry Sciences Lab, the Division resurveyed communities in the late 1990s. The household survey data provide valid and reliable quantitative measures of community deer harvest for the study years covered. While household surveys produce very high quality data, cost, complexity, and burden on the public preclude conducting them very often. Because they cannot be undertaken frequently, household surveys are poor indicators of short-term changes in harvesting patterns.

ADF&G's Division of Wildlife Conservation has undertaken voluntary mail-out surveys of hunters in Southeast Alaska for almost 20 years. Results of these surveys provide good order-of-magnitude estimates of the region's deer harvest and may be useful in identifying large-scale trends in harvest over time. Data are inadequate to accurately measure harvest trends at the community or Wildlife Analysis Area levels. Participation in this annual survey is voluntary. Data from the mail-out surveys may differ substantially from harvest estimates provided by Division of Subsistence interview surveys. This is especially true for smaller communities where small sample sizes result in large variances.

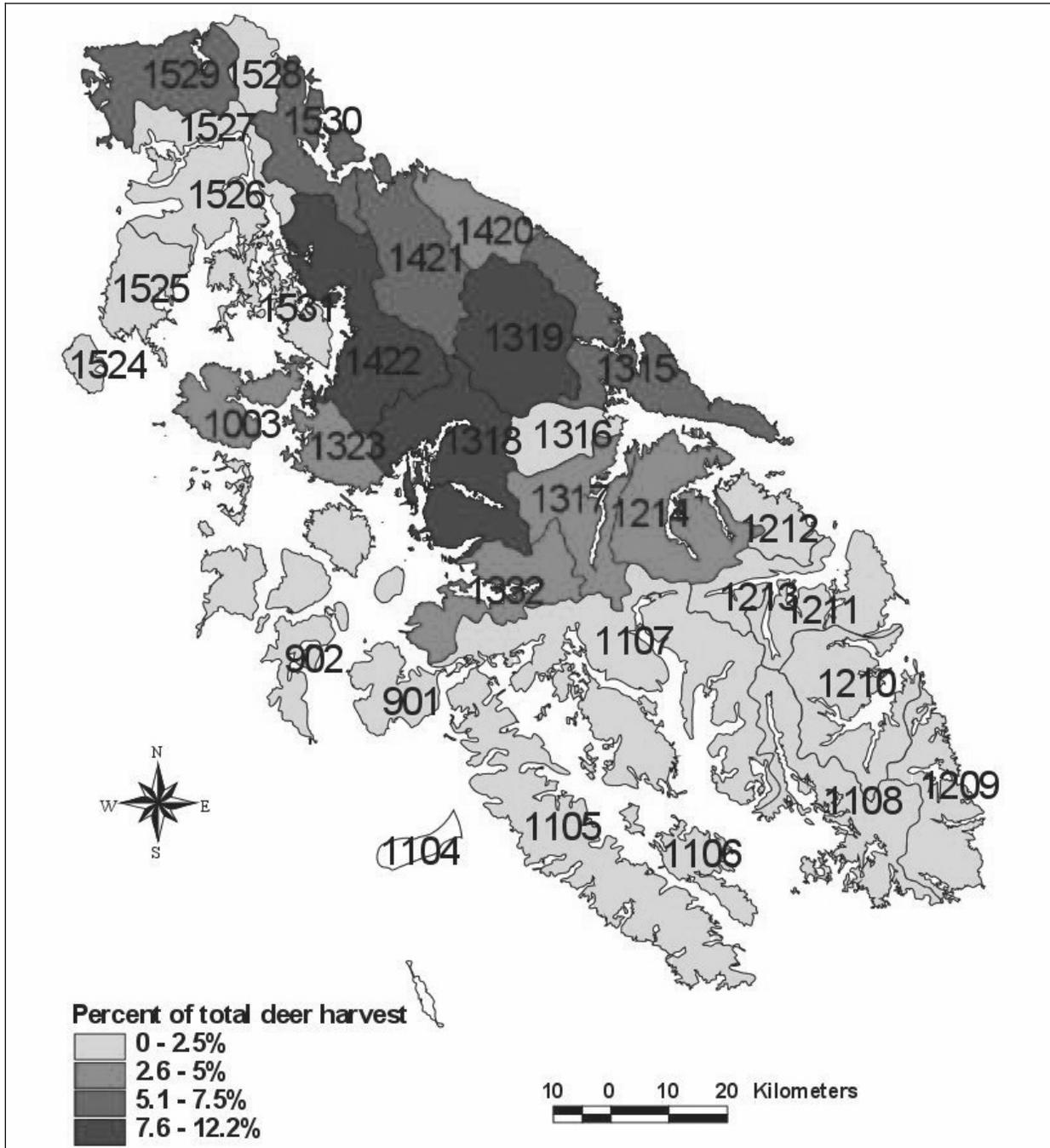
Federal registration permits were implemented during the 2003/04 regulatory year. These permits were required for Federally qualified subsistence users who wanted to hunt in the early season or harvest a doe which are not legal under the State regulations. Thus, these permits were not used by all hunters and the reports only represent a portion of hunters. Some of the activity from these permits appears to be reported in the ADF&G's mail-out survey results. Thus, it is hard to piece the complete harvest picture together. In 2005, the USDA FS and ADF&G developed a combined harvest permit and report for Unit 2 that should provide better harvest reporting data in the future. No data are available for 2005 at this time.

Based on mail-out survey results, the estimated deer harvest in Unit 2 was above the ADF&G objective of 2700 deer in 2000 and 2001 (Porter 2003), but declined to less than 2000 deer by 2003 (Straugh et al 2004) (**Figure 6**). However, the number of days it takes to harvest a deer remained relatively constant over time (**Figure 6**).

**Figure 7** shows the percentage of the total Unit 2 harvest contributed by each WAA based on ADF&G, Division of Subsistence household surveys in 1997. This indicates that none of the WAAs involved in this proposal contribute a substantial portion to the overall Unit 2 harvest.

In 2003, harvest data collected by the USDA FS showed that 189 deer were harvested during the last week of July and 104 deer were harvested during Aug. 1–15. Harvest data for 2004 showed that Federally qualified deer hunters harvested 169 deer during the last week of July 2004, and 137 deer during Aug. 1–15 (**Figures 8 and 9**). This demonstrates that Federally qualified subsistence hunters were making use of the early deer-hunting season. Federal data represent an unknown portion of the total Unit 2 deer harvest, although the July numbers should be accurate because there is no State season in July.

In 2005, Brinkman (2006) conducted interviews with key informants from POW communities, Ketchikan, and Saxman to collect hunter perceptions on deer hunting patterns, deer population trends, deer habitat, and hunting access. Approximately 50% of POW residents perceived that off-island hunters have affected their hunting experience, household deer hunting success and have competed with them for deer. Eighty percent of off-island residents reported they hunt the northern half of POW and few reported that they hunt the outer islands or the southern portion of POW.



**Figure 7.** Percentage (eight year average) of the total Unit 2 deer harvest contributed by each Wildlife Analysis Area for 1989-1996. Data from ADF&G, Division of Wildlife Conservation mail-out deer hunter surveys and summarized by the ADF&G Division of Subsistence.

## Areas Specific to the Proposals

### *Proposal WP06-07*

Federal permit data show that 18 residents from Craig, Hydaburg, and Klawock harvested 21 deer on Suemez Island (WAA 901) in 2003 and 2004. **Table 2** shows the chronology of the harvest reported by Federal permittees. Federal data represent an unknown portion of the total Suemez Island deer harvest but are most accurate for the July and early August harvest period. ADF&G's mail-out survey data indicate that hunters from Craig, Hollis, Hydaburg, Juneau, Ketchikan, Klawock, Naukati Bay, Port Protection, Sitka, Waterfall and Outside of Alaska (nonresidents) hunted on Suemez Island during the 2000 through 2003 seasons (**Tables 3 and 4**, Straugh et al 2004, Straugh and Rice 2003, Paul and Straugh 2002, Paul and Straugh 2001). Craig was by far the community with the largest number of hunters, deer harvested, and most consistent use from year to year. Ketchikan and Klawock were the second and third largest users respectively, but yearly use was sporadic. **Figure 10** shows the ADF&G Subsistence Divisions' estimate for Craig's harvest of deer on Suemez Island in 1997 and **Figure 11** shows the same information for Hydaburg. It is not possible to determine the dates these hunters used the area. However, ADF&G's mail-out survey data estimates that August generally represents the second highest harvest month in Unit 2, accounting for approximately 15%–35% of the total harvest.

**Tables 3 and 4** indicate that, based on ADF&G's mail-out survey data, Federally qualified subsistence hunters accounted for 80% of the users and 85% of the harvest in WAA 901. ADF&G estimated that the largest number of users came from Craig, followed by Ketchikan and Klawock (Straugh et al. 2004). Craig hunters harvested an estimated 20 deer in 2003 which accounted for 63% of the WAA 0901 harvest and provided about 5% of the total Craig harvest. Ketchikan hunters harvested an estimated six deer in 2003 which accounted for 19% of the WAA 0901 harvest and provided less than one percent of the total Ketchikan harvest.

The southeast portion of POW, proposed for removal of the closure to non-Federally qualified hunters during Aug. 1–15, includes WAAs 1209, 1210, 1211 and parts of 1107, 1108, and 1213. Thirteen hunters with Federal permits reported harvesting 15 deer in this area during the 2003 and 2004 seasons. All but two of the deer were harvested in WAA 1107, which includes the village of Hydaburg, and approximately half of this WAA is outside of the proposed closure removal area. This is consistent with past testimony. **Table 5** shows the chronology of the harvest reported by Federal permittees. ADF&G's mail-out survey data indicate that hunters from Craig, Hydaburg, Juneau, Ketchikan, Klawock, Metlakatla, Other Alaska and Outside of Alaska (nonresidents) hunted in this area during the 2000 through 2003 seasons (**Tables 6 and 7**, Straugh et al. 2004, Straugh and Rice 2003, Paul and Straugh 2002, Paul and Straugh 2001). Again, most of this use was reported for WAA 1107. Ketchikan is the only community with substantial use of WAAs other than 1107. It is not possible to determine the dates these hunters used the area. However, testimony provided at the Unit 2 Deer Subcommittee meetings indicates that the early season is important for Ketchikan hunters to take their children hunting before school starts (SERAC 2005).

### *Proposal WP06-08*

The islands in the southwest part of Unit 2 include WAAs 901 (Suemez Island), 1105 (Dall Island), 1106 (Long Island), and parts of 1107 (Sukkwon Island and portions of POW) and 1108 (southwest POW and small islands). The southeast portion of POW as defined in proposal WP06-08 includes all of WAA 1210 and most of WAAs 1209, 1211, and 1213.

Federal permit data show that 29 residents from Craig, Hydaburg, Klawock, Metlakatla, and Thorne Bay harvested 35 deer in the southwest island WAAs in 2003 and 2004. Table 8 shows the chronology of the

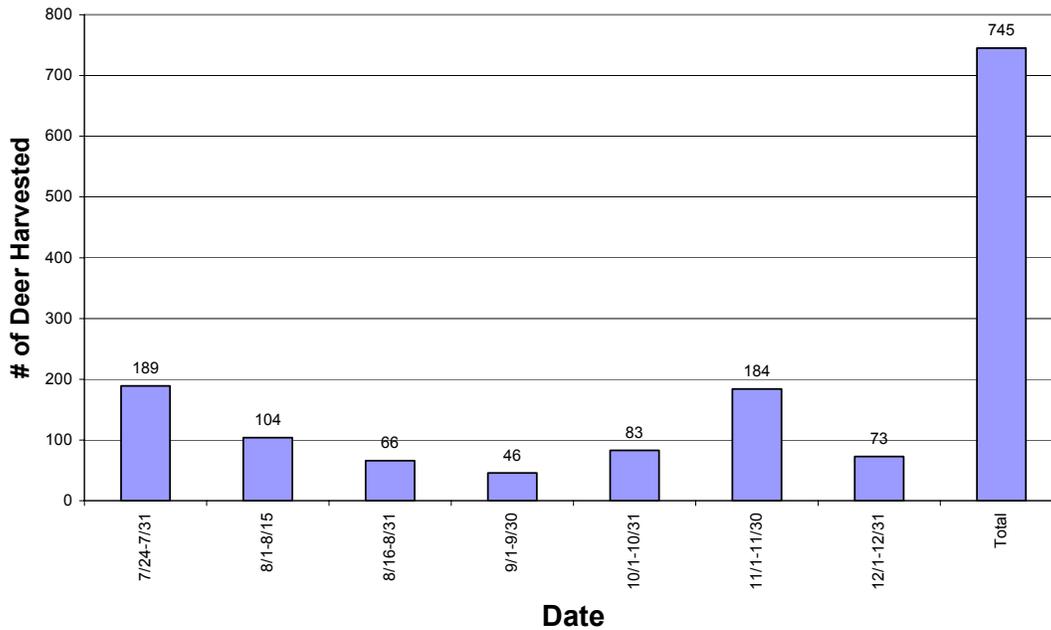
harvest reported by Federal permittees. All but one of the deer were harvested from WAAs 901 and 1107. Much of the WAA 1107 harvest probably came from POW, but some may have occurred on Sukkwan Island, which is included in the proposed closure area. One deer was harvested in WAA 1106 and no deer were harvested by Federal permittees in WAAs 1105 or 1108. ADF&G's mail-out survey data from 2000–2003 indicate that hunters from Craig, Hollis, Hydaburg, Juneau, Ketchikan, Klawock, Naukati Bay, Port Protection, Sitka, Waterfall and Outside of Alaska (nonresidents) hunted on the southwest islands during the 2000 through 2003 seasons (Tables 9 and 10, Straugh et al 2004, Straugh and Rice 2003, Paul and Straugh 2002, Paul and Straugh 2001). As noted above, Craig was the main community using Suemez Island (WAA 901). Craig and Klawock were the primary users of Dall Island (WAA 1105). Ketchikan reported the most hunters and most consistent use of Long Island (WAA 1106). Craig, Hydaburg, and Klawock all had similar consistent use of WAA 1107, which includes Sukkwan Island as well as part of POW. Ketchikan also used this WAA to a lesser extent. It is impossible to determine how much of the use of WAA 1107 was on Sukkwan versus POW. No harvest was reported in WAA 1108 in the State mail-out harvest survey. Tables 9 and 10 indicate that approximately 80% or more of the hunters and deer harvested in WAAs 901, 1105, and 1107 was by residents of Unit 2. Non-Federally qualified hunters accounted for most of WAA 1106 hunters (73%) and deer harvest (92%). Overall, for these island WAAs, Unit 2 residents accounted for 74% of the hunters and 69% of the deer harvest. It is not possible to determine the dates these hunters used the area. In general, ADF&G's mail-out survey data estimate that August represents the second highest harvest month in Unit 2 accounting for approximately 15%–35% of the total harvest. Mail-out data summarized by the ADF&G Division of Subsistence indicates that non-Federally qualified hunters accounted for over 50% of the harvest on Dall (WAA 1105) and Long (WAA 1106) Islands from 1989–1996 (**Figure 12**). Comparing Figure 12 to Table 10 indicates that there has been a recent decline in use of Dall Island by non-rural residents Figures 10 and 11 show the ADF&G Division of Subsistence estimated 1997 Unit 2 harvest by WAA for Craig and Hydaburg.

One hunter with a Federal permit reported hunting deer in the southeast POW area of this proposal during the 2003 and 2004 seasons. This hunter was from Metlakatla and harvested a deer in WAA 1210 in July. ADF&G's mail-out survey data indicate that hunters from Craig, Ketchikan, Metlakatla, and nonresidents hunted the southeast POW area during the 2000 through 2003 seasons (**Tables 11 and 12**, Straugh et al 2004, Straugh and Rice 2003, Paul and Straugh 2002, Paul and Straugh 2001). Ketchikan showed the highest and most consistent use of the area. This is consistent with past testimony and with data from the ADF&G Division of Subsistence (**Figure 12**). It is not possible to determine the dates these hunters used the area but August is considered an important time for Ketchikan parents to take their children deer hunting on POW prior to the start of the school year.

### **Effects of the Proposals**

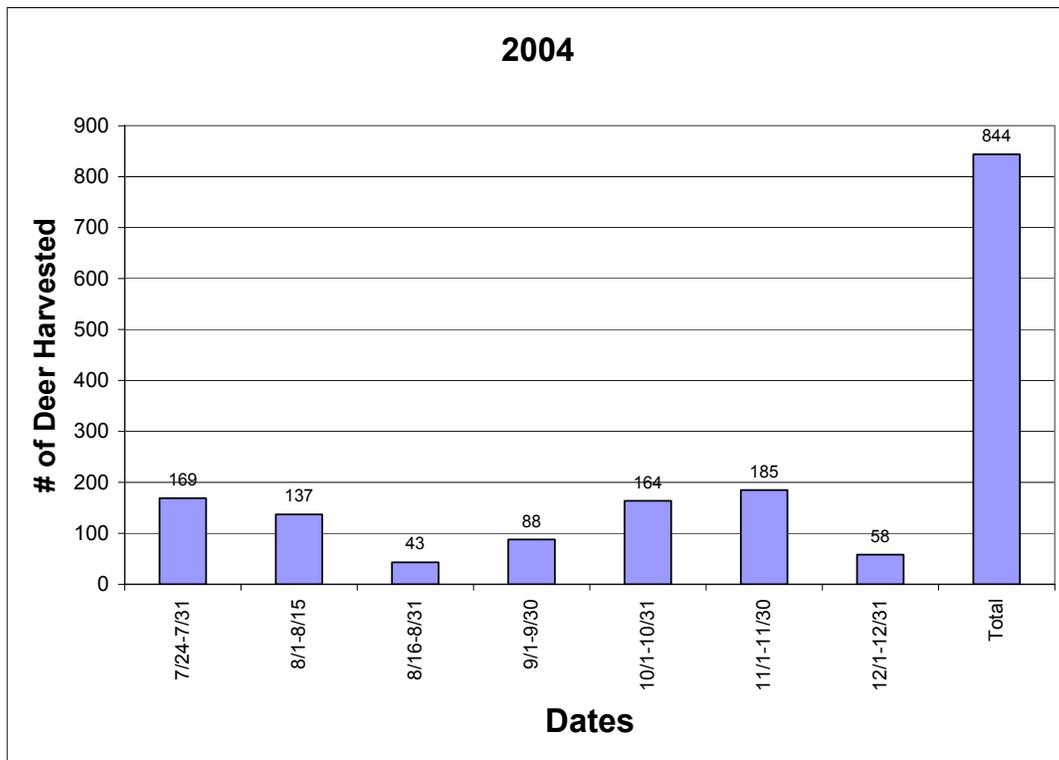
Both proposals would remove the closure of Federally managed public lands to non-Federally qualified deer hunters in some portion of southeast POW from Aug. 1–15. The defined area under consideration varies by proposal. WP06-07 includes a larger area, incorporating the west side of the southeast tip of POW. The available data and public input suggest that non-Federally qualified hunters are the primary users on the east side (WAAs 1209, 1210, and 1211), but show very little use on the west side (WAA 1108 and part of 1107). Federally qualified subsistence hunters utilize the west side, but it does not account for a large proportion of their harvest. Federally qualified subsistence hunters use the east side to a minimal extent. Thus, opening up the southeast POW area identified in WP06-07 would not create competition for the resource. Based on past use patterns, this proposal would allow non-Federally qualified deer hunters additional opportunities to harvest deer without impacting Federally qualified subsistence users.

### 2003

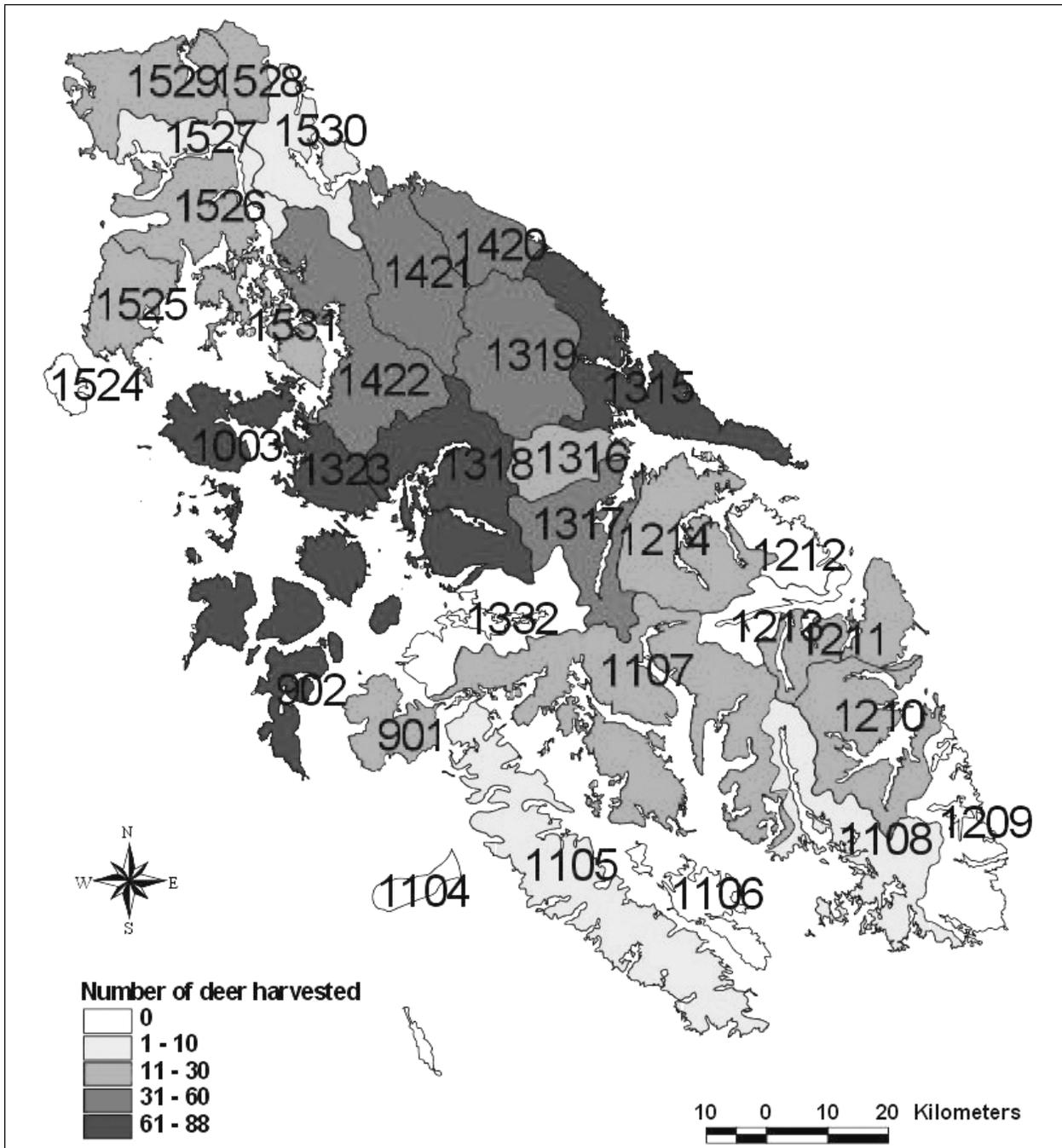


**Figure 8.** Timing of deer harvest by Unit 2 Federal registration permit holders in 2003. Data is from USDA FS harvest database.

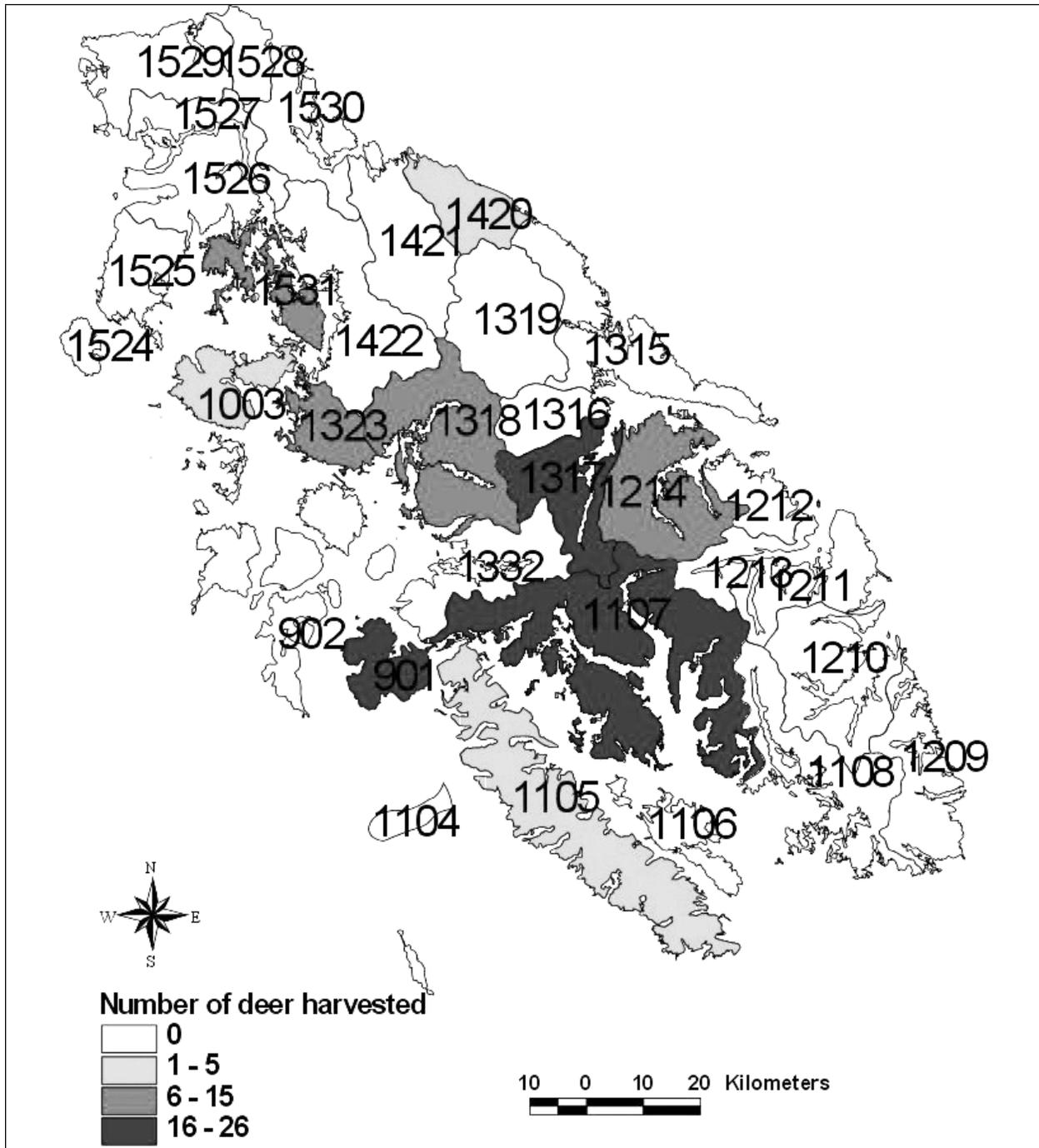
### 2004



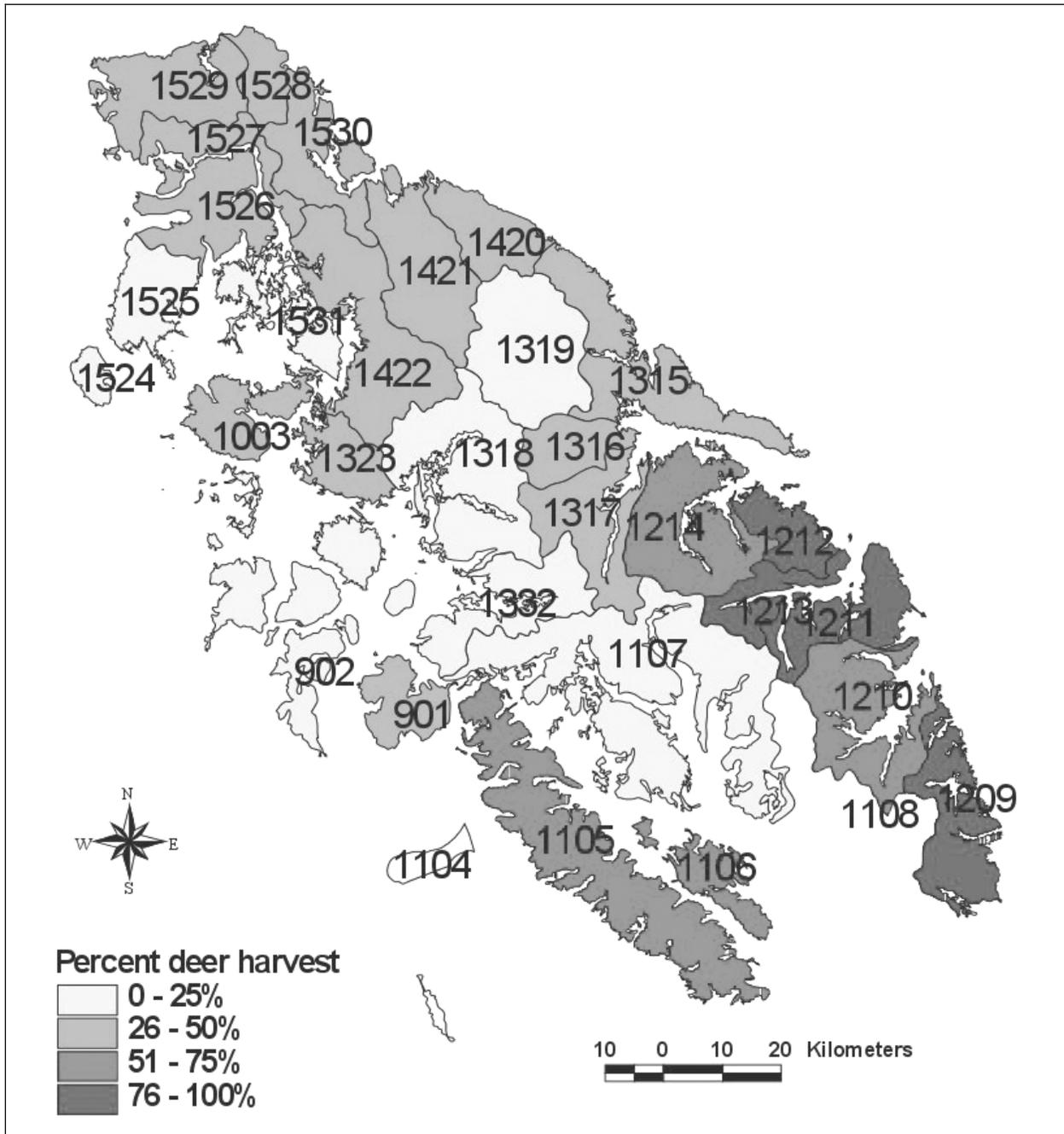
**Figure 9.** Timing of deer harvest by Unit 2 Federal registration permit holders in 2004. Data is from USDA FS harvest database.



**Figure 10.** The estimated number of deer harvested by residents of Craig, AK in each Unit 2 Wildlife Analysis Area in 1997. Data from ADF&G, Division of Subsistence.



**Figure 11.** The estimated number of deer harvested by residents of Hyadburg, AK in each Unit 2 Wildlife Analysis Area in 1997. Data from ADF&G, Division of Subsistence.



**Figure 12.** The estimated percentage of deer taken by non-Federally qualified deer hunters in each Wildlife Analysis Area (WAA) in Unit 2. This indicates which user group takes the majority of the deer in each WAA but does not indicate the importance of the WAA to the overall Unit 2 harvest (see Figure 7). Data from ADF&G Division of Wildlife Conservation mail-out deer hunter surveys and summarized by the ADF&G Division of Subsistence.

**Table 2.** Harvest dates reported by Unit 2 Federal permit holders in 2003 and 2004 for deer harvested in Wildlife Analysis Area 0901 (Suemez Island). Source data from USDA FS harvest data base.

Year	Date							Total
	July	August 1-15	August 16-31	September	October	November	December	
2003	1	0	1	1	3	2	0	8
2004	1	2	0	4	2	4	0	13
<b>Total</b>	2	2	1	5	5	6	0	21

**Table 3.** Estimated number of hunters using Wildlife Analysis Area 0901 (Suemez Island) from 2000 through 2003, sorted by community of residence. Source data from ADF&G mail-out hunter survey reports (e.g., Straugh et al 2004).

WAA	COMMUNITY OF RESIDENCE	YEAR				Total
		2000	2001	2002	2003	
0901 (Suemez I.)	Craig	43	17	6	25	91
	Hollis				4	4
	Hydaburg				3	3
	Juneau	5				5
	Ketchikan	6			6	12
	Klawock		10			10
	Naukati Bay		5			5
	Outside AK				8	8
	Port Protection		5		1	6
	Sitka			5		5
	Waterfall				1	1
<b>GRAND TOTAL</b>		<b>54</b>	<b>37</b>	<b>11</b>	<b>48</b>	<b>150</b>

**Table 4.** Estimated number of deer harvested by community of residence in Wildlife Analysis Area 0901 from 2000 through 2003. Zeros indicate there was hunter effort by that community in that year, but no harvest. Blank cells indicate there was no hunter effort for that community and year. Source data from ADF&G mail-out hunter survey reports (e.g., Straugh et al 2004).

WAA	COMMUNITY OF RESIDENCE	YEAR				Grand Total
		2000	2001	2002	2003	
0901 (Suemez I.)	Craig	52	34	0	20	106
	Hollis				2	2
	Hydaburg				0	0
	Juneau	9				9
	Ketchikan	0			6	6
	Klawock		10			10
	Naukati Bay		9			9
	Outside AK				4	4
	Port Protection		5		0	5
	Sitka			5		5
	Waterfall				0	0
<b>Grand Total</b>		<b>61</b>	<b>58</b>	<b>5</b>	<b>32</b>	<b>156</b>

**Table 5.** Harvest dates reported by Unit 2 Federal permit holders in 2003 and 2004 for deer harvested in Wildlife Analysis Areas 1107, 1108, 1209, 1210, 1211, and 1213 (south POW). Source data from USDA FS harvest data base.

Year	Date							Total
	July	August 1-15	August 16-31	September	October	November	December	
2003	2	0	0	0	0	1	1	4
2004	1	2	1	6	0	1	0	11
<b>Total</b>	3	2	1	6	0	2	1	15

**Table 6.** Estimated number of hunters using Wildlife Analysis Areas 1107, 1108, 1209, 1210, 1211, and 1213 (south POW) from 2000 through 2003, sorted by community of residence. Source data from ADF&G mail-out hunter survey reports (e.g., Straugh et al 2004). No data is shown for WAA 1108 because no hunters reported hunting in that WAA.

WAA	COMMUNITY OF RESIDENCE	YEAR					Total
		2000	2001	2002	2003		
1107 Hydaburg	Craig	26	17	17	20	80	
	Hydaburg	22	14	28	14	78	
	Ketchikan	12	5	7	6	30	
	Klawock	16	10	23	7	56	
	Other Alaska		6			6	
	Outside AK		10		4	14	
1107 Hydaburg Total		76	62	75	51	264	
1210 Moira Sd	Ketchikan			7	12	19	
	Metlakatla			17		17	
	Outside AK	5				5	
1210 Moira Sd Total		5		24	12	41	
1211 Kitkun	Craig	9				9	
	Ketchikan	18		7	12	37	
1211 Kitkun Total		27		7	12	46	
1213 W Arm Cholmondeley	Juneau		5			5	
	Ketchikan		5	7	6	18	
1213 W Arm Cholmondeley Total			10	7	6	23	
1209 SE POW	Ketchikan		5			5	
1209 SE POW Total			5			5	
<b>GRAND TOTAL</b>		<b>108</b>	<b>77</b>	<b>113</b>	<b>81</b>	<b>379</b>	

**Table 7.** Estimated number of deer harvested by in Wildlife Analysis Areas 1107, 1108, 1209, 1210, 1211, and 1213 (south POW) from 2000 through 2003, sorted by community of residence. Zeros indicate there was hunter effort by that community in that year, but no harvest. Blank cells indicate there was no hunter effort for that community and year. Source data from ADF&G mail-out hunter survey reports (e.g., Straugh et al 2004). No data is shown for WAA 1108 because no hunters reported harvesting deer in that WAA.

WAA	COMMUNITY OF RESIDENCE	YEAR				Total
		2000	2001	2002	2003	
1107 Hydaburg	Craig	35	11	17	15	78
	Hydaburg	22	7	34	14	77
	Ketchikan	12	5	0	6	23
	Klawock	16	10	0	7	33
	Other Alaska		0			0
	Outside AK		5		0	5
1107 Hydaburg Total		85	38	51	42	216
1210 Moira Sd	Ketchikan			0	0	0
	Metlakatla			17		17
	Outside AK	0				0
1210 Moira Sd Total		0		17	0	17
1211 Kitkun	Craig	26				26
	Ketchikan	0		14	0	14
1211 Kitkun Total		26		14	0	40
1213 W Arm Cholmondeley	Juneau		0			0
	Ketchikan		5	0	0	5
1213 W Arm Cholmondeley Total			5	0	0	5
1209 SE POW	Ketchikan		5			5
1209 SE POW Total			5			5
<b>GRAND TOTAL</b>		<b>111</b>	<b>48</b>	<b>82</b>	<b>42</b>	<b>283</b>

**Table 8.** Harvest dates reported by Unit 2 Federal permit holders in 2003 and 2004 for deer harvested in Wildlife Analysis Areas 0901, 1105, 1106, 1107, and 1108 (southwest islands). Source data from USDA FS harvest data base.

Year	Date							Total
	July	August 1-15	August 16-31	September	October	November	December	
2003	3	0	1	1	3	3	1	12
2004	1	3	1	10	2	6	0	23
<b>Total</b>	4	3	2	11	5	9	1	35

**Table 9.** Estimated number of hunters using Wildlife Analysis Areas 0901, 1105, 1106, 1107, and 1108 (southwest islands) from 2000 through 2003, sorted by community of residence. Source data from ADF&G mail-out hunter survey reports (e.g., Straugh et al 2004). No data is shown for WAA 1108 because no hunters reported hunting in that WAA.

WAA	COMMUNITY OF RESIDENCE	YEAR				Total
		2000	2001	2002	2003	
<b>0901 Suemez I.</b>	Craig	43	17	6	25	91
	Hollis				4	4
	Hydaburg				3	3
	Juneau	5				5
	Ketchikan	6			6	12
	Klawock		10			10
	Naukati Bay		5			5
	Outside AK				8	8
	Port Protection		5		1	6
	Sitka			5		5
	Waterfall				1	1
<b>0901 Suemez I. Total</b>		<b>54</b>	<b>37</b>	<b>11</b>	<b>48</b>	<b>150</b>
<b>1105 Dall I.</b>	Craig	9	6	6		21
	Juneau				5	5
	Klawock	8	10			18
<b>1105 Dall I. Total</b>		<b>17</b>	<b>16</b>	<b>6</b>	<b>5</b>	<b>44</b>
<b>1106 Long I.</b>	Craig	9			5	14
	Hydaburg			7		7
	Ketchikan	12	15		18	45
	Haines		11			11
<b>1106 Long I. Total</b>		<b>21</b>	<b>26</b>	<b>7</b>	<b>23</b>	<b>77</b>
<b>1107 Hydaburg</b>	Craig	26	17	17	20	80
	Hydaburg	22	14	28	14	78
	Ketchikan	12	5	7	6	30
	Klawock	16	10	23	7	56
	Other Alaska		6			6
	Outside AK		10		4	14
<b>1107 Hydaburg Total</b>		<b>76</b>	<b>62</b>	<b>75</b>	<b>51</b>	<b>264</b>
<b>GRAND TOTAL</b>		<b>168</b>	<b>141</b>	<b>99</b>	<b>127</b>	<b>535</b>

**Table 10.** Estimated number of deer harvested in Wildlife Analysis Areas 0901, 1105, 1106, 1107, and 1108 (southwest islands) sorted by community of residence from 2000 through 2003. Source data from ADF&G mail-out hunter survey reports (e.g., Straugh et al 2004). No data is shown for WAA 1108 because no hunters reported harvesting deer in that WAA.

WAA	COMMUNITY OF RESIDENCE	YEAR				Total
		2000	2001	2002	2003	
<b>0901 Suemez I.</b>	Craig	52	34	0	20	106
	Hollis				2	2
	Hydaburg				0	0
	Juneau	9				9
	Ketchikan	0			6	6
	Klawock		10			10
	Naukati Bay		9			9
	Outside AK				4	4
	Port Protection		5		0	5
	Sitka			5		5
	Waterfall				0	0
<b>0901 Suemez I. Total</b>		<b>61</b>	<b>58</b>	<b>5</b>	<b>32</b>	<b>156</b>
<b>1105 Dall I.</b>	Craig	9	23	11		43
	Juneau				0	0
	Klawock	0	0			0
<b>1105 Dall I. Total</b>		<b>9</b>	<b>23</b>	<b>11</b>	<b>0</b>	<b>43</b>
<b>1106 Long I.</b>	Craig	0			10	10
	Hydaburg			0		0
	Ketchikan	18	46		30	94
	Haines		25			25
<b>1106 Long I. Total</b>		<b>18</b>	<b>71</b>	<b>0</b>	<b>40</b>	<b>129</b>
<b>1107 Hydaburg</b>	Craig	35	11	17	15	78
	Hydaburg	22	7	34	14	77
	Ketchikan	12	5	0	6	23
	Klawock	16	10	0	7	33
	Other Alaska		0			0
	Outside AK		5		0	5
<b>1107 Hydaburg Total</b>		<b>85</b>	<b>38</b>	<b>51</b>	<b>42</b>	<b>216</b>
<b>GRAND TOTAL</b>		<b>173</b>	<b>190</b>	<b>67</b>	<b>114</b>	<b>544</b>

**Table 11.** Estimated number of deer hunters in Wildlife Analysis Areas 1209, 1210, 1211, and 1213 (southeast POW) sorted by community of residence from 2000 through 2003. Source data from ADF&G mail-out hunter survey reports (e.g., Straugh et al 2004).

WAA	COMMUNITY OF RESIDENCE	YEAR				Total
		2000	2001	2002	2003	
<b>1210 Moira Sd</b>	Ketchikan			7	12	19
	Metlakatla			17		17
	Outside AK	5				5
1210 Moira Sd Total		5		24	12	41
<b>1211 Kitkun</b>	Craig	9				9
	Ketchikan	18		7	12	37
1211 Kitkun Total		27		7	12	46
<b>1213 W Arm Cholmondeley</b>	Juneau		5			5
	Ketchikan		5	7	6	18
1213 W Arm Cholmondeley Total			10	7	6	23
<b>1209 SE POW</b>	Ketchikan		5			5
1209 SE POW Total			5			5
<b>GRAND TOTAL</b>		<b>32</b>	<b>15</b>	<b>38</b>	<b>30</b>	<b>115</b>

**Table 12.** Estimated number of deer harvested in Wildlife Analysis Areas 1209, 1210, 1211, and 1213 (southeast POW) sorted by community of residence from 2000 through 2003. Source data from ADF&G mail-out hunter survey reports (e.g., Straugh et al 2004).

WAA	COMMUNITY OF RESIDENCE	YEAR				Total
		2000	2001	2002	2003	
<b>1210 Moira Sd</b>	Ketchikan			0	0	0
	Metlakatla			17		17
	Outside AK	0				0
1210 Moira Sd Total		0		17	0	17
<b>1211 Kitkun</b>	Craig	26				26
	Ketchikan	0		14	0	14
1211 Kitkun Total		26		14	0	40
<b>1213 W Arm Cholmondeley</b>	Juneau		0			0
	Ketchikan		5	0	0	5
1213 W Arm Cholmondeley Total			5	0	0	5
<b>1209 SE POW</b>	Ketchikan		5			5
1209 SE POW Total			5			5
<b>GRAND TOTAL</b>		<b>26</b>	<b>10</b>	<b>31</b>	<b>0</b>	<b>67</b>

Proposal WP06-07 would close Suemez Island to non-Federally qualified deer hunters from Aug. 1–15. The existing data indicate that the area is used by Federally qualified subsistence users as well as non-Federally qualified deer hunters. The ADF&G's mail out survey data for the 2000–2003 seasons indicate that only Craig residents use Suemez Island on a yearly basis. Small numbers of hunters from other POW communities are often reported as well, and could easily be missed by the sampling design in some years. Non-Federally qualified hunters from Ketchikan, Juneau, Sitka, and Outside Alaska (nonresidents) were also reported during this time. None of the non-Federally qualified communities were reported using Suemez Island more than one year out of the four. Thus, their use may be more opportunistic than traditional, although the small numbers of hunters using Suemez Island from these communities could also be missed by the sampling design.

Based on ADF&G's 2002–2003 mail-out survey information, proposal WP06-07 could limit hunting opportunity for between 0–14 non-Federally qualified hunters who normally try to hunt on Suemez Island in a given year. Specific information on the timing of effort for non-Federally qualified hunters on Suemez Island is not available, so the degree of restriction is hard to determine. It is likely that some non-Federally qualified hunters would be restricted but in reality, the effect would be small because the closure is between Aug. 1–15 and most hunters could still hunt later in the season. Based on the reported levels of use and harvest, it seems unlikely that proposal WP06-07 would create a noticeable reduction in competition between users on Suemez Island.

The combined effect of the two parts of this proposal could lead to additional hunting pressure on the south end of POW Island, especially early in the season. This is a relatively low use area compared to other parts of POW (Turek et al. 1998). However, based on current hunting patterns, these changes seem unlikely to cause a detectable difference in the number of deer harvested in south POW WAAs or on Suemez Island.

Proposal WP06-08 would exclude non-Federally qualified deer hunters from hunting on the southwest islands of Unit 2 from Aug. 1–15. These islands are currently open to all hunters. Based on estimates from ADF&G's mail-out survey data (**Table 10**), approximately a quarter of the hunters that used the southwestern islands area from 2000–2003 were non-Federally qualified hunters (including rural Alaska hunters without positive customary and traditional use determinations). Over half of the estimated harvest from 1989–1996 on Dall and Long Islands was by non-Federally qualified hunters (**Figure 12**), but use of Dall Island has decreased since then. Most of these hunters were from Ketchikan, which is the only non-Federally qualified community for which this area produces a meaningful portion of the community harvest. From 2000–2003 it produced an estimated 3.9% of the Ketchikan community deer harvest (123 deer over the four year period). WAAs 1106 (Long Island) and 1107 were the main areas used by Ketchikan, and it is impossible to identify how much of the use of WAA 1107 was on POW and would not be affected by the proposed changes. Dall (WAA 1105) and Long (1106) Islands have large areas of Native Corporation lands that have (or have had) logging operations, which could explain the relatively high use of these islands by non-Federally qualified deer hunters. Most of Long Island is owned by Native Corporations, with only a relatively small portion USDA FS managed public lands. These islands are not easily accessible from Ketchikan.

Proposal WP06-08 could limit hunting opportunity for an estimated 12–47 non-Federally qualified hunters that normally try to hunt the southwest islands in a given year. Specific information on the timing of effort for non-Federally qualified hunters on the southwest islands is not available, so the degree of restriction is hard to determine. In reality, the effect would be small, because the closure is between Aug. 1–15 and most non-Federally qualified hunters could arrange their hunting trip between mid-August and Dec. 31. Proposal WP06-08 would likely have a greater impact on non-Federally qualified deer

hunters than would proposal WP06-07, primarily as a result of high use by non-Federally qualified users on Long Island.

The portions of the proposals seeking to close islands west of POW to non-Federally qualified hunters are not consistent with the Alaska National Interest Lands Conservation Act (ANILCA). As stated in Sections 815 and 816, nothing in ANILCA authorizes the restriction of nonsubsistence uses, unless necessary for conservation of healthy fish and wildlife populations, to continue the subsistence uses of such populations, for public safety, or for administrative purposes. Existing pellet group and harvest data do not indicate that there is a population concern and, as mentioned above, the ADF&G consider the Unit 2 deer population to be stable. Competition is difficult to quantify but deer harvest on the islands is predominantly by Unit 2 residents.

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<i>WP06-09 Executive Summary</i>	
<b>General Description</b>	Raise the harvest limit for Federally qualified subsistence hunters from four to six deer in Unit 2. <i>Submitted by the Craig Community Association.</i>
<b>Proposed Regulation</b>	<i>≠ 6 deer; however, no more than one may be an antlerless deer. Antlerless deer may be taken only during the period Oct. 15–Dec. 31. You are required to report all harvests using a joint Federal/State harvest report.</i>  <i>Federal public lands on Prince of Wales Island are closed to hunting of deer from Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.</i>
<b>Southeast Alaska Regional Advisory Council Recommendation</b>	<b>Support with modification.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support with modification.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATION WP06-09

### SOUTHEAST ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support the proposal** with modification. The Southeast Alaska Subsistence Regional Advisory Council voted to support WP06-09 with modification to read:

*Federally qualified subsistence users in Unit 2 may receive a Federal permit allowing the harvest of a 5th deer from Unit 2. A Federal permit will be issued allowing the harvest of 1 buck. A person requesting a permit will need to show his/her used or validated 4th deer tag.*

The Council discussed available deer population data and learned that our knowledge of the state of the deer population in Unit 2 continues to be incomplete. Scientific studies do not tell us with any confidence whether the deer population is stable, declining, or increasing. The Council has supported additional research studies to better document the status of the deer population. Local knowledge may provide the best information on this deer population.

Data were presented in the staff analysis and in the preliminary results of the Brinkman study that showed that a significant number of subsistence hunters either limit out taking the four deer presently allowed in regulation or take more than four deer. The hunters interviewed in the Brinkman study took an average of

6.1 deer per hunter. They were asked how many deer they needed for their household needs; the average was 5.1 deer. Half of the Brinkman respondents harvested more than 4 deer, and half said they needed more than 4 deer for their household's use. In addition, over the years, the Council has heard descriptions of community 'high harvesters' who harvest a substantial amount of the total subsistence harvest in their communities. 'High harvesters' on Prince of Wales Island may take dozens of deer per year.

Some high harvesters may be taking more than four deer per year by utilizing designated hunter permits. These permits allow them to hunt for other Federally qualified rural residents over 10 years of age. Other high harvesters may not always use the designated hunter provisions or be able to use them. Federal regulations should not require a hunter to use designated hunter permits to meet his or her household needs.

The recommended Federal permit for a 5th deer would recognize that high harvesters take, use, and need more than the 4 deer provided in current regulation. The recommendation is supported by strong data showing that a portion of subsistence hunters in Unit 2 harvest, use, and need more than 4 deer per year for their household's use. This will be of benefit to subsistence users.

Staff estimated that a general 6 deer harvest limit would result in an additional harvest of 40–100 deer per year. The Council recommendation for a closely controlled Federal permit for a 5th deer would be likely to result in fewer additional deer taken. Because harvest would not increase substantially and because the Federal permit would be closely monitored, this recommendation follows recognized principles of wildlife conservation.

Finally, the recommended change would have negligible effect on nonsubsistence hunters.

## INTERAGENCY STAFF COMMITTEE RECOMMENDATIONS WP06-09

### Option A: Majority Recommendation

**Support with modification**, consistent with part of the recommendation of the Southeast Alaska Subsistence Regional Advisory Council to provide for an increase in harvest limit from 4 to 5 deer. The recommendation also removes the requirement for a Federal permit as recommended by the Council, and provides the authority to the Forest Supervisor to reduce the harvest limit from 5 deer to 4 deer based on conservation concerns.

The modified regulation would read:

#### Unit 2—Deer

*✦ 5 deer; however, no more than one may be an antlerless deer. July 24–Dec. 31.  
Antlerless deer may be taken only during the period Oct. 15–Dec. 31.  
You are required to report all harvests using a joint Federal/State harvest report. **The Forest Supervisor is authorized to reduce the harvest to 4 deer based on conservation concerns, in consultation with ADF&G and the Chair of the Southeast Alaska Subsistence Regional Advisory Council.***

*Federal public lands on Prince of Wales Island are closed to hunting of deer from Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.*

### **Option B: Minority Recommendation**

**Support with modification**, consistent with part of the recommendation of the Southeast Alaska Subsistence Regional Advisory Council to provide for an increase in harvest limit from 4 to 5 deer. The recommendation also removes the requirement for a Federal permit as recommended by the Council, but does not provide the authority to the Forest Supervisor to reduce the harvest limit from 5 deer to 4 deer based on conservation concerns.

The modified regulation would read:

#### **Unit 2–Deer**

*≠ 5 deer; however, no more than one may be an antlerless deer. July 24–Dec. 31.  
Antlerless deer may be taken only during the period Oct. 15–Dec. 31.  
You are required to report all harvests using a joint Federal/State harvest report.*

*Federal public lands on Prince of Wales Island are closed to hunting of deer from Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.*

### **Justification**

The Interagency Staff Committee is in agreement with two of the three aspects of this recommendation. All members agree that there is rationale for the harvest limit change, as requested by the Southeast Alaska Subsistence Regional Advisory Council (SERAC). All members also agree that a special permit for harvest of the 5th deer, as proposed by SERAC, is not necessary. Members of the Interagency Staff Committee disagree on whether the Forest Supervisor should be delegated authorization to reduce the harvest limit from 5 deer to 4 deer.

#### *Rationale for five deer:*

The Interagency Staff Committee found no reason under ANILCA 805(c) to oppose the Council's recommendation to increase harvest from 4 to 5 deer. The analysis shows that some people would like to harvest more than 4 deer to meet their family needs. An argument could be made that more than 4 deer could be harvested using designated hunter provisions in Federal subsistence regulation. However, it shouldn't be necessary to use the designated hunter provisions to harvest food for your own family. Designated hunter provisions are designed to harvest food for other community members who don't have the capability to harvest their own. A recent report (Brinkman, referred to in the SERAC recommendation) indicates that 5.1 deer is the average family need for those people interviewed.

There is no known conservation problem at this time for deer in Unit 2. The Alaska Department of Fish and Game (ADF&G) harvest objective is 2,700 deer. Recent harvests have been below that number, and the amount of harvest is on a downward trend while hunter effort (deer/day) has been stable. Changing the harvest limit to 5 deer would not increase total harvest to above the ADF&G harvest objective. The analysis recognizes that deer available for harvest are likely to diminish in future years, as more and more habitat becomes unavailable or of diminished quality. This will likely be exacerbated by severe snow winter(s). ADF&G currently believes that deer populations are stable.

*Rationale for no special federal permit:*

The USDA Forest Service does not believe there is a reason to require additional administrative bureaucracy associated with the Council's recommendation that a specific Federal permit be used for the 5th deer, and that a subsistence harvester must show his/her used or validated 4th deer tag prior to receiving the 5th deer Federal permit. The current reporting system can be used to document harvest of a 5th deer with no modification. Six harvest tags are already distributed to the hunter. The Interagency Staff Committee concurs that requiring the subsistence harvester to present themselves at a Forest Service office prior to receiving the 5th deer authorization would be detrimental to the satisfaction of subsistence needs and would be administratively burdensome for the Federal manager.

*Rationale for/against authorizing the Forest Supervisor to reduce the harvest to 4 deer based on conservation concerns:*

Option A: Majority recommendation

Unit 2 deer populations are currently stable, and harvest is apparently on a decreasing trend. However, it is anticipated that deer available for harvest are likely to diminish in future years, as more and more habitat becomes unavailable or of diminished quality. This will likely be exacerbated by severe snow winter(s). The recommendation to give the Forest Supervisor authority to reduce the harvest to 4 deer (from 5 deer), based on conservation concerns, is meant to give flexibility to the manager to reduce potential harvest if there are immediate conservation concerns which cannot easily be dealt with using the formal rulemaking process. Most likely, this would result from substantial herd die-off during/following a severe winter. The hunting season for Unit 2 extends almost 6 months, from July 24 to December 31. Because of the long season, an emergency special action, which is in effect only 60 days, would not be an appropriate action (unless there were notice and public hearing to extend) and a Board temporary action would also require notice and public hearing (36 CFR 242.19). The purpose of this authorization would be to give the Forest Supervisor flexibility for quick action that would not require notice and public hearing.

Option B: Minority recommendation

Assigning the local manager the responsibility of reducing the harvest limit from 5 deer to 4 is unfair to both subsistence users and to the manager. It is unfair to subsistence users because major changes in the harvest limit, such as a 20% reduction, should first be granted a full public review before being implemented, and the decision to change harvest limits is, and should remain, the prerogative of the Secretaries through the Federal Subsistence Board. To do otherwise circumvents the opportunity for local input from the subsistence users as mandated in ANILCA. Also, such changes in harvest limits would be necessitated by substantial data. Currently and into the foreseeable future detailed data concerning the population size, and even the population trend of the Prince of Wales Island deer herd are lacking, so it would be unfair to saddle the manager with such responsibility knowing that such data do not exist and may not exist for a very long time.

**STAFF ANALYSIS  
WP06-09**

**ISSUES**

Proposal WP06-09 was submitted by the Craig Community Association. This proposal would raise the harvest limit for Federally qualified subsistence users hunting deer from four to six deer in Unit 2.

**DISCUSSION**

The proponents feel that the current four deer limit is not sufficient to meet their subsistence needs. They also suggest that raising the harvest limit would reduce costs and increase efficiency of harvests when hunting for others using the Federal Designated Hunter Permit.

The intent and wording of the proposal were confirmed with Lisa Trimmer of the Craig Community Association on Nov. 17, 2005.

**Existing Federal Regulation**

**Unit 2—Deer**

*4 deer; however, no more than one may be an antlerless deer. Antlerless July 24–Dec. 31. deer may be taken only during the period Oct. 15–Dec. 31. You are required to report all harvests using a joint Federal/State harvest report.*

*The Federal public lands on Prince of Wales Island are closed to hunting of deer from Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.*

**Proposed Federal Regulation**

**Unit 2—Deer**

*¶ 6 deer; however, no more than one may be an antlerless deer. July 24–Dec. 31. Antlerless deer may be taken only during the period Oct. 15–Dec. 31. You are required to report all harvests using a joint Federal/State harvest report.*

*Federal public lands on Prince of Wales Island are closed to hunting of deer from Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.*

**State Regulation**

**Unit 2—Deer**

*Residents and nonresidents: four bucks. Aug. 1–Dec. 31.*

**Extent of Federal Public Lands**

There are approximately 2.3 million acres of land in Unit 2, of which 1.9 million acres (83%) are Federal public lands managed by the Tongass National Forest. There is a small amount of land managed by FWS Alaska Maritime National Wildlife Refuge. State, municipal, and private land is scattered throughout the unit and comprises approximately 398,000 acres (17%); of which Native corporations own 280,000 acres (12%).

### **Customary and Traditional Use Determinations**

All rural residents of Units 1A, 2, and 3 have a positive customary and traditional use determination for deer in Unit 2. Rural residents of Unit 2 have a positive customary and traditional use determination for deer in Units 1A, 1B and 2.

### **Regulatory History**

The regulatory history of deer management for Unit 2 is discussed in the analysis for WP06-07/08.

### **Current Events Involving Species**

A discussion of current events concerning Unit 2 deer is included in the analysis for WP06-07/08.

### **Biological Background**

The biological background for deer in Unit 2 is discussed in the staff analysis for WP06-07/08.

### **Harvest History**

For general Unit 2 harvest history information, refer to the analysis for WP06-07/08.

Federal harvest permit data indicate that of those hunters that reported harvesting deer, approximately 8%, and 19% harvested four deer in 2003 and 2004, respectively. In 2004, 146 Designated Hunter permits were issued to members of communities with positive Federal customary and traditional use determinations for Unit 2. However, only 28 of those designated hunter permits were issued to members of communities on Prince of Wales Island (POW). Overall, only a small number of hunters harvest deer utilizing Federal harvest permits, and most harvest is under the State permit system. In 2003, 67 State proxy hunting permits were issued to hunters with positive Federal customary and traditional use determinations for Unit 2, but only 12 of those were issued to residents of POW communities (Straugh et al 2004). Through 2004 there were separate State and Federal permit and reporting systems, making it hard to accurately determine the number of hunters and how many deer they harvested. The new State/Federal harvest report implemented in 2005 should provide better information in the future. Although the 2005 harvest season is over, the data is not yet available.

Mazza (2003) looked at ADF&G hunter statistics and found that overall hunter effort on POW remained fairly constant between 1984 and 2001, although it varied from year to year. She also found that the number of hunters from Ketchikan did not change significantly from 1997–2001. The two groups that had increased were Other Alaska (i.e. not POW communities or Ketchikan) and Outside Alaska (nonresidents). Thus, the available data suggests that while demand (as measured by numbers of hunters and deer harvested) has fluctuated, there has been no overall increasing trend. This may reflect changes in area community populations as job opportunities change in the area, especially recent changes in the timber industry (Mazza 2003). POW communities constitute approximately half of the hunters on the island (Mazza 2003, Table 2). **Figure 1** confirms Mazza's analysis, but shows a sharp decline in both number of hunters and deer harvested since 2001. **Figure 2** indicates that the number of days per deer harvested has remained steady in recent years.

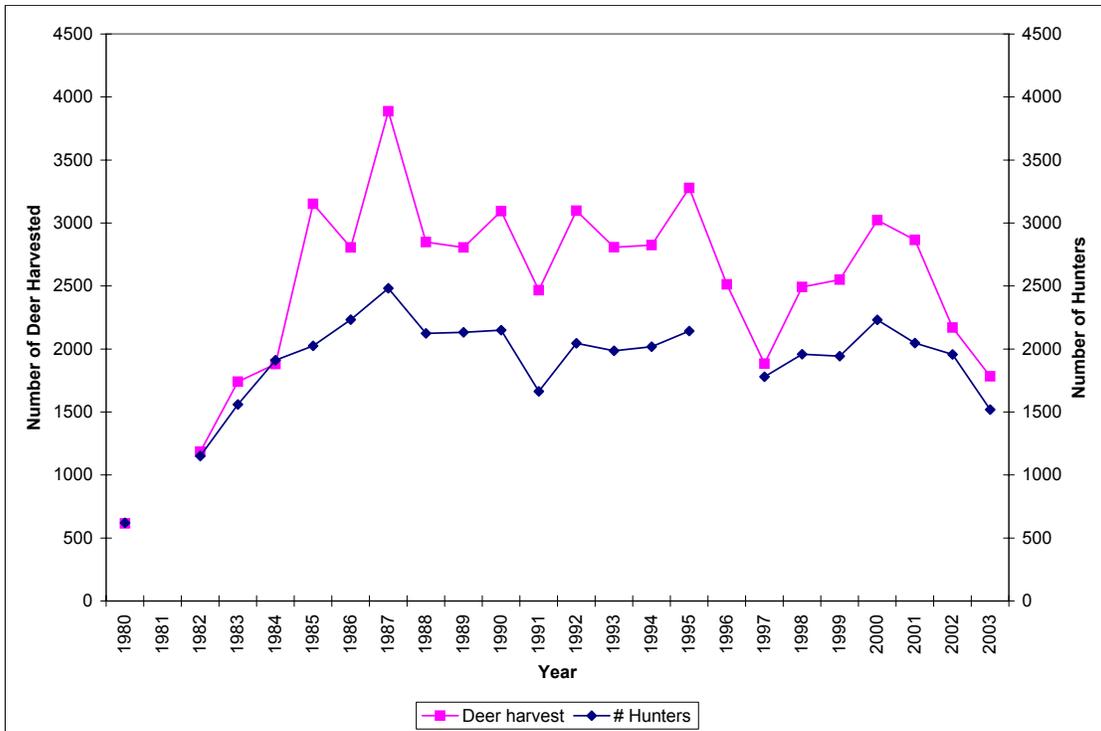


Figure 1. Unit 2 deer harvest and number of hunters. Data from ADF&G deer hunter harvest surveys and Turek et al. 1998.

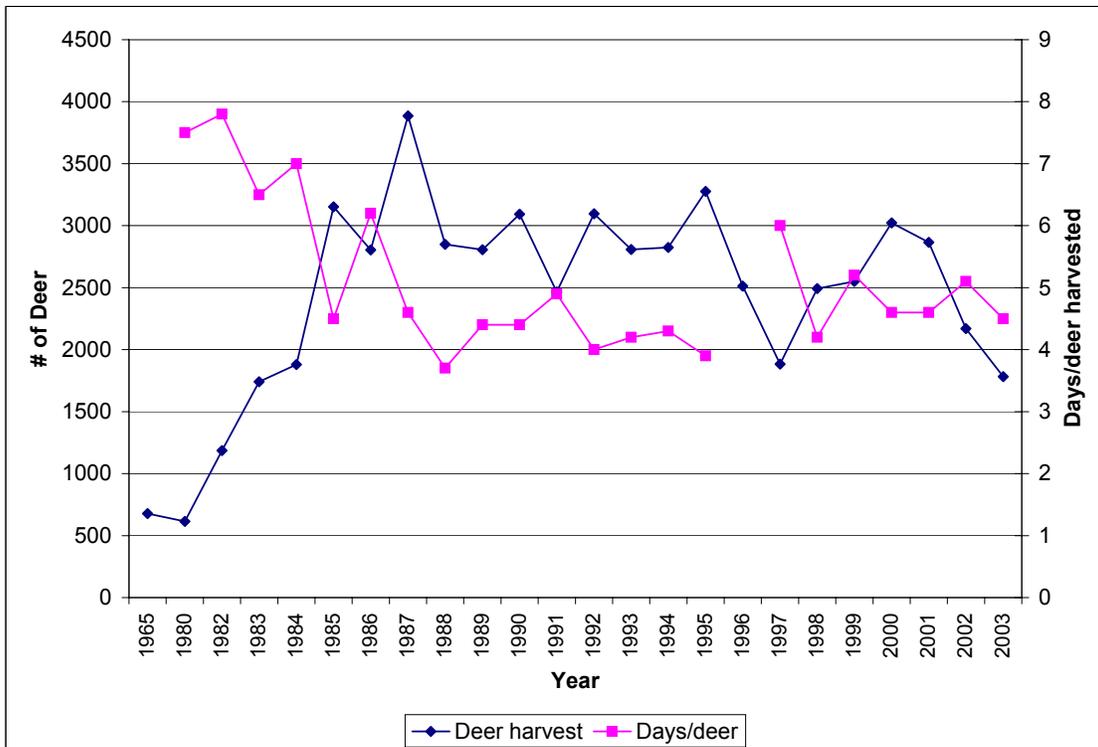


Figure 2. Deer harvest and number of days per deer harvested. Data from the ADF&G hunter harvest survey and Turek et al. 1998.

## Effects of the Proposal

This proposal would allow Federally qualified subsistence hunters in Unit 2 to harvest up to six deer per year. This would provide an opportunity for locally qualified hunters to harvest more deer to meet their needs. One way to look at need is the per capita deer harvest reported in the ADF&G Community Profile Database (CPDB). In 1996–98, all POW communities were surveyed and found to use between 30–95 pounds of deer meat per person per year (ADF&G 2001). These studies assumed 80 pounds of usable meat per deer, or 0.4–1.2 deer per person. A problem with this approach is that it assumes that harvesters are able to obtain all the deer they want. This may not be true for a number of reasons including competition, reduced deer populations, and lack of time available to spend harvesting due to other obligations. Also, averages do not represent everybody. What is sufficient for the average does not meet everyone's needs. However, the CPDB also reports 95<sup>th</sup> percentile use rates for deer. The highest 95 percentile rates of use were for Kasaan in 1998, and equate to 0.55 pounds of deer meat per day or 2.5 deer per year per person. This is within the current harvest limit. Four deer per year equates to 0.88 pounds of deer meat per person per day. Most subsistence users utilize other sources of meat as well as deer.

This proposal could result in an increase in deer harvest in Unit 2. The extent of this increase is unknown. Available data indicates that 8%–19% of successful Federally qualified Unit 2 subsistence deer hunters harvest the full four deer they are currently allowed. For the 2003 season, the ADF&G estimated that there were 516 Federally qualified deer hunters that successfully harvested deer in Unit 2 (Straugh et al 2004). This would amount to 41–98 hunters who harvested four deer. If these hunters averaged an additional deer per person, it would mean a harvest increase of approximately 40–100 deer. This would be a 2.2%–5.6% increase using the 2003 estimated total harvest for Unit 2. The total Unit 2 estimated deer harvest declined sharply in 2002 and 2003 (**Figure 1**) and fell below the ADF&G harvest objective of 2700 deer.

Increased harvest would not be appropriate for a declining deer population. A number of people have testified that the Unit 2 deer population is declining, and the long-term expectation is that decreasing winter habitat will result in a population decline. This expectation is based on habitat changes from timber sales. However, this is compared to the 1954 condition, and would not necessarily happen on a consistent yearly basis. This prediction is based on habitat models using severe winter weather habitat. Thus, the actual decline may not occur until a severe snow winter. In the meantime, the deer population may not show much of an effect because they can survive in lesser-quality habitat. Any decline due to habitat would likely be specific to the harvested watersheds. However, most of the roads used by hunters were created for logging, so these areas would correlate strongly with current high harvest areas on POW. The available data have not been able to detect a decline in the deer population, and ADF&G considers the population stable (Porter 2005, personal communication). However, small scale population and distribution changes on traditional hunting areas could occur undetected by current methods. Changes in the visibility and distribution of deer due to habitat changes could also cause the perception of a population decline.

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<i>WP06-10 Executive Summary</i>	
<b>General Description</b>	Require deer harvest ticket number one to be used for the harvest of an antlerless deer in Unit 2. <i>Submitted by Mr. Ernest W. Stiller.</i>
<b>Proposed Regulation</b>	<p><b>Unit 2—Deer</b></p> <p><i>4 deer; however, no more than one may be an antlerless deer. Antlerless deer may be taken only during the period Oct. 15–Dec. 31. You are required to report all harvests using a joint Federal/State harvest report. <b>You may only use harvest ticket #1 for antlerless deer.</b></i></p> <p><i>Federal public lands on Prince of Wales Island are closed to hunting of deer from Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.</i></p>
<b>Southeast Alaska Regional Advisory Council Recommendation</b>	<b>Oppose.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATION WP06-10

### SOUTHEAST ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Oppose.** The Southeast Alaska Subsistence Regional Advisory Council opposes this proposal. Doe harvest was managed under Federal permits through the 2004 hunting season. In 2005 hunters taking does were required to report their harvest on the mandatory harvest report form. There are no significant problems in Unit 2 with the legal doe harvests that take place.

The proposed use of the first deer tag for any doe harvest would mean that Unit 2 hunters wishing to take a doe could do no deer hunting until the doe season opened on October 15.

This proposal is not supported by substantial data showing that a regulatory change is needed. It would operate to the detriment of subsistence users by unnecessarily restricting their hunting opportunity. Finally, it would conflict with the principles of wildlife conservation in Unit 2.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-10**

**Oppose** the proposal as recommended by the Southeast Alaska Subsistence Regional Advisory Council.

**Justification**

This proposal is detrimental to the satisfaction of subsistence needs without adequately addressing the concern regarding the illegal harvest of female deer, as suggested by the proponent. Neither the proposal nor the suggested alternative would adequately reduce illegal antlerless deer harvest. In addition, this proposal would result in a divergence with State regulations. Every effort has been made between the State and Federal managers to reduce the complexity of deer management in Unit 2. This proposal and the alternative identified by the proponent would needlessly complicate deer management in Unit 2.

## STAFF ANALYSIS WP06-10

### ISSUES

This proposal, submitted by Mr. Ernest W. Stiller, a resident of Naukati, requires deer harvest ticket number one to be used for the harvest of an antlerless deer in Unit 2. Mr. Stiller is concerned that subsistence hunters are taking more than one antlerless animal.

As an alternative, Mr. Stiller would agree to designate any other harvest ticket to take an antlerless deer.

### DISCUSSION

Current regulations authorize Federally qualified subsistence users to harvest one antlerless deer in Unit 2. The open season for subsistence deer hunting is July 24 through Dec. 31. Antlerless deer can only be taken after Oct. 15. An antlerless deer may be a doe, fawn or buck deer that has dropped his antlers. Current regulations require hunters to use deer harvest tickets in order.

#### Existing Federal Regulation

##### Unit 2—Deer

*4 deer; however, no more than one may be an antlerless deer. July 24–Dec. 31  
Antlerless deer may be taken only during the period Oct.  
15–Dec. 31. You are required to report all harvests using a joint  
Federal/State harvest report.*

*The Federal public lands on Prince of Wales Island are closed to hunting of deer from  
Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations*

#### Proposed Federal Regulation

##### Unit 2—Deer

*4 deer; however, no more than one may be an antlerless deer. Ant- July 24–Dec. 31  
lerless deer may be taken only during the period Oct. 15–Dec. 31.  
You are required to report all harvests using a joint Federal/State  
harvest report. **You may only use harvest ticket #1 for antlerless  
deer.***

*The Federal public lands on Prince of Wales Island are closed to hunting of deer from  
Aug. 1–15, except by Federally qualified subsistence users hunting under these regulations.*

#### Existing State Regulations

The requirement for Units 1–5 to carry all harvest tickets and to validate them in sequential order (already in regulation for other parts of the State) was implemented by the Alaska Board of Game at its Nov. 2004 meeting.

### **5 AAC 92.010 Harvest tickets and reports.**

*(f) for deer, a person may not hunt deer, except in a permit hunt, unless the person has in possession a deer harvest ticket. All unused deer harvest tickets must be carried while hunting deer in Units 1–5 and must be validated in sequential order, beginning with harvest ticket number one.*

### **5 AAC 92.130 Restrictions to bag limit.**

*(a) Unless otherwise provided in 5 AAC 84-5 AAC 92, no person may take a species of game in any unit or portion of a unit if that person's total statewide take of that species already equals or exceeds the bag limit for that species in that unit or portion of a unit, except as provided in (d) of this section.*

### **Extent of Federal Public Lands**

There are approximately 2.3 million acres of land in Unit 2, of which 1.9 million acres (83%) are Federal public lands managed by the Tongass National Forest.

### **Customary and Traditional Use Determinations**

All rural residents of Units 1A, 2, and 3 have a positive customary and traditional use determination for deer in Unit 2. Rural residents of Unit 2 have a positive customary and traditional use determination for deer in Units 1A, 1B and 2. Additionally, residents of Point Baker and Port Protection (located on North Prince of Wales Island) have positive customary and traditional use determinations for Units 3 and 4.

### **Regulatory History**

A four deer harvest limit with an Aug. 1–Dec. 31 harvest season has been in Federal and/or State regulations since 1988. Prior to 1988, the harvest limit and regulatory season was, for the most part, more limited. A limited doe hunt has been in regulation in most years since 1955. Currently, State regulations do not allow the harvest of antlerless deer, but Federal regulations allow Federally qualified subsistence hunters to take one antlerless deer between Oct. 15 and Dec. 31 (**Table 1**).

### **Current Events Involving Species**

The Southeast Alaska Subsistence Regional Advisory Council's Unit 2 Deer Planning Subcommittee met in Craig Feb. 22–23, 2006. The Council received the Subcommittee's report at its Feb. 27–Mar. 3, 2006 meeting in Saxman. The Council reviewed the report and adopted it, with modification, as a Council report to the Federal Subsistence Board. The final report of the Council to the Board includes recommendations to modify areas of Federal public land closed to non-Federally qualified hunters during the Aug. 1–15 portion of the hunting, and to permit harvesting of a fifth deer under a Federal permit.

### **Harvest History**

A review and summary of deer harvest data from Unit 2 is contained in **Figures 1 and 2**. State harvest data from 1980–2003 show harvests increasing in the 1980s, peaking in 1990s and declining since 2001 to a low of 1,783 deer harvested in 2003. Antlerless deer harvests from 2001 to 2004 range from 62 to 82, with an average of 75 animals.

**Table 1.** Regulatory History for Unit 2 Deer Hunting.

Year(s)	Type of Season	Season	Limit	Conditions and Limitations
1925	Open	Sep 15–Dec 16	3	Bucks, 3" or greater antler growth
1925–1929	Open	Sep 1–Nov 30	3	Bucks, 3" or greater antler growth
1930–1941	Open	Aug 20–Nov 15	2	Bucks, 3" or greater antler growth
1942–1943	Resident	Sep 16– Nov 15	2	Bucks, 3" or greater antler growth
1942–1943	Nonresident	Sep 16–Nov 15	1	Bucks, 3" or greater antler growth
1944–1948	Resident	Sep 1– Nov 7	2	Bucks, 3" or greater antler growth
1944–1948	Nonresident	Sep 1–Nov 7	1	Bucks, 3" or greater antler growth
1949	Resident	Sep 1– Nov 15	2	Bucks, 3" or greater antler growth
1949	Nonresident	Sep 1–15 Nov	1	Bucks, 3" or greater antler growth
1950–1951	Resident	Aug 20–15 Nov	2	Bucks, 3" or greater antler growth
1950–1951	Nonresident	Aug 20–15 Nov	1	Bucks, 3" or greater antler growth
1952	Open	Aug 20–22 Nov	2	Bucks, 3" or greater antler growth
1953	Open	Aug 20–22 Nov	3	Bucks, 3" or greater antler growth
1954	Open	Aug 20–22 Nov	3	Bucks, 3" or greater antler growth
1955	Open	Aug 20–22 Nov	3	3 bucks or 2 bucks and one doe; bucks 3" or greater antler growth
1956	Open	Aug 20–26 Nov	4	3 bucks or 2 bucks and one doe; does 11/13 –11/26 or greater antler growth
1957–1958	Open	Aug 20–Nov 30	4	Does allowed 10/15–11/30
1959	Open	Aug 8–Nov 30	4	4 bucks or 3 bucks and one doe or 2 bucks and 2 does; bucks only before 10/01
1960	Open	Aug 20–Dec 15	4	4 bucks or 3 bucks and one doe; bucks only before 10/15 4 bucks or 3 bucks and one doe or 2 bucks and 2 does; bucks only before 10/01
1961	Open	Aug 1–Nov 30	4	Only 2 antlerless; antlerless only from 9/15–11/30
1962	Open	Aug 1–Dec 15	4	Antlerless deer from 9/15–12/15 only
1963–1967	Open	Aug 1–Dec 31	4	Antlerless deer from 9/15–12/15 only
1968	Open	Aug 1–Dec 15	4	Antlerless deer from 9/15–12/15 only
1969–1970	Open	Aug 1–Dec 31	4	Antlerless deer from 9/15–12/31 only
1971	Open	Aug 1–Dec 31	4	Antlerless deer from 9/15–12/31 only
1972	Open	Aug 1–Dec 31	3	Antlerless deer from 11/01–11/30
1973	Open	Aug 1–Nov 30	3	One antlerless deer from 11/01–11/30
1974–1977	Open	Aug 1–Nov 30	3	One antlerless deer from 11/01–11/30
1978–1984	Open	Aug 1–Nov 30	3	Antlered deer
1985–1986	State Subsistence General Regulations	Aug 1–Nov 30	3	3 antlered deer

*continued*

**Table 1.** Regulatory History for Unit 2 Deer Hunting. (continued)

Year(s)	Type of Season	Season	Limit	Conditions and Limitations
1987	State Subsistence General Regulations	Aug 1–Nov 30	3	3 antlered deer, 1 antlerless deer from 10/10–10/31
1988–1990	State and Federal Subsistence Regulations	Aug 1–Dec 31	4	Antlered deer
1991–1994	State and Federal Subsistence Regulations	Aug 1–Dec 31	4	Antlered deer
1995–2005	State Regulations	Aug 1–Dec 31	4	4 buck deer
1995–2000	Federal Subsistence Regulations	Aug 1–Dec 31	4	4 antlered deer. Not more than one may be antlerless deer; antlerless deer may be taken only during 10/15–12/31
2001–2002	Federal Subsistence Regulations	Aug 1–Dec 31	4	4 antlered deer. Not more than one may be antlerless deer; antlerless deer may be taken only during 10/15–12/31
2003–2005	Federal Subsistence Regulations	Jul 24–Dec 31	4	4 antlered deer. Not more than one may be antlerless deer; antlerless deer may be taken only during 10/15–12/31

### Effects of the Proposal

If you use harvest ticket number one before Oct. 15, you can no longer harvest an antlerless deer in Unit 2. If you plan to harvest an antlerless deer, you can not hunt before Oct. 15. In both of these examples, the result is a loss of harvest opportunity for Federally qualified subsistence users. This proposal would unnecessarily complicate deer management in Unit 2. Adopting this proposal would not necessarily prevent the illegal harvest of antlerless deer. However, this proposal would likely have some effect in reducing the illegal harvest of antlerless deer, as intended, since harvest tickets two through four would not be valid to harvest antlerless deer during the remainder of the season. A Federal antlerless deer permit used in conjunction with State harvest tickets would provide an opportunity to designate a harvest permit specifically for antlerless deer, but would retain the same enforcement concerns as the current system.

The proponent's alternative to allow the hunter to designate one of the four harvest ticket as an antlerless ticket would create confusion among law enforcement personnel due to the divers harvest patterns for southeast deer hunter. With this alternative there is currently no method of restricting the number of antlerless deer harvest tickets a hunter could designate. Making the necessary changes to the harvest ticket and harvest report formats, would require action of the Federal Subsistence Board and the Alaska Board of Game. New harvest reporting requirements for all Unit 2 deer hunters went into effect during the 2005/06 regulatory year. There has been no opportunity to evaluate the effects of the new harvest reporting system. It would be premature to implement any changes to the existing harvest ticket format, harvest report, and the associated harvest ticket conditions.

There is no existing methodology for designating and or documenting which harvest ticket would be the antlerless ticket. Any changes to the existing harvest reporting system would require changes by the Alaska Board of Game and/or ADF&G. The additional effects include further confusion for all Unit 2

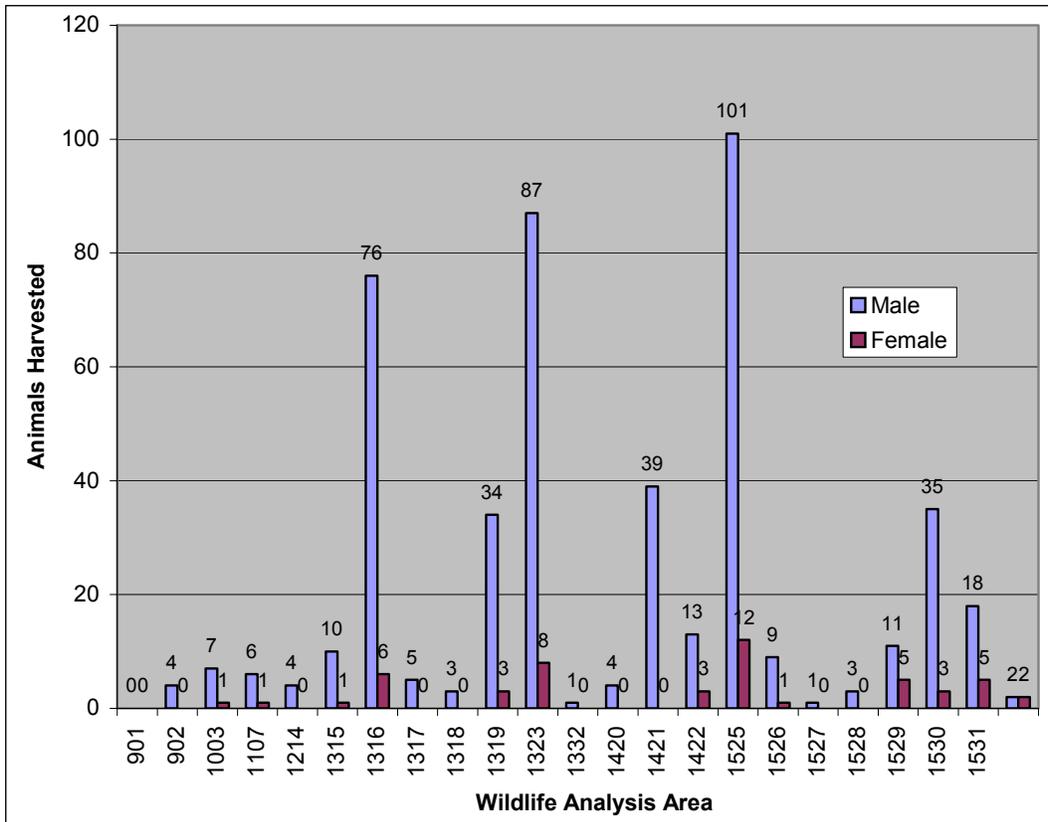


Figure 1. 2003 Unit 2 Subsistence Deer Harvest Results.

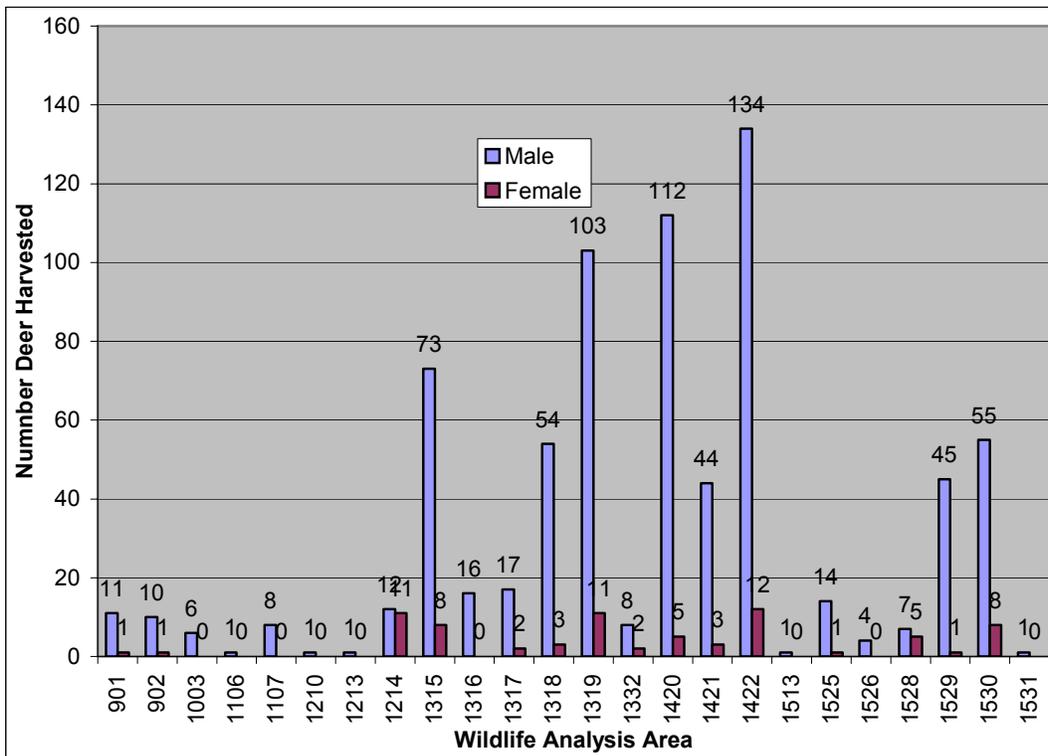


Figure 2. 2004 Unit 2 Subsistence Deer Harvest Results

deer hunters currently required to use the State/Federal harvest reporting system. Harvest data will be available later in 2006 from the new 2005/06 State/Federal harvest reporting system.

#### **LITERATURE CITED**

Alaska National Interest Land Conservation Act of 1980 as amended (ANILCA). Public Law 96-487. 96th Congress, December 2, 1980.

Porter, B. 2005. Area biologist. Personal communication. ADF&G, Ketchikan, AK.

<b>WP06-11a Executive Summary</b>	
<b>General Description</b>	Establish a customary and traditional use determination for elk in Units 1, 2, and 3 for the residents of Units 1B, 2, 3, and Meyers Chuck. <i>Submitted by Susan Stevens Ramsey and Luella Knapp of Wrangell.</i>
<b>Proposed Regulation</b>	<b>Unit 1*, 2*, 3–Elk</b>  <b><i>Residents of Units 1B, 2, 3, and Meyers Chuck.</i></b>  *Note that when contacted, the proponent said she wished the customary and traditional use determination apply to all areas where elk may be found.
<b>Southeast Alaska Regional Advisory Council Recommendation</b>	<b>Take no action.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Take no action.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATION WP06-11A

### SOUTHEAST ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Take no action** on WP06-11a. The Southeast Alaska Subsistence Regional Advisory Council had a number of concerns with this proposal requesting a positive customary and traditional use determination for elk in Units 1, 2, and 3. In summary, the Council concluded that it would be premature to make a positive or negative recommendation at this time. The Council recommendation to ‘take no action’ allowed deliberations to take place; a motion to table would not have allowed Council deliberations. The following considerations contributed to the Council recommendation to ‘take no action’:

A huntable elk population has been present in Unit 3 for less than 10 years. Hunting patterns for this population are continuing to develop. Although the staff analysis was thorough, not much is known at this time about how much elk have been integrated into subsistence practices. The Council needs more substantial information on use of elk before making a positive or negative recommendation.

The Council has received no public input, other than the initial proposal from proponents, supporting this proposal. The Council has heard from Fish and Game Advisory Committees and from area hunters, opposing the proposal. Area elk hunters, a majority of whom are from rural communities eligible for subsistence hunting of other species, appear to be satisfied with the current management regimen. The Council needs more positive public input before it may make a recommendation on this proposal.

The Council will consider proposals for customary and traditional use determinations in the future should they be submitted. At some time, as the elk population increases and expands and as hunters come to rely

more on elk, this use probably should be recognized with a customary and traditional determination and/or with Federal regulations setting seasons, harvest limits, and hunting conditions.

The Council may wish to consider at a later date how the Council makes recommendations on customary and traditional use determinations and whether they need to be made at all. At discussions at the recent Federal Subsistence Board meeting in Jan. 2006, Federal legal experts pointed out that customary and traditional use determinations are not required by ANILCA: “The priority is for rural Alaska residents. The use is fish and wildlife, the ability to get a portion of your sustenance from the land . . . . Everybody’s qualified who is a rural resident in some way . . . . We do not have to parse out who’s what in each community.”

At the request of the Secretary of the Interior, the Federal Subsistence Management Program will be reviewing its procedures for making customary and traditional use determinations. This review, and Council recommendations concerning determinations, may result in changes in the way the Subsistence Program makes customary and traditional use determinations. It could even result in elimination of this procedure, which was adopted as a matter of comity when Federal management began.

### **INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-11A**

**Take no action** as recommended by the Southeast Alaska Subsistence Regional Advisory Council.

#### **Justification**

Elk are non-native to Southeast Alaska and were introduced into Unit 3 in 1987. A huntable elk population has been present for less than 10 years. The analysis considered the eight criteria used by the Federal Subsistence Management program in making customary and traditional use determinations. The short duration that elk have been present and hunted in Unit 3 is the key criterion to be addressed. The Interagency Staff Committee believes that the period of time is not sufficient to establish a long term consistent pattern of use.

## STAFF ANALYSIS WP06-11a

### ISSUES

Proposal WP06-11, submitted by Susan Stevens Ramsey and Luella Knapp of Wrangell, requests that the Federal Subsistence Board make a positive customary and traditional use determination for elk in Unit 3 for residents of Units 1B, 2, and 3, and Meyers Chuck; and requests the establishment of a Federal season for harvest of elk in Unit 3. The proponents want to be able to harvest elk under Federal subsistence management regulations. They stated that it is difficult for them to meet their families' subsistence needs with deer and moose, the other two large wildlife species available in this area.

One of the proponents, Ms. Ramsey, was contacted on Nov. 11, 2005 to clarify her intentions with this proposal. She confirmed that she wanted a customary and traditional use determination that would apply to the nearby communities, including all communities of Units 1B, 2 and 3 as well as Meyers Chuck. She felt the determination should apply to wherever elk are found in this area, not only to the Etolin/Zarembo Island area. This would include Units 1 and 2 where elk have also been reported. She would like the Federal subsistence management regulations to mirror the existing State of Alaska elk hunting regulations for seasons and other requirements. Bulls only should be allowed to be taken from the Etolin, Zarembo, and associated islands areas. Any sex elk should be allowed to be taken outside this area. The State of Alaska drawing and registration hunt dates for the Etolin, Zarembo, and associated islands should be maintained. She thought that Federal regulations should allow any Federally qualified subsistence hunter to be able get a permit to hunt. She said that her intention was not to restrict nonsubsistence hunters, but to enable Federally qualified subsistence hunters to be able to use elk for food. She also noted that elk hides were good for drums. Her family members have not been able to get permits and have not yet hunted for elk in Unit 3. Ms. Ramsey had not contacted Fish and Game Advisory Committees or City and Tribal government organizations, but she said that she planned to do so.

Staff met with the chair, vice-chair, and past chair of the Wrangell Fish and Game Advisory Committee on Nov. 28, and spoke with the vice chair of the Petersburg Fish and Game Advisory Committee on that same date. They did not favor a customary and traditional use determination for elk in Unit 3 and questioned how a positive determination could be made for an introduced species that has only been hunted under a drawing hunt for a short period of time. The advisory committees appear to believe that the current management approach provides sufficient hunting opportunity. Both advisory committees will discuss this proposal at future meetings.

The customary and traditional use determination portion of Ms. Ramsey and Ms. Knapp's proposal will be covered as staff analysis WP06-11a. The harvest portion of their proposal will be covered in staff analysis WP06-11b.

### DISCUSSION

#### Existing Federal Regulation

*Elk, Customary and Traditional Use Determination.*

There are no existing Federal customary and traditional determinations or regulations concerning elk in Unit 3 or elsewhere in southeast Alaska.

**Proposed Federal Regulation**

**Customary and traditional use determination**

*Unit 1\*, 2\*, 3                      Elk                      Residents of Units 1B, 2, 3, and Meyers Chuck.*

\*Note that when contacted, the proponent said she wished the customary and traditional use determination to apply to all areas where elk may be found.

**Existing State of Alaska Regulations**

**Unit 3—Elk**

*Unit 3, Etolin, Zarembo and associated Islands*

<b>Species/bag limit</b>	<b>Permit/ticket required</b>	<b>Open season</b>
<i>One bull by permit, bow and arrow only</i>	<i>DE318</i>	<i>Sept. 1–Sept. 30</i>
<i>OR One bull by permit,</i>	<i>DE321/323</i>	<i>Oct. 1–Oct. 31</i>
<i>OR One bull by permit</i>	<i>RE325</i>	<i>Nov. 15–Nov. 30</i>
<b>Unit 1, 2 and remainder of Unit 3:</b>		
<i>One elk</i>		<i>Aug. 1- Dec.31</i>

The State made a negative determination for elk in Unit 3, and has not set an Amount Reasonably Necessary for Subsistence Uses for elk in this unit.

**Introduced Species Issues**

From 1916–87, at least 33 introductions of terrestrial mammalian species took place in Alaska (**Table 1**). Introductions were made in 18 of Alaska’s 26 Game Management Units. Species introduced included beaver, bison, caribou, deer, goat, fox, hare, elk, marten, muskox, moose, and sheep. Sea otters were also introduced; however, marine mammals are not managed by the Federal Subsistence Management Program. Twenty-one of these introductions were known to have been made outside the historical range of the species introduced. For example, deer and elk were introduced to the Kodiak and Afognak Island area in 1924 and 1929 respectively. These ungulates had never previously been present on these islands. Caribou introductions to the Kenai and Nushagak peninsulas (Units 7, 15, and 17) in 1966 and 1987 were attempts to reintroduce caribou into what had been their historic range. Muskox reintroductions to Barter Island, Unit 26, in 1969, were yet another attempt to reintroduce a species to its historic range. Nunivak and Nelson Islands, Unit 18, where muskox were introduced in 1935 and 1967, were outside the historic range for this species. Muskox were introduced to the Seward Peninsula and Cape Thompson, Units 22 and 23, in 1970; whether these areas were part of the historic range of muskox is uncertain.

Federal subsistence trapping regulations recognize customary and traditional use of introduced furbearers, including beaver, fox, and marten, by all rural residents. The Federal customary and traditional use determinations in place concerning introduced ungulates are more complicated. Customary and traditional use is:

**Table 1.** Customary and traditional use determinations of harvested terrestrial mammal and furbearer transplants listed by Game Management Unit (adapted from Pedersen et al. 1991).

Species	Historic Range	Location	Unit	Transplant Year	Existing C & T Determinations		
					State	Federal Hunting	Federal Trapping
Moose	No	Berner's Bay	1	1958	Negative	Negative	
Marten	No	Prince of Wales Island	2	1934	Undetermined		All Rural
Elk	No	Etolin/Zarembo islands	3	1987	Negative	Undetermined	
Marten	No	Baranof Island	4	1934	Undetermined		All Rural
Marten	No	Chichagof Island	4	1949	Undetermined		All Rural
Goat	No	Baranof Island	4	1923	Undetermined	Positive	
Deer	No	Yakutat	5	1934	Positive	Positive	
Deer	No	Prince William Sound	6	1916	Positive	All Rural	
Moose	No	Copper River Delta	6	1949	Negative	Positive	
Beaver	No	Kodiak/Afognak	8	1925	Undetermined		All Rural
Sheep	No	Kodiak	8	1965	Transplant unsuccessful		
Caribou	No	Kodiak	8	1924	No huntable population		
Deer	No	Kodiak/Afognak	8	1924	Positive	Positive	
Elk	No	Kodiak/Afognak	8	1929	Negative	Positive	
Hare	No	Kodiak/Afognak	8	1934	Undetermined	All Rural	
Goat	No	Kodiak	8	1952	Negative	Negative	
Moose	No	Kodiak	8	1965	Transplant unsuccessful		
Muskrat	No	Kodiak	8	1925	Undetermined		All Rural
Caribou	No	Adak	10	1958	Undetermined	All Rural	
Fox	No	Aleutian Islands	10	1913	Undetermined		All Rural
Bison	No	Chitina, Copper R. Basin	11	1950, 1962	Negative	Negative	
Caribou	Yes	Kenai Peninsula	7	1966	Undetermined	Negative	
Caribou	Yes	Kenai Peninsula	15	1966	Undetermined	Negative	
Caribou	Yes	Nushagak Peninsula	17	1987	Positive	Positive	
Muskox	No	Nunivak, Nelson Islands	18	1935, 1967	Negative	Negative	
Bison	No	Farewell	19	1965	Negative	Negative	
Bison	No	Delta/ remainder	20A,B, C,E,F	1928	Undetermined	All Rural	
Bison	No	Delta/ remainder	20D	1928	Negative	Negative	
Muskox	No?	Seward Peninsula	22	1970	Positive	Positive	
Muskox	Yes?	Cape Thompson	23	1970	Positive	Positive	
Muskox	Yes	Barter Island/E. Brooks Range	26	1969	Positive	Positive	

In Federal regulations "All Rural" are the default determination adopted by the Board at the inception of Federal management. See 5 AAC 99.016 for State of Alaska Determinations.

- a) Not recognized for Berner's Bay moose, Unit 1
- b) Recognized for goat introduced to Baranof Island, Unit 4; use is not recognized for goat introduced to Kodiak, Unit 8.
- c) Recognized for deer introduced to Kodiak and Afognak Islands, Prince William Sound, and Yakutat, Units 5, 6, and 8.
- d) Not recognized for caribou for Kenai Peninsula, Units 7 and 15.
- e) Recognized for elk introduced to Kodiak and Afognak islands, Unit 8.
- f) Generally not recognized for bison introduced in Units 19 and 20.
- g) Recognized for muskox introduced in Units 22, 23, and 26 but not for Unit 18.

In general, Federal subsistence management regulations recognize customary and traditional use of introduced species after a huntable population has been established; however, there are a number of exceptions. These negative customary and traditional use determinations reflect Regional Advisory Council recommendations; whether recognized subsistence use of other species takes place in areas where the introduced species is found, land ownership and jurisdiction, State of Alaska regulations in place at the inception of Federal management; and other factors. The following summarizes some factors that were considered for some of these determinations.

**Unit 1—Berner's Bay moose.** Hunting of this small, introduced moose population has been regulated with a State drawing permit. The hunt is primarily on Federal public lands within the boundaries of the City and Borough of Juneau. This area was the traditional territory of the Auke Tlingit who now reside in the Juneau nonrural area. No subsistence use of any species by Federally qualified subsistence users is known to take place in the hunt area.

**Units 4 and 8—Goat.** The Board concurred with the Southeast Alaska and the Kodiak/Aleutians Subsistence Regional Advisory Councils' recommendations concerning customary and traditional use of these species in these units.

The Southeast Alaska Subsistence Regional Advisory Council recommended recognizing customary and traditional use for goats in Unit 4.

Following an ADF&G study of goat use in Unit 8, the Kodiak/Aleutians Subsistence Regional Advisory Council worked with the Kodiak Fish and Game Advisory Committee to develop a locally supported management strategy that addresses management of goat subsistence hunting on Kodiak Island. For this reason the Kodiak/Aleutians Regional Council opposed recognizing use of goat on Kodiak Island.

**Unit 5, 6, and 8—Deer.** Positive determinations were made by the Alaska Board of Game in the 1980s. The Federal Subsistence Management Program adopted the State determinations.

**Units 7 and 15—Caribou on the Kenai Peninsula.** The Board did not find sufficient evidence of use of caribou by residents of the rural communities on the Kenai Peninsula. Most Kenai Peninsula residents live in the Homer or Kenai nonrural areas. Federal subsistence management regulations do recognize other customary and traditional use of ungulates in portions of these units: moose by residents of Ninilchik, Nanwalek, Port Graham, and Seldovia in Units 15B, 15C, and portions of 15A. Subsistence use of moose by residents of Chenega Bay and Nanwalek is recognized in the Kings Bay drainage in Unit 7.

**Unit 8—Elk on Kodiak, Afognak, and other islands.** The Board made a positive customary and traditional use determination for elk for all residents of Unit 8. This determination includes residents of communities who hunt deer (also an introduced species) in areas where elk might be found, (Ouzinkie, Port Lions, and Kodiak). It also includes residents of communities whose residents do not usually hunt

deer or other species where elk are present, (Akiok, Karluk, Larsen Bay, and Old Harbor). Federal public lands where elk may be present is limited in this unit and consists mainly of northwest Afognak Island; access is difficult. Request for Reconsideration 97-05, submitted by the State of Alaska, challenged this Federal Subsistence Board decision; the Board upheld its positive determination.

**Unit 18—Muskox.** In this unit, introduced muskox occur on Nunivak and Nelson Islands. Most of Nelson Island and important areas of Nunivak Island are under State of Alaska jurisdiction. Locally supported management of these muskox herds was developed through public processes in the 1980s, prior to inception of Federal management. Under State regulations, this management provided for a local preference through issuance of some registration permits at locations in Unit 18, well before the hunting season was open and a drawing hunt for other permits. Forty-five drawing permits were issued in 2005. Local residents in Mekoryak and Nightmute benefit from guiding drawing hunt winners.

**Units 19 and 20—Bison.** Almost all bison and hunting in these units takes place on land under State of Alaska jurisdiction. Regulations recognize customary and traditional use of bison in Units 20A, 20B, 20C, 20E, and 20F. However, no huntable bison population exists in these subunits, and there is no Federal or State open season.

**Considerations concerning elk in Unit 3.** Almost all land in this unit is Federal public land. There are existing customary and traditional use determinations for deer and other species in Unit 3; this area is clearly used by rural residents for subsistence hunting and fishing. As described below, most of the elk taken in Unit 3 have been taken by rural residents from the proposed customary and traditional use communities.

Elk in Unit 3 were one of the last terrestrial mammalian introductions in Alaska. Caribou were also introduced in 1987 to the Nushagak Peninsula. This caribou introduction was a reintroduction, and the Board recognized customary and traditional use of this species on the peninsula. The short time that elk have been present in Unit 3 and hunted by residents of the communities proposed for customary and traditional use needs to be evaluated.

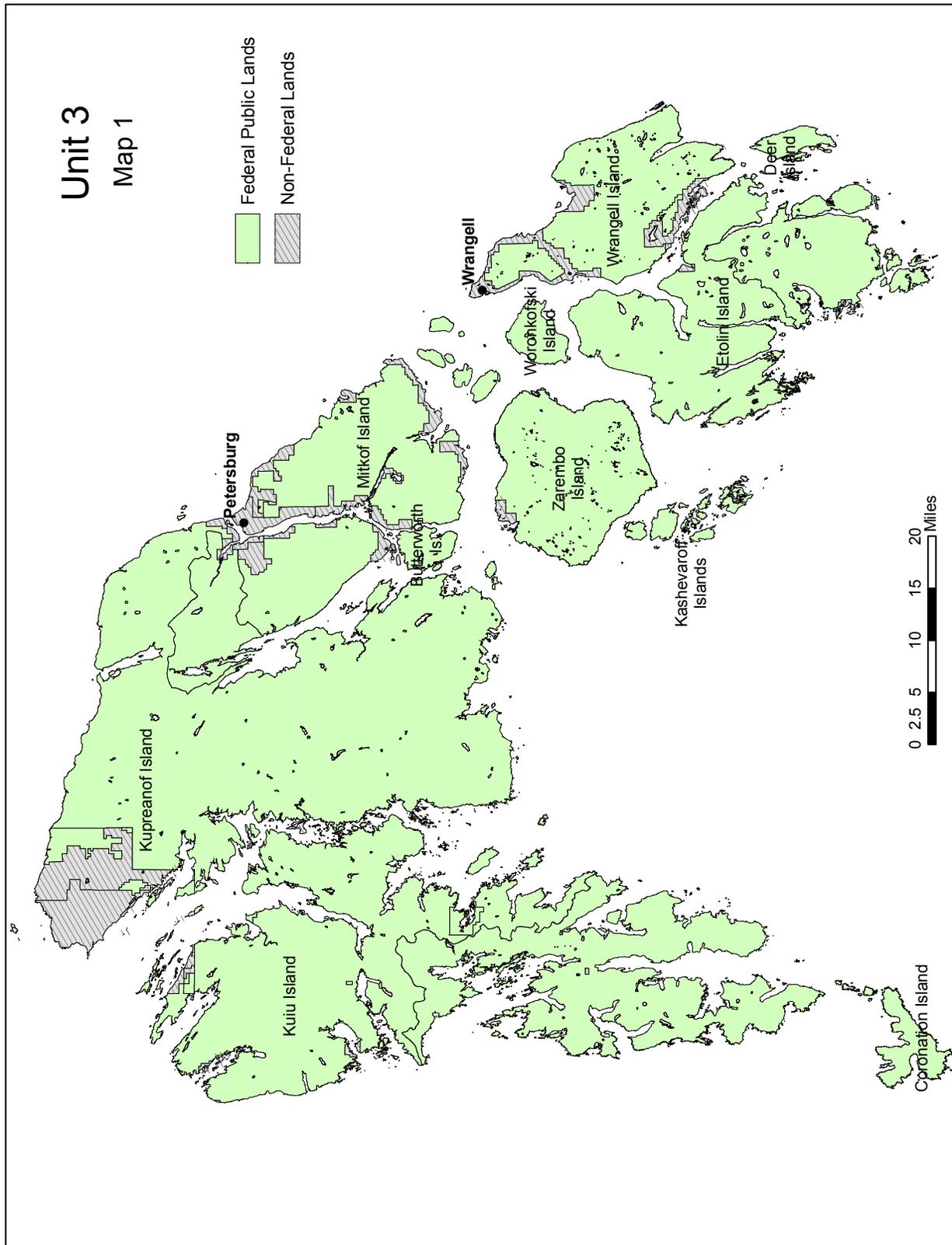
### **Extent of Federal Public**

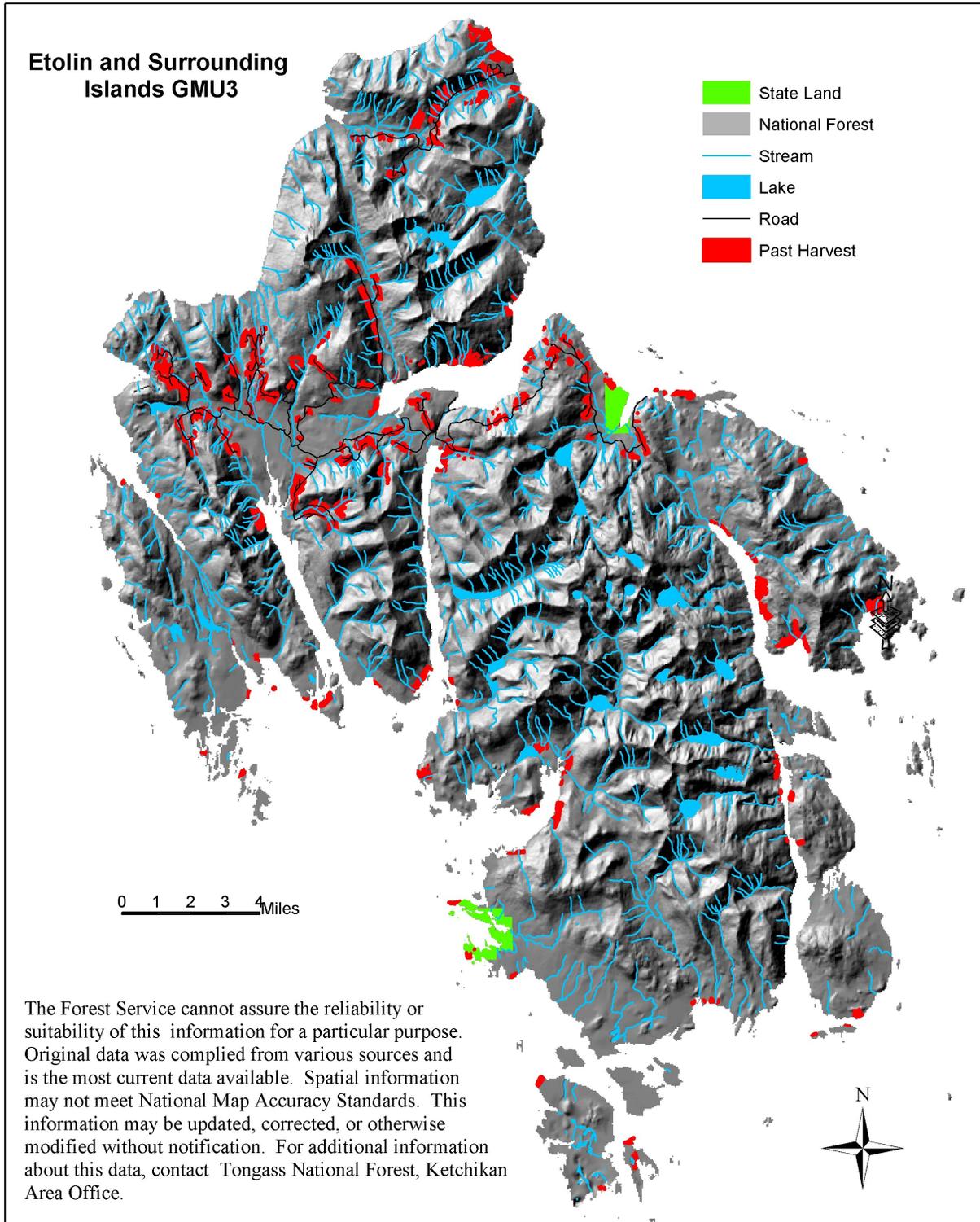
Federal public lands comprise approximately 93.6% of Unit 3 and consist of almost 100% USDA Forest Service (USDA FS) managed lands (**Map 1**). Bureau of Land Management (BLM) administers 15 acres within Unit 3. The State of Alaska administers 2.9% of the land in Unit 3; municipalities, Native Corporations and other private owners' holdings comprise approximately 3.4% of Unit 3 lands.

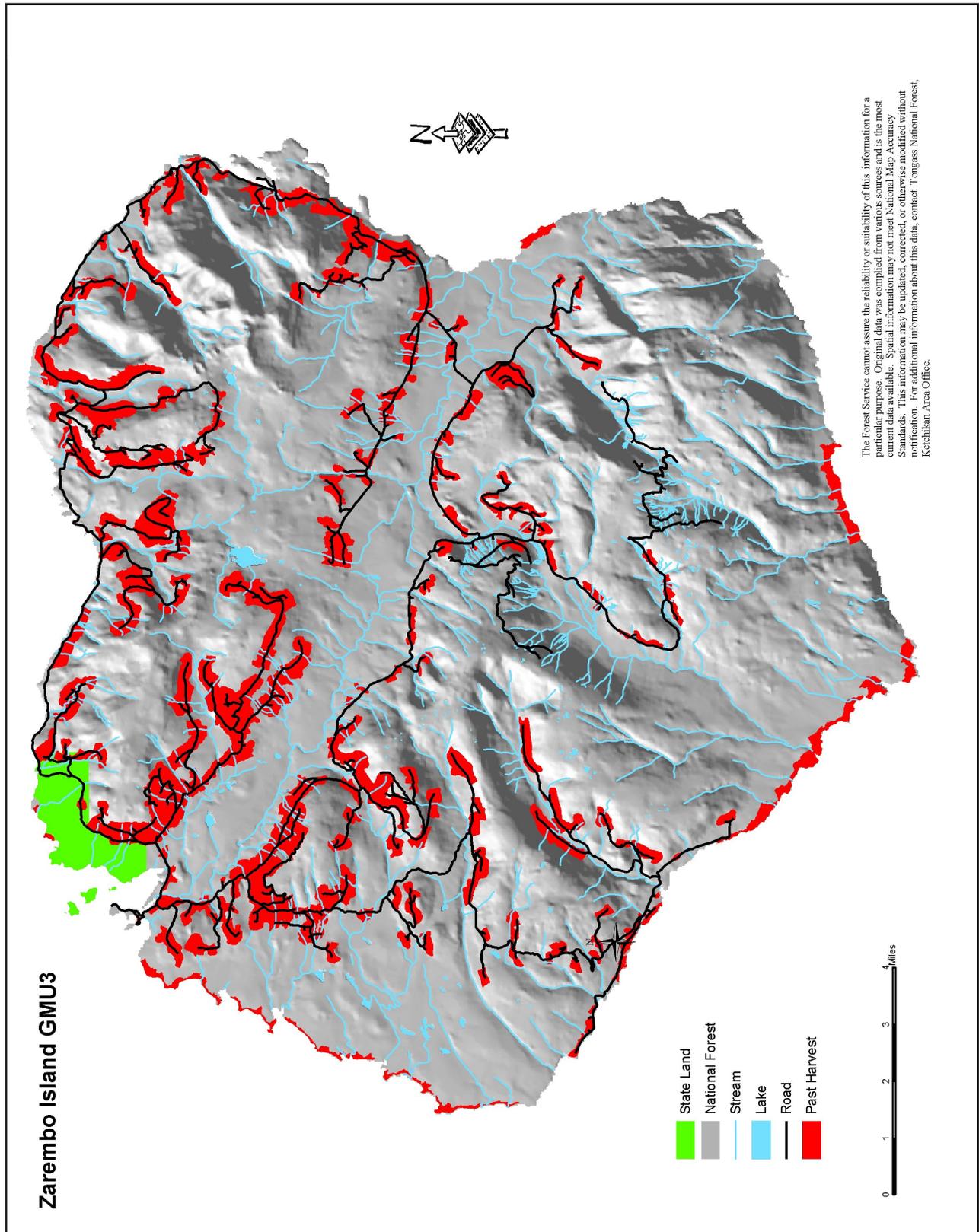
Land ownership in the State regulated permitted hunt area (Etolin Island **Map 2**, Zarembo Island **Map 3**) has even less State land and private ownership than the rest of Unit 3. USDA FS administers 98.5% of the land in the permit area, State of Alaska administers 1.5%, and private owners hold 0.001% of the lands on Etolin, Zarembo, and associated islands.

### **Regulatory History**

The Alaska Legislature passed a law in 1985 requiring the introduction of 50 elk to Etolin Island. Introductions began in 1987. By 1996, ADF&G estimated that the elk population had reached at least 250 animals and could sustain a hunt of 20 bulls (Lowell 2004). The Alaska Board of Game established the first hunt for elk by drawing permit in 1997, and authorized issuance of up to 30 permits for hunters to harvest 1 bull between Oct. 1-31 (Lowell 2002). That same year, the State Legislature passed House Bill 59, which required ADF&G to make available an additional four Unit 3 elk permits per year to







be donated for competitive auctions or raffles to benefit nonprofit corporations that promote fish and game management of hunted species based in Alaska (Lowell 2002). The Alaska Board of Game added a Sept. 15-30 archery hunt in 1999, and expanded that hunt to Sept. 1-30 in 2001 (Lowell 2002). The number of permits available in the drawing permit hunt has increased stepwise since 1997 (**Table 2**).

**Table 2.** Regulatory history of the Unit 3 elk hunt, Etolin and Zarembo Island hunt area.

Year	# Permits Allowed	# Permits Issued	Season	Bag Limit
1997	30 drawing 4 raffle	27 drawing 2 raffle	10/1 to 10/31	1 bull
1998	30 drawing 4 raffle	30 drawing 1 raffle	10/1 to 10/31	1 bull
1999	70 drawing 4 raffle	70 1 raffle	9/15 to 9/30	1 bull by bow and arrow only
			10/1 to 10/31	1 bull
2000	70 drawing 4 raffle	72 drawing 2 raffle	9/15 to 9/30	1 bull by bow and arrow only
			10/1 to 10/31	1 bull
2001	120 drawing 4 raffle	120 drawing 3 raffle	9/1 to 9/30	1 bull by bow and arrow only
			10/1 to 10/31	1 bull
2002	120 drawing 4 raffle	120 drawing 2 raffle	9/1 to 9/30	1 bull by bow and arrow only
			10/1 to 10/31	1 bull
2003	155 drawing 4 raffle	155 drawing 4 raffle	9/1 to 9/30	1 bull by bow and arrow only
			10/1 to 10/31	1 bull
2004	155 drawing 4 raffle	155 drawing 3 raffle	9/1 to 9/30	1 bull by bow and arrow only
			10/1 to 10/31	1 bull
2005	175 drawing 4 raffle	175 0 raffle	9/1 to 9/30	1 bull by bow and arrow only
			10/1 to 10/31	1 bull
2005		133	11/15 to 11/30	1 bull (by registration permit)

\*Note that there are minor differences between the permit totals in this table and in other presentations of permit data presenting residence data; the residence of a small number of permit recipients is unknown. Lowell 2005.

The drawing permit area boundary was defined by the Alaska Board of Game in Oct. 2000. The permit area includes Zarembo, Etolin, and several of the surrounding small islands. In order to limit the dispersal of elk and the establishment of elk populations on new islands in southeast Alaska, the Alaska Board of Game also authorized an either-sex hunt for elk in Units 1, 2, and the remainder of Unit 3 outside of the drawing hunt area from Aug. 1–Dec. 31 (Lowell 2002). A similar season was previously authorized by the Board in 1993, but was reconsidered and reversed during that same Board meeting (Lowell 2002).

Current regulations in 2005 include a drawing permit hunt offering 175 permits, with 25 drawing permits authorized for an archery only season from Sept. 1-30, and 150 drawing permits authorized for Oct. 1-31. Permits allow the taking of one bull-only in the drawing permit area. The October hunt is split into two periods: Oct. 1-15 and Oct. 16-31, with 75 permits available for each period. A registration permit hunt authorizing harvest of one bull per permit was initiated for Nov. 15-30 in 2005.

The Alaska Board of Game made a negative customary and traditional use determination for elk at their fall 1996 meeting (Lowell 2002). The present harvest guideline for elk in the permit area is 40 elk, with no more than 30 elk to be taken from Etolin Island and no more than 10 to be taken from Zarembo Island.

## Current Events Involving Elk

The ADF&G issued an emergency order on Nov. 4, 2005 closing the registration permit hunt for elk on Zarembo Island, scheduled to begin on Nov. 15. As of Friday, Nov. 4, 2005, reported harvest of elk in that area had reached six bulls. ADF&G felt that keeping the hunt open with such a small allowable harvest ran the risk of exceeding the harvest guideline of 10 elk; a higher harvest level could potentially be detrimental to the long-term stability of the population.

## Biological Background

### *Introduction*

Elk (*Cervus elaphus*) are not endemic to Alaska, but were first successfully introduced onto Afognak Island near Kodiak in 1929. There were several unsuccessful attempts to introduce elk in southeast Alaska between 1925 and 1962 on Gravina, Kruzof, and Revillagigedo Islands, but these attempts failed to establish local populations of elk in the region (O’Gara and Dundas 2002). After the Alaska State Legislature passed a bill in 1985 requiring introduction of elk, 33 Roosevelt elk (*C. e. roosevelti*) captured in the Jewell Meadows Wildlife Management Area, and 17 Rocky Mountain elk (*C. e. nelsoni*) captured in the Elkhorn Wildlife Management Area, were translocated from their Oregon sites to separate locations on Etolin Island in 1987. About 2/3 of the translocated elk died within 18 months of their release (Lowell 2002). This introduction was strongly supported and partially funded by the Ketchikan Sports and Wildlife Club.

### *Distribution*

The surviving elk have reproduced and dispersed from their original locations and established growing populations on Etolin and Zarembo Islands. Based on telemetry data from the years immediately following the introduction, most Roosevelt elk appeared to have remained within 10 miles of their release site on Etolin Island; while Rocky Mountain elk appear to have dispersed widely (Lowell 2002). Elk are highly mobile: young elk, especially bulls, disperse away from their mother’s herd; populations have been known to shift their ranges (Raedeke et al. 2002); and populations may migrate annually up to 90+ miles (Irwin 2002). Elk observations have been reported from as far north as Farragut Bay north of Petersburg, to as far south as Spacious Bay on the Cleveland Peninsula (Lowell 2005, pers comm.). Observation locations include Mitkof, Wrangell, Prince of Wales, Deer, Bushy, Shrubby, and Kupreanof Islands, and various locations on the mainland. While many of these observations were from reliable observers, few of these observations have been substantiated. The furthest substantiated observation to date was of a radiotagged elk found dead on Farm Island just north of Wrangell.

### *Population*

Accurate population estimates are not available and are difficult to obtain due to sightability problems because of rough terrain, dense vegetation, and elusive elk behavior. Dave Person (ADF&G) developed a model to predict elk population in southeast Alaska that used demographic information for elk in other areas to provide preliminary parameters, and incorporated a simple logistic population growth model that includes effects from harvest, but not predation that is known to occur. This model estimated that a reasonable upper limit of elk populations on Etolin and Zarembo Islands that may have been present in 2000, was approximately 450 animals (Elk Technical Committee 2000). However, this estimate was thought to be high at the time, since the model used to generate it did not include population decreases due to predation, dispersal, competition with deer, and other factors (Elk Technical Committee 2000). However, the estimate matched reasonably well with ADF&G’s 2000 post-parturition model population

estimate for Etolin Island of approximately 350 elk. Based on very limited flight data and pellet count transects, a current estimate of elk population is approximately 450 animals, with more than three quarters of elk on Etolin, and the remainder on Zarembo (Lowell 2005, pers. comm.). Numbers of elk on islands outside of Etolin and Zarembo are thought to be low (Lowell 2004). Rates of population increase for elk have been estimated between 0.18 and 0.37 (Raedeke et al. 2002), but actual rates are highly variable and dependent on factors such as mortality rate, emigration, and rate of reproduction, which are dependent on a host of other environmental factors. Future population growth is expected to continue, and may increase exponentially in the near future should elk successfully colonize additional habitat (Elk Technical Committee 2000).

Person (Elk Technical Committee 2000) also developed a model to predict the maximum number of elk that could be supported by the habitats available on Etolin and Zarembo Islands (carrying capacity). This model was based on the Habitat Suitability Index model developed for deer in the area (Suring et al. 1992), with adjustments for the differences in forage utilization and metabolism between elk and deer (Elk Technical Committee 2000). Assumptions of the model included 1) all available habitats would be occupied by elk, and 2) there would be no competition with deer for resources. This modeling exercise provided a preliminary estimate of carrying capacity on Etolin Island of 1300 elk (Elk Technical Committee 2000).

In summary, the estimated current population of elk in the Etolin and Zarembo islands area is approximately 450, with about 350 elk on Etolin Island and about 100 elk on Zarembo Island; however, given the lack of recent survey, forage, or telemetry data, biologists have a low level of confidence in this estimate. One modeling approach applied indicated an upper limit to the size of the growing, post introduction population, of 450 elk in year 2000; a second modeling approach estimated a 1,300 elk habitat carrying capacity on the two islands. For the purpose of this analysis, we consider that the current elk population is below carrying capacity.

### *Management Concerns*

In the 2005 Forest Service *Assessment of Invasive Species in Alaska and Its National Forests* (Schrader and Hennon), elk were found to be an invasive terrestrial species that could cause substantial ecological harm in southeast Alaska. The main management concern consistently addressed prior to and ever since the elk introduction is their potential impact on endemic Sitka black-tailed deer (*Odocoileus hemionus sitkensis*) populations (ADF&G 1985, ADF&G 1999, ADF&G 2004). Three primary ways have been identified through which elk could negatively impact local deer populations: 1) competition with deer for food, 2) alteration of predator-prey dynamics, and 3) introduction of exotic diseases and parasites to endemic wildlife.

### *Competition with Deer*

Direct competition in the form of physical displacement is a possibility, as both elk and deer in southeast Alaska appear to prefer lower elevation coastal areas during the winter and move to higher elevations in summer (Lowell 2004). Indirect competition may also occur in the forms of competition for food and alteration of predator-prey dynamics.

Significant potential exists for interspecific competition between deer and elk for food resources due to high dietary overlap. Kirchoff and Larson (1998) found 64% overlap in winter diets of elk and deer on Etolin Island. Red huckleberry (*Vaccinium parvifolium*) in particular was an important component of both species' diets (13% for both); browsing on red huckleberry in the study area was extremely heavy and severe enough to result in plant death in some instances (Kirchoff and Larsen 1998).

Lack of interspecific partitioning of habitats used by both species may contribute to competition for food. Elsewhere where these two species cohabit, no substantial negative social interaction has been documented that might prevent habitat overlap (Miller 2002).

Where elk and deer compete for food resources, deer primarily experience adverse population effects (Kirchhoff and Larson 1998). Factors contributing to elk's competitive advantage include that elk can exploit a wider variety of foods (Miller 2002), can digest coarser vegetation, can reach higher to forage (Kirchhoff and Larson 1998), and are more mobile under heavy snow conditions than deer (Miller 2002).

Currently, scant evidence is available to assess impact of expanding introduced elk populations on deer in southeast Alaska. Winter range transects conducted in 1991, 1998, and 1999 show an increasing trend in elk use as measured by number of fecal pellets per plot. Pellet density doubled from 1991–98, and increased by a third again by 1999. Deer use in the same area decreased by half from 1991–98, and by more than a third again in 1999 (Crain 2000). Vegetation surveys indicate a reduction in *Vaccinium* shrubs by heavy browsing; *Vaccinium* species are important winter forage for both species (ADF&G 1999). Person (Elk Technical Committee 2000) estimated that elk would have a five times greater impact on habitat than deer. However, the apparent site fidelity to the same areas on Etolin Island in the first 14 years after release suggests these areas have not sustained enough damage to forage habitat to cause the elk to go elsewhere (Elk Technical Committee Notes 2000). There is no evidence from deer harvest records to support decreases in deer population due to competition with elk. However, very little deer harvest customarily occurs along southern Etolin Island where the most elk are concentrated, and number of deer harvested does not directly reflect the number of deer available for harvest.

The elk population on Etolin and Zarembo Islands is currently well below carrying capacity. Should the elk population approach carrying capacity on Etolin, or should there be one or more heavy snowfall years, competition with deer could become serious (Lowell 2005, pers comm.). As the number and distribution of elk increases, reductions in deer numbers are likely (Lowell 2004).

#### *Predator Prey Interactions*

The availability of elk as an alternate source of prey for predators in southeast Alaska may influence predator-prey dynamics in ways that could negatively impact deer populations (Lowell 2004). Predation by wolves has been identified as a source of mortality for elk in southeast Alaska (Lowell 2004). Introduction of a new prey species may lead to increases in populations of predators, which could result in suppression of deer populations (ADF&G 1985).

#### *Disease*

ADF&G recognized the potential for parasite and disease transmission from the introduced elk to endemic wildlife as a source of concern (ADF&G 1999). Elk translocated to southeast Alaska were vaccinated for a variety of diseases and quarantined prior to their release on Etolin Island in 1987 (Lowell 2002). ADF&G has provided elk hunters with blood serum sampling kits since 1999 to voluntarily collect samples from the elk they harvest. Hunters have provided 26 samples to date, of which 17 have been submitted for laboratory analysis. None of these have tested positive for exposure to any of the 10 different disease agents for which analyses were performed (Lowell 2002, 2005 pers com).

### *ADF&G Management Recommendations*

Management recommendations outlined in the Draft Southeast Alaska Elk Management Plan (ADF&G 1999) were to:

- 1) Manage for hunting opportunity on Etolin and Zarembo islands where populations are already established.
- 2) To maintain population below carrying capacity on Etolin and Zarembo islands to limit dispersal to other islands and the mainland.
- 3) Minimize elk numbers in the remainder of southeast Alaska. (Lowell 2002)

A final Southeast Elk Management Plan has not been completed.

### *Information Needs*

Further information needs for elk in southeast Alaska identified by the Elk Technical Committee in 2000 include the following:

- Total number and/or density of animals in southeast Alaska or key locations
- Population trends
- Recruitment rates, and mortality sources and rates
- More information on potential competition with deer, including species-specific fitness and behavioral interactions (i.e., displacement)
- Habitat use and preference
- Dispersal and movements
- Effects on habitat
- Effects of elk on overall predator-prey dynamics.

### *Summary*

In summary, the introduction of elk will have unknown and difficult to predict consequences on the existing habitats and wildlife in southeast Alaska. Currently, the population is growing and the elk are expanding their range beyond their initial introduction sites on Etolin Island. Managers and biologists are concerned that elk may negatively affect deer populations in locales where they become established through direct and indirect competition, or that they may spread diseases to indigenous wildlife. Currently, there are no ongoing studies that will provide information on the impact of elk to the habitats and wildlife of southeast Alaska.

### **Hunting and Harvest History**

The Alaska Board of Game authorized elk hunting in Unit 3 beginning in the 1997 hunting season, ten years after elk were introduced into this unit. Hunting has taken place under drawing permit hunts, with a registration permit hunt initiated in 2005. **Tables 3, 4 and 5** present compilations of drawing and registration permit data available for elk hunting in Unit 3 from 1997–2005. Drawing permit data are shown in **Table 3**. The 2005 registration permit data are shown in **Table 4**. Summary drawing permit data are shown in **Table 5**. These tables show resident community of applicant, number of permits issued, number of permits actually hunted, and number of elk taken.

A total of 107 elk are known to have been taken in the drawing and raffle permit hunts over the 9 years that hunting has taken place, with an additional four cows reported to have been taken on Shrubby

**Table 3.** Elk Drawing Hunt Permit Data, 1997 through 2005.

Res.Comm	Data	Year									Grand Total
		1997	1998	1999	2000	2001	2002	2003	2004	2005	
AMBLER	Sum of Applicants			1				1			2
	Sum of Permits			0				0			0
	Sum of Hunted			0				0			0
	Sum of Successful			0				0			0
ANAKTUVUK PASS	Sum of Applicants						1	1			2
	Sum of Permits						0	0			0
	Sum of Hunted						0	0			0
	Sum of Successful						0	0			0
ANCHOR POINT	Sum of Applicants						2				2
	Sum of Permits						0				0
	Sum of Hunted						0				0
	Sum of Successful						0				0
ANCHORAGE	Sum of Applicants	36	60	66	77	55	45	46	32	39	456
	Sum of Permits	1	2	3	7	6	2	7	8	7	43
	Sum of Hunted	1	2	2	5	0	1	4	2	2	19
	Sum of Successful	0	0	0	0	0	0	0	1	0	1
ANGOON	Sum of Applicants			5	2		1	1			9
	Sum of Permits			0	0		0	0			0
	Sum of Hunted			0	0		0	0			0
	Sum of Successful			0	0		0	0			0
AUKE BAY	Sum of Applicants		17	19	26	15	14	6	8	11	116
	Sum of Permits		0	1	0	0	3	0	0	5	9
	Sum of Hunted		0	1	0	0	1	0	0	2	4
	Sum of Successful		0	0	0	0	0	0	0	0	0
BARROW	Sum of Applicants					1					1
	Sum of Permits					0					0
	Sum of Hunted					0					0
	Sum of Successful					0					0
BETHEL	Sum of Applicants	1									1
	Sum of Permits	0									0
	Sum of Hunted	0									0
	Sum of Successful	0									0
BIG LAKE	Sum of Applicants				1				1		2
	Sum of Permits				0				0		0
	Sum of Hunted				0				0		0
	Sum of Successful				0				0		0
BUCKLAND	Sum of Applicants							1			1
	Sum of Permits							0			0
	Sum of Hunted							0			0
	Sum of Successful							0			0
CHUGIAK	Sum of Applicants	4	3	6	6	4		4	1	4	32
	Sum of Permits	0	0	1	0	0		1	0	0	2
	Sum of Hunted	0	0	1	0	0		0	0	0	1
	Sum of Successful	0	0	0	0	0		0	0	0	0
CLEAR	Sum of Applicants						1				1
	Sum of Permits						0				0
	Sum of Hunted						0				0
	Sum of Successful						0				0
COFFMAN COVE	Sum of Applicants	22	33	38	53	34	35	32	26	42	315
	Sum of Permits	1	0	0	2	3	4	6	1	3	20
	Sum of Hunted	1	0	0	2	2	3	5	1	0	14
	Sum of Successful	1	0	0	0	1	0	0	0	0	2
COPPER CENTER	Sum of Applicants	1				1	1		1	1	5
	Sum of Permits	0				0	0		1	0	1
	Sum of Hunted	0				0	0		0	0	0
	Sum of Successful	0				0	0		0	0	0
CORDOVA	Sum of Applicants	8	8	7	5	7	2	1	1	5	44
	Sum of Permits	0	0	1	0	0	0	0	1	0	2
	Sum of Hunted	0	0	0	0	0	0	0	1	0	1
	Sum of Successful	0	0	0	0	0	0	0	1	0	1
CRAIG	Sum of Applicants	37	64	101	106	111	70	68	59	71	687
	Sum of Permits	0	1	9	5	10	6	8	15	8	62
	Sum of Hunted	0	0	9	5	8	6	5	11	3	47
	Sum of Successful	0	0	2	2	4	0	0	3	1	12

**Table 3.** Elk Drawing Hunt Permit Data, 1997 through 2005.

Res.Comm	Data	Year									Grand Total
		1997	1998	1999	2000	2001	2002	2003	2004	2005	
DELTA JUNCTION	Sum of Applicants	3	2	1	1	3	6	4	4	8	32
	Sum of Permits	0	0	0	0	0	1	1	2	0	4
	Sum of Hunted	0	0	0	0	0	0	0	1	0	1
	Sum of Successful	0	0	0	0	0	0	0	0	0	0
DILLINGHAM	Sum of Applicants			1	1		1				3
	Sum of Permits			0	0		1				1
	Sum of Hunted			0	0		1				1
	Sum of Successful			0	0		0				0
DOUGLAS	Sum of Applicants		20	18	26	16	12	12	4	13	121
	Sum of Permits		0	0	0	2	1	0	2	1	6
	Sum of Hunted		0	0	0	0	0	0	0	0	0
	Sum of Successful		0	0	0	0	0	0	0	0	0
DUTCH HARBOR	Sum of Applicants	1			1	2					4
	Sum of Permits	0			0	0					0
	Sum of Hunted	0			0	0					0
	Sum of Successful	0			0	0					0
EAGLE RIVER	Sum of Applicants	2	2	9	15	9	11	5	6	2	61
	Sum of Permits	0	0	0	0	1	0	0	0	0	1
	Sum of Hunted	0	0	0	0	1	0	0	0	0	1
	Sum of Successful	0	0	0	0	0	0	0	0	0	0
EDNA BAY	Sum of Applicants		1	8	10		3	4	5	4	35
	Sum of Permits		0	0	0		0	0	2	1	3
	Sum of Hunted		0	0	0		0	0	1	1	2
	Sum of Successful		0	0	0		0	0	0	0	0
EIELSON AFB	Sum of Applicants	1				1				1	3
	Sum of Permits	0				0				0	0
	Sum of Hunted	0				0				0	0
	Sum of Successful	0				0				0	0
ELFIN COVE	Sum of Applicants				3	5	1	2			11
	Sum of Permits				0	0	0	0			0
	Sum of Hunted				0	0	0	0			0
	Sum of Successful				0	0	0	0			0
ELMENDORF AFB	Sum of Applicants	1				1	2				4
	Sum of Permits	0				0	0				0
	Sum of Hunted	0				0	0				0
	Sum of Successful	0				0	0				0
ESTER	Sum of Applicants	1	1	1		2					5
	Sum of Permits	0	0	1		0					1
	Sum of Hunted	0	0	0		0					0
	Sum of Successful	0	0	0		0					0
FAIRBANKS	Sum of Applicants	36	30	34	49	33	32	34	18	25	291
	Sum of Permits	0	1	0	2	2	2	7	4	6	24
	Sum of Hunted	0	1	0	2	1	1	3	0	1	9
	Sum of Successful	0	0	0	0	0	0	0	0	0	0
FORT RICHARDSON	Sum of Applicants		1	2		1	2	1			7
	Sum of Permits		0	0		0	0	0			0
	Sum of Hunted		0	0		0	0	0			0
	Sum of Successful		0	0		0	0	0			0
FORT WAINWRIGHT	Sum of Applicants	3	1		1			1			6
	Sum of Permits	0	0		0			1			1
	Sum of Hunted	0	0		0			1			1
	Sum of Successful	0	0		0			0			0
GAKONA	Sum of Applicants		1			1	2				4
	Sum of Permits		0			0	1				1
	Sum of Hunted		0			0	1				1
	Sum of Successful		0			0	0				0
GIRDWOOD	Sum of Applicants		5	4	5	1		3			18
	Sum of Permits		0	0	0	0		0			0
	Sum of Hunted		0	0	0	0		0			0
	Sum of Successful		0	0	0	0		0			0
GLENNALLEN	Sum of Applicants	1			1	1		2	2	8	15
	Sum of Permits	0			0	0		0	0	1	1
	Sum of Hunted	0			0	0		0	0	0	0
	Sum of Successful	0			0	0		0	0	0	0

Table 3. Elk Drawing Hunt Permit Data, 1997 through 2005.

Res.Comm	Data	Year									Grand Total
		1997	1998	1999	2000	2001	2002	2003	2004	2005	
GUSTAVUS	Sum of Applicants			4		1	2	2	1	1	11
	Sum of Permits			0		0	0	0	0	0	0
	Sum of Hunted			0		0	0	0	0	0	0
	Sum of Successful			0		0	0	0	0	0	0
HAINES	Sum of Applicants	21	35	44	36	32	20	22	14	19	243
	Sum of Permits	0	1	2	2	1	0	3	2	2	13
	Sum of Hunted	0	1	2	1	0	0	2	1	0	7
	Sum of Successful	0	1	0	0	0	0	0	0	0	1
HEALY	Sum of Applicants	1	1	1	1	3	2	1			10
	Sum of Permits	0	0	0	0	0	0	0			0
	Sum of Hunted	0	0	0	0	0	0	0			0
	Sum of Successful	0	0	0	0	0	0	0			0
HOLLIS	Sum of Applicants		3		1		2	1			7
	Sum of Permits		0		0		0	0			0
	Sum of Hunted		0		0		0	0			0
	Sum of Successful		0		0		0	0			0
HOMER	Sum of Applicants	1		2	1	1		2		3	10
	Sum of Permits	0		0	0	0		0		0	0
	Sum of Hunted	0		0	0	0		0		0	0
	Sum of Successful	0		0	0	0		0		0	0
HOONAH	Sum of Applicants	16	7	4	3	3	6	3	4	7	53
	Sum of Permits	0	2	0	1	0	0	0	0	2	5
	Sum of Hunted	0	2	0	1	0	0	0	0	0	3
	Sum of Successful	0	0	0	0	0	0	0	0	0	0
HOUSTON	Sum of Applicants	1			1						2
	Sum of Permits	0			0						0
	Sum of Hunted	0			0						0
	Sum of Successful	0			0						0
HYDABURG	Sum of Applicants		1	3		7	1	5	1	20	38
	Sum of Permits		1	0		1	1	2	0	5	10
	Sum of Hunted		1	0		1	1	2	0	5	10
	Sum of Successful		0	0		0	0	2	0	5	7
HYDER	Sum of Applicants		2			2		2			6
	Sum of Permits		0			0		0			0
	Sum of Hunted		0			0		0			0
	Sum of Successful		0			0		0			0
ILIAMNA	Sum of Applicants		1								1
	Sum of Permits		0								0
	Sum of Hunted		0								0
	Sum of Successful		0								0
JUNEAU	Sum of Applicants	219	170	241	216	167	130	90	74	95	1402
	Sum of Permits	1	5	7	9	22	18	13	15	9	99
	Sum of Hunted	1	2	3	7	10	7	7	8	1	46
	Sum of Successful	0	0	0	0	3	0	0	2	0	5
KAKE	Sum of Applicants	4	7	6	8	3	4	5		5	42
	Sum of Permits	0	0	1	0	0	1	0		1	3
	Sum of Hunted	0	0	0	0	0	1	0		0	1
	Sum of Successful	0	0	0	0	0	0	0		0	0
KASAAN	Sum of Applicants			3	2		2			5	12
	Sum of Permits			0	0		0			1	1
	Sum of Hunted			0	0		0			0	0
	Sum of Successful			0	0		0			0	0
KASILOF	Sum of Applicants	1	2	1	2	1	3		1	1	12
	Sum of Permits	0	0	0	0	0	0		0	1	1
	Sum of Hunted	0	0	0	0	0	0		0	1	1
	Sum of Successful	0	0	0	0	0	0		0	0	0
KENAI	Sum of Applicants	6	4	12	3	2	2	2		3	34
	Sum of Permits	0	0	0	0	0	0	1		0	1
	Sum of Hunted	0	0	0	0	0	0	1		0	1
	Sum of Successful	0	0	0	0	0	0	0		0	0
KETCHIKAN	Sum of Applicants	221	229	382	348	320	186	179	117	165	2147
	Sum of Permits	7	6	12	7	22	15	22	18	23	132
	Sum of Hunted	7	3	10	6	14	13	14	12	10	89
	Sum of Successful	0	3	3	1	3	1	1	0	1	13

**Table 3.** Elk Drawing Hunt Permit Data, 1997 through 2005.

Res.Comm	Data	Year									Grand Total
		1997	1998	1999	2000	2001	2002	2003	2004	2005	
KING SALMON	Sum of Applicants	1		1					1	2	5
	Sum of Permits	0		0					1	0	1
	Sum of Hunted	0		0					1	0	1
	Sum of Successful	0		0					1	0	1
KLAWOCK	Sum of Applicants	5	7	22	21	22	14	6	9	11	117
	Sum of Permits	0	0	1	0	2	2	0	2	1	8
	Sum of Hunted	0	0	1	0	2	0	0	2	1	6
	Sum of Successful	0	0	1	0	0	0	0	1	0	2
KODIAK	Sum of Applicants	2	1	1	6	4	5	1	2	4	26
	Sum of Permits	0	0	0	0	0	2	0	1	0	3
	Sum of Hunted	0	0	0	0	0	0	0	0	0	0
	Sum of Successful	0	0	0	0	0	0	0	0	0	0
MCGRATH	Sum of Applicants				1		1				2
	Sum of Permits				0		0				0
	Sum of Hunted				0		0				0
	Sum of Successful				0		0				0
METLAKATLA	Sum of Applicants	4	9	13	6	9	8	7	9	18	83
	Sum of Permits	0	0	1	0	0	0	0	1	2	4
	Sum of Hunted	0	0	0	0	0	0	0	1	0	1
	Sum of Successful	0	0	0	0	0	0	0	0	0	0
MEYERS CHUCK	Sum of Applicants	9	11	10	9	6	7	3	2	2	59
	Sum of Permits	0	0	0	1	0	3	1	0	0	5
	Sum of Hunted	0	0	0	1	0	3	1	0	0	5
	Sum of Successful	0	0	0	0	0	1	0	0	0	1
MILL CREEK	Sum of Applicants							2			2
	Sum of Permits							0			0
	Sum of Hunted							0			0
	Sum of Successful							0			0
MOOSE PASS	Sum of Applicants	1	1	1	1	1	1				6
	Sum of Permits	0	0	0	0	0	0				0
	Sum of Hunted	0	0	0	0	0	0				0
	Sum of Successful	0	0	0	0	0	0				0
NAPASKIAK	Sum of Applicants						1				1
	Sum of Permits						0				0
	Sum of Hunted						0				0
	Sum of Successful						0				0
NAUKATI	Sum of Applicants			1	1		1	3		2	8
	Sum of Permits			0	0		0	0		0	0
	Sum of Hunted			0	0		0	0		0	0
	Sum of Successful			0	0		0	0		0	0
NENANA	Sum of Applicants			1			1				2
	Sum of Permits			0			0				0
	Sum of Hunted			0			0				0
	Sum of Successful			0			0				0
NIKISKI	Sum of Applicants	1						1		1	3
	Sum of Permits	0						0		0	0
	Sum of Hunted	0						0		0	0
	Sum of Successful	0						0		0	0
NINILCHIK	Sum of Applicants				1		2	1			4
	Sum of Permits				0		0	0			0
	Sum of Hunted				0		0	0			0
	Sum of Successful				0		0	0			0
NOME	Sum of Applicants						1				1
	Sum of Permits						0				0
	Sum of Hunted						0				0
	Sum of Successful						0				0
Non-Resident	Sum of Applicants	199	11	24	29	31	22	25	20	13	374
	Sum of Permits	1	0	0	0	1	2	2	1	3	10
	Sum of Hunted	1	0	0	0	1	1	0	0	2	5
	Sum of Successful	0	0	0	0	0	0	0	0	0	0
NORTH POLE	Sum of Applicants	7	5	6	7	10	12	12	7	3	69
	Sum of Permits	0	1	0	0	0	0	0	3	0	4
	Sum of Hunted	0	1	0	0	0	0	0	1	0	2
	Sum of Successful	0	1	0	0	0	0	0	0	0	1

Table 3. Elk Drawing Hunt Permit Data, 1997 through 2005.

Res.Comm	Data	Year										Grand Total
		1997	1998	1999	2000	2001	2002	2003	2004	2005		
PALMER	Sum of Applicants	8	10	15	21	12	17	23	14	27	147	
	Sum of Permits	1	1	0	2	1	1	2	1	1	10	
	Sum of Hunted	0	1	0	0	1	1	1	1	0	5	
	Sum of Successful	0	1	0	0	0	0	0	0	0	1	
PELICAN	Sum of Applicants			4	1	1		1	1		8	
	Sum of Permits			0	0	0		0	0		0	
	Sum of Hunted			0	0	0		0	0		0	
	Sum of Successful			0	0	0		0	0		0	
PETERSBURG	Sum of Applicants	183	203	238	249	206	227	229	145	289	1969	
	Sum of Permits	3	1	10	8	19	19	26	27	39	152	
	Sum of Hunted	3	1	8	7	14	18	15	14	16	96	
	Sum of Successful	1	0	5	1	4	4	0	1	4	20	
POINT BAKER	Sum of Applicants	3	5	4	9	5	3	7	6	2	44	
	Sum of Permits	0	0	0	0	0	1	1	0	0	2	
	Sum of Hunted	0	0	0	0	0	0	0	0	0	0	
	Sum of Successful	0	0	0	0	0	0	0	0	0	0	
PORT ALEXANDER	Sum of Applicants		2	3					1		6	
	Sum of Permits		0	0					0		0	
	Sum of Hunted		0	0					0		0	
	Sum of Successful		0	0					0		0	
SALCHA	Sum of Applicants			2						1	3	
	Sum of Permits			0						0	0	
	Sum of Hunted			0						0	0	
	Sum of Successful			0						0	0	
SELDOVIA	Sum of Applicants	1									1	
	Sum of Permits	0									0	
	Sum of Hunted	0									0	
	Sum of Successful	0									0	
SEWARD	Sum of Applicants	2	1	1	3	4	2	2	1	2	18	
	Sum of Permits	0	0	0	0	0	1	0	0	1	2	
	Sum of Hunted	0	0	0	0	0	1	0	0	0	1	
	Sum of Successful	0	0	0	0	0	0	0	0	0	0	
SITKA	Sum of Applicants	36	41	77	102	75	53	54	42	47	527	
	Sum of Permits	0	1	2	3	4	5	3	7	5	30	
	Sum of Hunted	0	0	1	3	0	4	2	6	0	16	
	Sum of Successful	0	0	0	0	0	0	0	0	0	0	
SKAGWAY	Sum of Applicants	6	2	7	4	2	1	1	3	2	28	
	Sum of Permits	0	0	0	0	0	0	0	0	0	0	
	Sum of Hunted	0	0	0	0	0	0	0	0	0	0	
	Sum of Successful	0	0	0	0	0	0	0	0	0	0	
SOLDOTNA	Sum of Applicants	3	5	4	4	3	4	1	5	4	33	
	Sum of Permits	0	0	0	0	0	0	0	2	2	4	
	Sum of Hunted	0	0	0	0	0	0	0	0	0	0	
	Sum of Successful	0	0	0	0	0	0	0	0	0	0	
STERLING	Sum of Applicants		2	3	5	3	2	4	2		21	
	Sum of Permits		0	0	0	0	0	0	0		0	
	Sum of Hunted		0	0	0	0	0	0	0		0	
	Sum of Successful		0	0	0	0	0	0	0		0	
SUTTON	Sum of Applicants					1					1	
	Sum of Permits					0					0	
	Sum of Hunted					0					0	
	Sum of Successful					0					0	
TALKEETNA	Sum of Applicants		1	1	2		1				5	
	Sum of Permits		0	0	0		0				0	
	Sum of Hunted		0	0	0		0				0	
	Sum of Successful		0	0	0		0				0	
TENAKEE SPRINGS	Sum of Applicants			1	5	1					7	
	Sum of Permits			0	0	0					0	
	Sum of Hunted			0	0	0					0	
	Sum of Successful			0	0	0					0	
THORNE BAY	Sum of Applicants	35	88	114	99	90	79	59	41	60	665	
	Sum of Permits	4	2	9	8	4	10	8	9	9	63	
	Sum of Hunted	3	0	8	7	1	8	7	8	4	46	
	Sum of Successful	3	0	2	1	1	2	1	0	0	10	

**Table 3.** Elk Drawing Hunt Permit Data, 1997 through 2005.

Res.Comm	Data	Year									Grand Total
		1997	1998	1999	2000	2001	2002	2003	2004	2005	
TOGIAK	Sum of Applicants						1				1
	Sum of Permits						0				0
	Sum of Hunted						0				0
	Sum of Successful						0				0
TOK	Sum of Applicants		1	3	1	4	3	2	2	2	18
	Sum of Permits		0	0	1	0	0	0	1	0	2
	Sum of Hunted		0	0	0	0	0	0	1	0	1
	Sum of Successful		0	0	0	0	0	0	0	0	0
TRAPPER CREEK	Sum of Applicants			1							1
	Sum of Permits			0							0
	Sum of Hunted			0							0
	Sum of Successful			0							0
TWO RIVERS	Sum of Applicants	1	1	1	2	1					6
	Sum of Permits	0	0	0	0	0					0
	Sum of Hunted	0	0	0	0	0					0
	Sum of Successful	0	0	0	0	0					0
UNALAKLEET	Sum of Applicants						1				1
	Sum of Permits						1				1
	Sum of Hunted						1				1
	Sum of Successful						1				1
UNALASKA	Sum of Applicants			1			1	1	1		4
	Sum of Permits			0			0	0	0		0
	Sum of Hunted			0			0	0	0		0
	Sum of Successful			0			0	0	0		0
Unknown	Sum of Applicants		3	8	4	5					20
	Sum of Permits		0	0	2	1					3
	Sum of Hunted		0	0	2	1					3
	Sum of Successful		0	0	0	1					1
VALDEZ	Sum of Applicants	8	13	10	14	9	7	6	5	5	77
	Sum of Permits	0	0	0	1	1	0	2	3	0	7
	Sum of Hunted	0	0	0	0	1	0	0	2	0	3
	Sum of Successful	0	0	0	0	0	0	0	0	0	0
WARD COVE	Sum of Applicants	48	45	81	69	86	30	33	34	47	473
	Sum of Permits	1	1	2	2	6	0	3	6	9	30
	Sum of Hunted	1	1	2	2	3	0	1	4	5	19
	Sum of Successful	0	1	1	0	2	0	0	1	1	6
WASILLA	Sum of Applicants	13	22	23	24	13	16	25	11	18	165
	Sum of Permits	0	1	1	0	1	0	3	0	3	9
	Sum of Hunted	0	1	1	0	0	0	0	0	2	4
	Sum of Successful	0	0	0	0	0	0	0	0	0	0
WHALE PASS	Sum of Applicants					2	3				5
	Sum of Permits					0	0				0
	Sum of Hunted					0	0				0
	Sum of Successful					0	0				0
WILLOW	Sum of Applicants	1					1				2
	Sum of Permits	0					0				0
	Sum of Hunted	0					0				0
	Sum of Successful	0					0				0
WRANGELL	Sum of Applicants	148	164	194	242	204	158	212	139	230	1691
	Sum of Permits	5	3	6	9	13	17	32	19	24	128
	Sum of Hunted	4	2	5	8	8	13	25	14	12	91
	Sum of Successful	2	2	2	3	0	3	4	1	3	20
YAKUTAT	Sum of Applicants	1			2		1	2			6
	Sum of Permits	0			0		0	0			0
	Sum of Hunted	0			0		0	0			0
	Sum of Successful	0			0		0	0			0
Total Sum of Applicants		1375	1365	1900	1955	1656	1291	1266	883	1350	13041
Total Sum of Permits		25	30	70	72	123	120	155	155	175	925
Total Sum of Hunted		22	19	54	59	69	86	96	93	68	566
Total Sum of Successful		7	9	16	8	19	12	8	12	15	106

**Table 4.** 2005 November registration permit data.

<b>Community of Applicant</b>	<b>Number of Permits Issued</b>
Non-Alaska Resident	1
Big Lake	1
Coffman Cove	7
Cprdpva	2
Craig	4
Edna Bay	2
Juneau	2
Ketchikan	28
Klawock	1
Metlakatla	1
Meyers Chuck	5
Naukati Bay	2
Petersburg	12
Sitka	6
Thorne Bay	17
Ward Cove	3
Wasilla	1
Whale Pass	3
Wrangell	35
<b>Total</b>	<b>133</b>
<b>Reported as of Jan. 27, 2005:</b>	
Permits hunted	53
Permits not hunted	68
Permits not returned	12
<b>Elk taken</b>	<b>1 bull</b>
Successful hunter residence	Wrangell

Lowell, 2006.

Island outside the permit hunt area. Preliminary data show one elk taken by a Wrangell resident under a registration permit in 2005. The highest harvest, 19 elk, took place in 2001. The harvest data show no trend over time. The number of permits issued has been increased over the years and more hunters have taken to the field in recent years. However, harvest has not increased proportionate to the number of permits issued or number of hunters in the field.

Current management harvest guidelines allow up to 40 elk to be taken, 30 from Etolin Island and 10 from Zarembo Island. This guideline was established as a management tool for the 2005 open registration permit hunt. Actual harvest has never approached this harvest guideline, although the Zarembo Island registration hunt was closed in 2005 because six elk had been taken in the drawing permit hunt. A number of factors may have kept harvest well below these harvest guidelines. During October, the rut is over and elk are generally not bugling or responding to hunter calls; this makes hunting more difficult. In recent years, weather conditions have been mild, allowing elk to stay away from beach or other lowland areas more easily accessible to hunters. Elk are more concentrated at more accessible winter range areas later in the year. Finally, access to the hunt areas, particularly getting to Etolin Island and to areas on Etolin where

**Table 5.** Unit 3 Elk Drawing Permit Data, Aggregated by Resident Community, 1997-2005

	<b>Applicants</b>	<b>Permits</b>	<b>Hunted</b>	<b>Successful</b>
<b>ALL NONRESIDENT AND NON-RURAL</b>				
<b>Category total</b>	<b>6121</b>	<b>396</b>	<b>211</b>	<b>27</b>
<b>Percent of All</b>	<b>47%</b>	<b>43%</b>	<b>37%</b>	<b>25%</b>
<b>NONRESIDENT AND NON-RURAL OUTSIDE SOUTHEAST ALASKA</b>				
FAIRBANKS NORTH STAR BOROUGH	377	30	12	1
HOMER AREA	12	0	0	0
KENAI AREA	103	6	2	0
MATSU AREA	317	19	9	1
MUNICIPALITY ANCHORAGE	578	46	21	1
NONRESIDENT (Outside Alaska)	374	10	5	0
SEWARD AREA	24	2	1	0
VALDEZ	77	7	3	0
<b>Category total</b>	<b>1862</b>	<b>120</b>	<b>53</b>	<b>3</b>
<b>Percent of All</b>	<b>14%</b>	<b>13%</b>	<b>9%</b>	<b>3%</b>
<b>NON-RURAL INSIDE SOUTHEAST ALASKA</b>				
JUNEAU AREA	1639	114	50	5
KETCHIKAN AREA	2620	162	108	19
<b>Category total</b>	<b>4259</b>	<b>276</b>	<b>158</b>	<b>24</b>
<b>Percent of All</b>	<b>33%</b>	<b>30%</b>	<b>28%</b>	<b>23%</b>
<b>ALL RURAL</b>				
<b>Category total</b>	<b>6900</b>	<b>526</b>	<b>352</b>	<b>78</b>
<b>Percent of All</b>	<b>53%</b>	<b>57%</b>	<b>62%</b>	<b>74%</b>
<b>RURAL OUTSIDE SOUTHEAST ALASKA</b>				
Category total	208	17	7	3
<b>Percent of All</b>	<b>2%</b>	<b>2%</b>	<b>1%</b>	<b>3%</b>
<b>RURAL IN UNIT 2 AND 3 AND MEYERS CHUCK, UNIT 1</b>				
COFFMAN COVE	315	20	14	2
CRAIG	687	62	47	12
EDNA BAY	35	3	2	0
HOLLIS	7	0	0	0
HYDABURG	38	10	10	7
KAKE	42	3	1	0
KASAAN	12	1	0	0
KLAWOCK	117	8	6	2
MEYERS CHUCK	59	5	5	1
NAUKATI	8	0	0	0
PETERSBURG	1969	152	96	20
POINT BAKER	44	2	0	0
THORNE BAY	665	63	46	10
WHALE PASS	5	0	0	0
WRANGELL	1691	128	91	20
<b>Category total</b>	<b>5694</b>	<b>457</b>	<b>318</b>	<b>74</b>
<b>Percent of All</b>	<b>44%</b>	<b>49%</b>	<b>56%</b>	<b>70%</b>
<b>UNKNOWN</b>				
Category total	20	3	3	1
<b>Percent of All</b>	<b>0%</b>	<b>0%</b>	<b>1%</b>	<b>1%</b>
<b>TOTAL UNIT 3</b>	<b>13041</b>	<b>925</b>	<b>566</b>	<b>106</b>

elk may be present, is very difficult. **Maps 2 and 3** show the topography of these islands. Boat moorages are limited, and the road system on the islands does not provide good access to areas where the elk herds are normally found. In 2005, the registration hunt was opened Nov. 15–30 to provide further opportunity to harvest elk in Unit 3.

Twenty-five permits, including two raffle permits, for elk hunting were issued in 1997, the first year hunting was opened in Unit 3. The number of drawing permits has been increased stepwise over the past eight years. In 2005, 175 drawing permits were issued. The number of applicants for drawing permits has always greatly exceeded the number of permits issued. The year 2000 saw the greatest number of applicants. The 1,955 hunters who applied had a 3.6% chance of getting one of the 70 permits that were issued (an additional two raffle permits were issued). In 2005, 1,350 applicants had a 13% chance of receiving one of the 175 permits issued.

Over the 1997–2005 time period, about 61% of persons receiving permits actually hunted. 566 hunters out of 925 received permits. In 2005, about 39% of permit holders hunted, based on preliminary data. Over this time period, 107 elk were taken. Harvest has ranged from 7 to 19 elk per year. About 19% of persons who actually hunted have taken elk. In 2005, 22% of hunters took elk.

Residents of 92 Alaskan communities and an estimated 20 Outside communities were permit applicants for Unit 3 elk from 1997–2005. About 51% of the 13,041 permit applications came from rural residents in Southeast Alaska. The largest number of these, or 44%, came from residents of the rural communities proposed for a positive customary and traditional use determination. About 33% of applications came from nonrural residents in Southeast Alaska; an additional 14% of applications came from nonrural residents elsewhere in Alaska and from Outside Alaska (nonresidents) (due to rounding and unknown cases, the total does not add to 100%).

Most of the elk harvested, 94%, were taken by Southeast Alaskan residents. Nonrural southeast Alaska residents took 23% of the total harvest, with rural residents taking 71% of the harvest. Residents of the rural communities proposed for a positive customary and traditional use determination accounted for 56% of the hunters in the field, and they took 70% of the total harvest. Both the proportion of persons receiving permits in these communities who actually hunted, 70%, and the proportion of these hunters getting elk, 23%, were higher for these communities than for either southeast Alaska nonrural hunters (57% actually hunted with a 15% success rate) or for other nonrural hunters (43% actually hunted with a 6% success rate).

**Figure 1** shows time series data for the proportion of total applications coming from the proposed customary and traditional use communities and from southeast Alaska nonrural communities. The proportion of applicants coming from the proposed customary and traditional use communities shows a strong upward trend. The proportion of total applications coming from the nonrural communities shows a strong downward trend. Over time the hunt is becoming primarily a local hunt. **Figure 2** shows the portion of total elk harvest going to residents of the proposed customary and traditional use communities and to southeast Alaska nonrural communities. This data shows no trend due to inter-year variability. The proposed customary and traditional use communities harvested most of the elk taken in Unit 3 in all but 1998.

### Seasonality of Harvest

Fall weather influences elk movement patterns and hunter effort and success. Seasonal variation in harvest success over time shows higher harvest success during the first week of the general hunt, **Table 6**. Interestingly, no elk have been harvested during Sept. 22–30 of the archery season from 1999–2004.

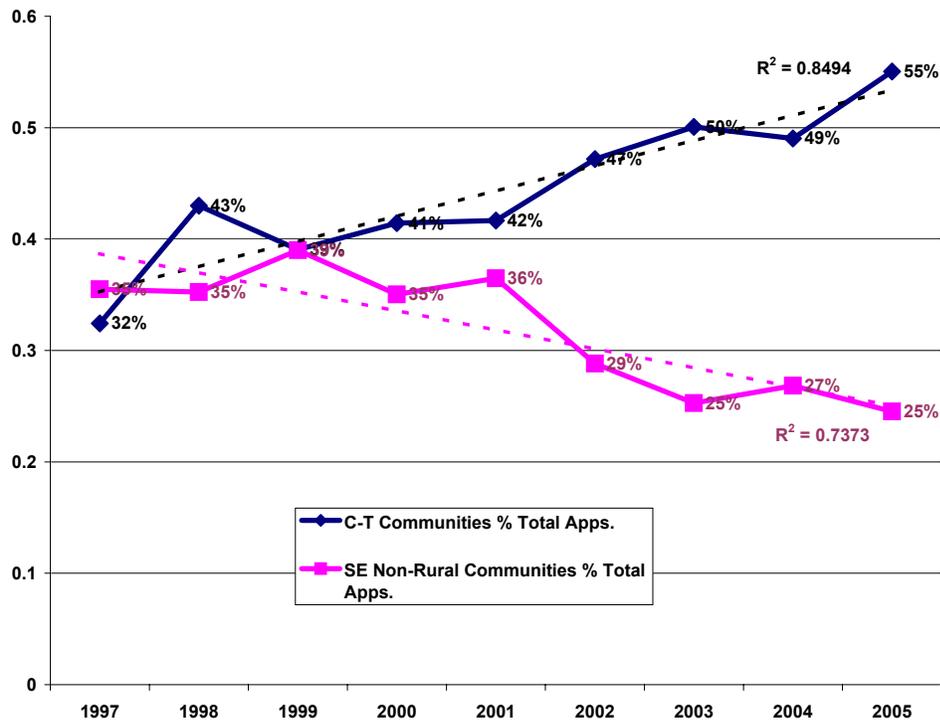


Figure 1. Unit 3 Elk Drawing Permits, 1997-2005, Applicants by Resident Community.

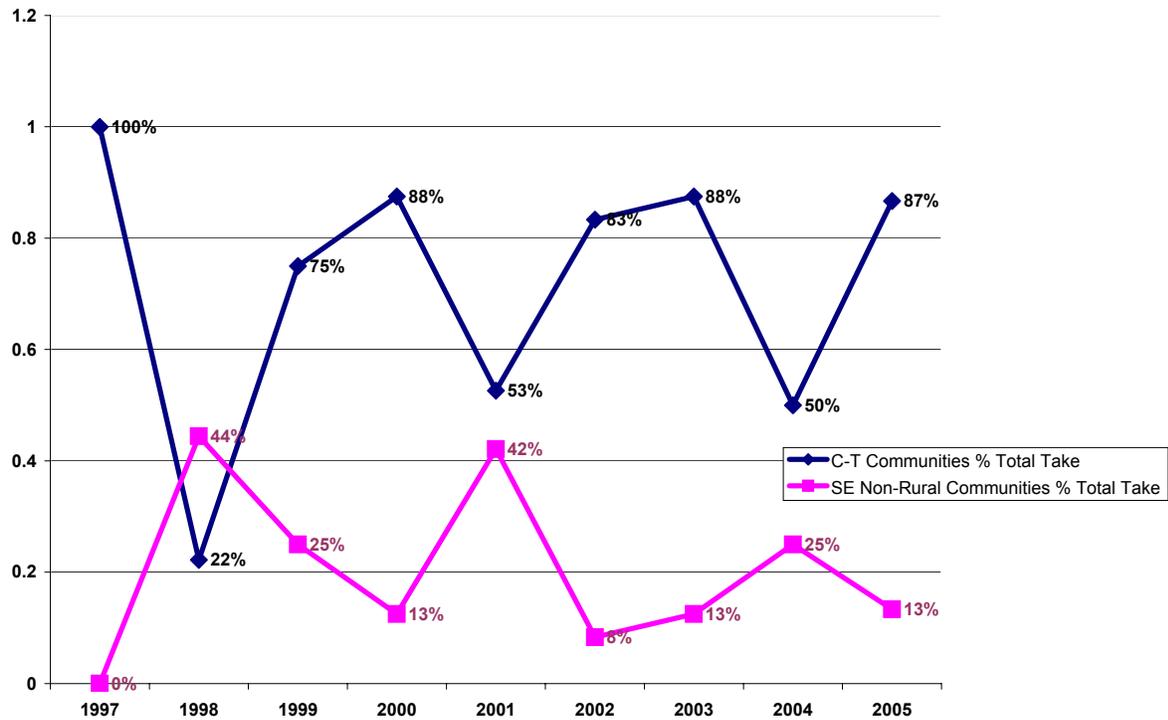


Figure 2. Unit 3 Elk Drawing Permits, 1997-2005, Harvest Percent by Resident Community of Applicant

**Table 6.** Unit 3 elk harvest chronology number and percent (in parentheses) of the Regulatory Year's harvest by harvest period.

Regulatory Year	Harvest Period								n
	9/1–7	9/8–14	9/15–21	9/22–30	10/1–7	10/8–14	10/15–21	10/22–/31	
1997	NA	NA	NA	NA	3 (42.9)	0 (0)	2 (28.6)	2 (28.6)	7
1998	NA	NA	NA	NA	5 (55.6)	3 (33.3)	1 (11.1)	0 (0)	9
1999	NA	NA	0 (0)	0 (0)	7 (43.8)	2 (12.5)	4 (25.0)	3 (18.8)	16
2000	NA	NA	1 (12.5)	0 (0)	2 (25.0)	2 (25.0)	2 (25.0)	1 (12.5)	8
2001	0 (0)	0 (0)	1 (5.3)	0 (0)	8 (42.1)	3 (15.8)	7 (36.8)	0 (0)	19
2002	0 (0)	0 (0)	1 (7.7)	0 (0)	4 (30.8)	3 (23.1)	2 (15.4)	3 (23.1)	13
2003	0 (0)	0 (0)	0 (0)	0 (0)	3 (37.5)	0 (0)	1 (12.5)	4 (50.0)	8
2004	1 (8.3)	1 (8.3)	0 (0)	0 (0)	4 (33.3)	1 (8.3)	1 (8.3)	4 (33.3)	12
<b>Grand Total</b>	1 (1.1)	1 (1.1)	3 (3.3)	0 (0)	36 (39.1)	14 (15.2)	20 (21.7)	17 (18.5)	92

Source: Lowell 2005.

While weather and other temporal issues may affect the success of hunters or the ease of finding elk, these data indicate that hunter effort is likely higher for the first week of the general hunt season. The archery season has not shown as consistent a pattern, but sample sizes for the bow hunt have been small. A total of five elk were harvested by bow and arrow between 1999–2004.

Four elk were reported to have been taken outside of the drawing permit boundary since 1997. All four of these elk were harvested by Wrangell residents from Shrubby Island: one in 2004, and three in 2005 (Rich Lowell 2005).

In summary, these data show that:

- 1) Large numbers of hunters apply for drawing hunts for Unit 3. In recent years chances of getting a permit have been about 1 in 8.
- 2) Southeast Alaskans have made up 84% of permit applicants.
- 3) Residents of the rural communities proposed for a positive customary and traditional use determination accounted for a majority of the elk hunting that has taken place (56% of all hunters) and about 70% of the total harvest.
- 4) The permit hunt has become more of a local hunt over time.
- 5) Hunters tend to hunt in the earlier part of the State seasons.

### Other Management Considerations

In the 1980s the USDA Forest Service and the ADF&G cooperated in introducing elk into Unit 3. They set forth their individual and joint responsibilities in a supplement to Master Memorandum of Understanding #810009 (MOU), signed in 1986. The Ketchikan Sports and Wildlife Club encouraged and facilitated the introduction. Subsequent to the elk introduction, the agencies met until recently on a yearly basis as directed under the MOU. The agencies prepared a draft management plan in 1999, and last met in

2000. Staff suggests completion of the management plan for elk for Unit 3. The management plan would include population objectives for this elk population, harvest objectives, discussion of elk dispersal away from the introduction sites, evaluation of competition with deer and other ecological impacts, subsistence use of elk, and other issues.

Whether done through development of a management plan or as a separate effort, the agencies need to establish methods for providing adequate survey and inventory information for this species. Existing habitat and population information for elk are extremely limited.

### **Customary and Traditional Use Determinations**

No customary and traditional use determination has been made for Unit 3 elk. There is currently no Federal subsistence hunt of elk allowed in Unit 3.

### **Eight Factors for Determining Customary and Traditional Uses**

A community or area's customary and traditional use is generally exemplified through the following eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) 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; (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 Federal Subsistence Board makes customary and traditional use determinations based on an application of these eight factors (50 CFR 100.16B and 36 CFR 242.16B). 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 100.16B and 36 CFR 242.16B).

Customary and traditional use determinations have been made for a number of wildlife species in Unit 3. Residents of Units 1B, 2, and 3 have customary and traditional use determination for moose on Mitkof and Wrangell Islands, while in the remainder of Unit 3, all rural residents are eligible for subsistence moose hunting. Rural residents of Units 1B, 3, Port Alexander, Port Protection, Pt. Baker and Myers Chuck have a positive customary and traditional use determination for deer in Unit 3. Substantial numbers of rural residents hunt deer in Unit 3, and large numbers of rural residents have put in for elk drawing permits. Customary and traditional use determinations have also been made for salmon, Dolly Varden, trout, smelt, and eulochon for Unit 3 areas. All rural residents are eligible for harvesting of many other mammal, bird, and fish species under Federal regulations in this area. The previous Board actions that made customary and traditional use determinations in this area recognized use of the area by residents of Units 1B, 2, and 3. The present request would add elk to the species for which customary and traditional use is recognized.

Goldschmidt and Haas document strong utilization of Unit 3, including Zarembo and Etolin Islands, by the nearby Stikine people in what was Wrangell territory. Former village and burial sites exist on both

Etolin Island and Zarembo Islands, and harvest of ungulates, vegetation, and marine species occurred across the entirety of both. Zarembo Island in particular was identified as a popular and reliable deer and mink harvest area and was used heavily for trapping as well. Elders interviewed for Haa Aaní: Our Land emphasized their dependence and reliability of the deer harvest on Etolin and Zarembo Islands. “[The Islands] were used by all the Stikines for hunting and fishing. These islands had plenty of deer” (Goldschmidt and Haas 1998: 154).

Permit application, hunt participation, and hunt success data covering the nine hunting seasons during which elk hunting has taken place under State of Alaska regulations are shown in **Tables 3 and 5**. These data show that residents of the communities in the proposed customary and traditional use communities comprised 5,694 or 44% of the 13,041 permits applicants in the 1997 to 2005 time period. They received 526 or 49% of permits issued and fielded 352 or 62% of the persons who actually hunted. They accounted for a harvest of 74 elk or 70% of all elk taken in drawing permit hunts. The success rate of persons who actually hunted was 23%. **Figure 1** shows change in participation in the drawing permit hunts. The proportion of permit applicants from the proposed customary and traditional use communities has risen over the years that the State of Alaska drawing hunt has been in existence. In 2005, residents from these communities accounted for 55% of the permit applicants and a majority both of hunters taking to the field and of successful hunters. Preliminary data for the 2005 registration hunt shows a similar pattern of participation. In this hunt 58 of 133 persons who received registration permits are known to have hunted. One bull elk was taken by a Wrangell resident.

Residents of Units 1B, 2, 3, and Meyers Chuck have hunted elk in Unit 3 since hunting of this elk population commenced in 1997. Their pattern of use of elk has been developing during the past nine seasons of hunting, and elk hunting is beginning to be incorporated into the seasonal round of subsistence harvesting undertaken by residents of the proposed communities.

Elk are taken with the methods and means common in southeast Alaska. Subsistence harvesters reach harvest sites by boat, and hunt on foot or with a motorized vehicles from the limited Forest Service road system in the hunt areas. As has been noted above, elk in Unit 3 are difficult to hunt, and overall success rate of residents from the proposed customary and traditional use communities has been 23%. Although good hunter effort data are not available, elk hunting in Unit 3 appears to be more demanding and less productive in terms of the likelihood of success than deer hunting and may be equivalent to the success rate of hunters in many moose hunts. A successful elk hunt provides the hunter with a large quantity of prized meat.

Knowledge of hunting skills, values, and lore are transmitted from generation to generation in ways common throughout southeast Alaska. These include transmission through clan and family ties in the Native community and through participation in hunting with more experienced family members and friends in the non-Native community. Subsistence hunting and fishing are extremely important to members of the rural communities proposed for a positive customary and traditional use determination. These activities play a vital social, economic, and cultural role in these communities.

Subsistence foods are shared in family and community networks. The communities within the identified units show strong patterns of subsistence harvest and distribution. **Table 7**, from the ADF&G Community Profile Database shows that between 1997 and 2000, both harvesting and distribution of elk meat was taking place among rural Southeast Alaska users. Although elk harvests were low in study years, residents of Hollis and Thorne Bay reported giving away elk meat, while residents of 10 different communities in Southeast Alaska reported receiving elk from hunters. The communities of Wrangell and Petersburg were not surveyed during the years when elk hunting has taken place, and no similar data exists for

redistribution of elk meat in those communities.

The residents in the rural communities proposed for customary and traditional designation depend on a wide range of fish and wildlife resources. The species used include a variety of fish, shellfish, migratory birds, bird eggs, small land mammals, furbearers, marine mammals, berries, plants, and seaweed. Large land mammals are particularly important resources needed to meet the subsistence requirements of rural residents. Overall harvests of subsistence foods in the communities in Units 1B, 2, and 3 range from 169 pounds per capita in Hollis to 451 pounds per capita in Kasaan, based on ADF&G Division of Subsistence community profile data base estimates. These levels of harvest document a dependence on subsistence harvested foods.

**Table 7.** Percentages of Households Using, Harvesting, Receiving and Giving Elk, Southeast 1997-2000 (CPDB).

Community	Used	Harvested	Received	Gave
Coffman Cove	12.0	2.0	10.0	0.0
Craig	0.0	0.0	1.2	0.1
Edna Bay	0.0	0.0	0.0	0.0
Hollis	6.5	0.0	6.5	2.2
Kake	0.0	0.0	0.0	0.0
Kasaan	14.3	0.0	14.3	0.0
Klukwan	3.2	0.0	3.2	0.0
Naukati Bay	8.0	0.0	8.0	0.0
Sitka	0.9	0.0	0.9	0.0
Thorne Bay	3.4	1.1	2.2	1.1
Whale Pass	6.7	0.0	6.7	0.0
Yakutat	1.4	0.0	1.4	0.0

\*Household survey data are not available for Wrangell, Petersburg, Juneau, or Ketchikan during the time elk have been hunted.

**Effects of the Proposal**

This proposal would provide a positive determination for elk in Units 1, 2, and 3 for residents of Units 1B, 2, 3 and Meyers Chuck. This determination would exclude other rural residents from hunting elk under Federal regulations in Units 1, 2, and 3.

The season and harvest limit provisions of the proposal, considered in the staff analysis for WP06-11b, would allow all Federally qualified subsistence hunters to receive permits for elk hunting in Unit 3. Depending on the Federal subsistence management regulations enacted, this proposal could result in decreases in harvest opportunity for non-Federally qualified hunters.

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**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-11B**

**Take no action** as recommended by the Southeast Alaska Subsistence Regional Advisory Council.

**Justification**

This recommendation is based on the recommendation to take no action on the customary and traditional use determination (Proposal WP06-11a) and the inability to implement the management regime proposed by the proponents, if a positive determination were made in WP06-11a.

The proponents ask that State regulations for all hunters be maintained, while at the same time authorizing all Federally qualified subsistence users to receive a permit for the drawing hunt. However, providing a permit to all Federally qualified subsistence users for hunting in October would not be feasible. An average of 610 persons from these communities (proposed in WP06-11a) have applied for 175 (year 2005 number of permits) total drawing permits during each of the nine years that hunting has taken place. The hunt area is relatively small, with a limited number of access points. Having a large number of hunters in the field could be a public safety problem and would raise concerns due to potential over harvest of elk. Therefore, this would violate recognized principles of wildlife conservation.

If the local demand for elk hunting permits remained the same as for previous years during the October portion of the hunt, most likely all non-Federally qualified users would need to be restricted. Restricting non-Federally qualified users is not the intent of the proponents. High demand could also require that an ANILCA Section 804 evaluation be conducted in order to limit the potential for over harvest among Federally qualified subsistence users. The Section 804 evaluation would indicate which users would be eligible to hunt elk. This evaluation would consider: 1) customary and direct dependence upon the populations as the mainstay of livelihood, 2) local residency, and 3) the availability of alternative resources. Therefore, for both Federally and non-Federally qualified users, the intent of the proponents' proposal could not be met.

The existing State of Alaska management regime, of issuing drawing hunt permits for bow and rifle seasons in September and October, respectively, and registration permits for a late November hunt (initiated in 2005), were developed with strong participation of rural and nonrural hunters living close to the hunt area. These drawing hunts, and particularly the October hunt, provide opportunity for residents of the proposed customary and traditional use communities. The success of hunters from these communities in the drawing hunts documents this past and continuing opportunity.

The open registration hunt, initiated in 2005, provides opportunity for all hunters from communities with potential customary and traditional use determinations (WP06-11a) to hunt for elk in the Etolin/Zarembo and associated islands portion of Unit 3 during 15 days in November. In past years, more than half of the harvestable surplus of elk would have been available for harvest in a November hunt.

**STAFF ANALYSIS  
WP06-11b**

**ISSUES**

Proposal WP06-11b, submitted by Susan Stevens Ramsey and Luella Knapp of Wrangell, requests establishment of a Federal season for harvest of elk in Unit 3. The proponents want to be able to harvest elk under Federal subsistence management regulations. Companion proposal (WP06-11a), which will address the customary and traditional use determination for residents of Units 1B, 2, 3, and Meyers Chuck, is being considered concurrently. Should a negative customary and traditional use determination be made for elk in WP06-11a, no action should be taken on this proposal.

Ms. Ramsey was contacted Nov. 11, 2005, to clarify her intentions with this proposal. She thought that Federal subsistence management regulations should allow any Federally qualified subsistence user to be able to get a permit to hunt elk. She stated that her family members have not been able to obtain State permits and have not yet hunted for elk in Unit 3. She clarified that her intention was not to restrict other hunters or to change established State of Alaska seasons, harvest limits, or permit requirements. Federal regulations should mirror State regulations for elk. To mirror State regulations, this proposal also needs to consider elk hunting in Units 1 and 2. Note that her written proposal requested an Aug. 1–Dec. 31 season, allowing both bull and cow elk to be taken.

The staff analysis for WP06-11a provides relevant information concerning the introduction of elk into Unit 3, biological considerations, and regulatory and harvest history. This analysis will focus on Federal subsistence management regulations needed to provide a subsistence opportunity.

**DISCUSSION**

The proponent would like to provide a subsistence opportunity to harvest elk for residents of Units 1B, 2, 3, and Meyers Chuck by making hunting permits available to all Federally qualified subsistence users.

**Existing Federal Regulation**

There are no existing Federal subsistence management regulations concerning elk in Units 1, 2 or 3. Companion proposal WP06-11a is analyzing the customary and traditional use determination for Units 1, 2 and 3 elk.

State regulations do not recognize subsistence use of elk.

**Proposed Federal Regulation\*****Units 1, 2, and 3—Elk**

*Unit 3, Etolin, Zarembo, and associated islands*

*One bull by drawing permit\**

*OR One bull by registration permit*

*Oct. 1–Oct. 31*

*Nov. 15–Nov. 30*

*Units 1, 2 and remainder of Unit 3: One elk*

*Aug. 1–Dec.31*

*Federally qualified subsistence users automatically qualify for a drawing permit*

\*Proposed Federal regulation corrected after discussions with proponent.

## Existing State Regulation

### Unit 3—Elk

#### Unit 3, Etolin, Zarembo and associated Islands

Species/bag limit	Permit/ticket required	Open season
<i>One bull by permit, bow and arrow only</i>	<i>DE318</i>	<i>Sept. 1–Sept. 30</i>
<i>OR One bull by permit,</i>	<i>DE321/323</i>	<i>Oct. 1–Oct. 31</i>
<i>OR One bull by permit</i>	<i>RE325</i>	<i>Nov. 15–Nov. 30</i>
<i>Unit 1, 2 and remainder of Unit 3:</i>		
<i>One elk</i>		<i>Aug. 1–Dec.31</i>

### Biological Background, Regulatory History, and Harvest History.

Please see appropriate sections of WP06-11a.

### Federal Regulatory Considerations

When contacted, the proponent stated that she wished for Federal seasons and harvest limits to mirror State of Alaska seasons and harvest limits, and that she did not want to exclude non-Federally qualified subsistence users from this hunt. However, she wanted all Federally qualified subsistence users to be able to hunt elk. A number of issues need to be considered in evaluating this proposal.

**Elk Management Plan.** Many issues facing elk management in Unit 3 could better be addressed with a completed elk management plan for this Unit. Staff encourage that State and Federal collaborative efforts to develop a management plan be resumed.

**Harvest guideline.** The present harvest guideline for Unit 3 is 40 elk total, 30 elk from Etolin Island and 10 Elk from Zarembo Island. Accurate population data for elk in Unit 3 are very limited because no recent biological assessment has been undertaken. Better population data would allow a more rigorous estimation of the harvestable surplus of elk. This could justify a higher harvest guideline.

Elk harvest in the drawing permit hunts has varied from 7 to 19 elk. In 2005, 15 elk were taken in the September and October drawing permit hunts, allowing a potential 25 elk to be taken in the November open registration permit hunt. One elk was taken in the open registration permit hunt in 2005 (see **Table 4** in the staff analysis for WP06-11a). The ADF&G Division of Wildlife Conservation will be evaluating the open registration hunt and may recommend extension of opportunity in this hunt.

**Number of hunters in the field.** Over the past nine years, the number of drawing permits issued by ADF&G has progressively increased from 27 permits in 1997 to 175 permits in 2005; see **Table 2**, WP06-11a. Elk harvest has not increased proportionately; see **Figure 2**, WP06-11a. The current State of Alaska drawing hunt allows up to 75 hunters to be in the field during each of two October drawing hunt periods, Oct. 1-15 and Oct. 16-31. In the judgment of Forest Service and State of Alaska biologists, allowing a much larger number of hunters in the field would raise public safety questions, given the limited number of boat moorages and areas where elk may be hunted on Etolin and Zarembo Islands (Lowell 2005. and Brainard 2006).

**Hunter Demand.** Data reporting hunter demand for drawing permits are presented in **Table 3**, WP06-11a. The number of applicants for the existing drawing permit hunts has greatly exceeded the number of permits issued. For 2005, there were 1,350 applicants for 175 permits of all types. Applicants had about a one in eight chance of getting a permit. Although 55% of permits issued went to residents of the proposed customary and traditional use communities, the drawing permit hunt provides a restricted opportunity for these residents.

Participation in the 2005 November registration permit hunt is presented in **Table 4**, WP06-11a. In the first year of this registration hunt, 133 persons received permits; 58 are known to have hunted. One bull was taken by a Wrangell resident. The registration hunt provides subsistence hunting opportunity for anyone wishing to hunt since this is an open access hunt. Because of the timing of this hunt late in the season, it favors rural residents living near the area. They are more likely to be able to schedule their hunting according to the local weather conditions that make access to hunting areas difficult in November.

**Community support.** The Petersburg and Wrangell Fish and Game Advisory Committees have been very involved in developing the existing State of Alaska hunting regulations and strongly favor continuing the current management system that combines drawing hunts in September and October and an open registration hunt in November. The applicant also supports maintenance of the present regulations. Staff is unaware of public support from elk hunters for major changes in elk hunting regulations for Units 1, 2 or 3.

### **Effects of the Proposal**

If proposal WP06-11a were adopted, it would provide a positive customary and traditional use determination for elk in Units 1, 2 and 3 for residents of Units 1B, 2, 3, and Meyers Chuck.

The season, permit and harvest limit provisions of the proposal would allow all Federally qualified subsistence users to receive permits for elk hunting in Unit 3, for use during the October drawing hunts.

### **LITERATURE CITED**

See WP06-11a and

Brainard, James. 2006. Wildlife biologist. Personal communication. USDA Forest Service, Petersburg.

<i>WP06-12 Executive Summary</i>	
<b>General Description</b>	Requests the creation of a Federal registration permit hunt for moose in Unit 1C to be defined as the area of the Chilkat Range south of the southern most National Park Service (NPS) boundary. <i>Submitted by Chuck Burkhardt of Gustavus.</i>
<b>Proposed Regulation</b>	<p><b>Unit 1C—Moose</b></p> <p><i>That portion south of Point Hobart including all Port Houghton Drainages—1 antlered bull with spike-fork or 50-inch antlers or 3 or more brow times on either antler by State registration permit only.</i> <span style="float: right;"><i>Sept. 15–Oct. 15</i></span></p> <p><i>Berners Bay Drainages</i> <span style="float: right;"><i>No Federal open season.</i></span></p> <p><b><i>That part within the Chilkat Range south of the southern most National Park Service (NPS) boundary—1 antlered bull by Federal registration permit only.</i></b> <span style="float: right;"><b><i>Sept. 15–Oct. 15</i></b></span></p> <p><i>Remainder, excluding drainages of Berners Bay—1 antlered bull by State registration permit only.</i> <span style="float: right;"><i>Sept. 15–Oct. 15</i></span></p>
<b>Southeast Alaska Regional Advisory Council Recommendation</b>	<b>Take no action.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Take no action.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support—11</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATION  
WP06-12**

**SOUTHEAST ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Take no action.** The Southeast Alaska Subsistence Regional Advisory Council voted to take no action on WP06-12. This proposal was addressing a permit condition developed by the Alaska Department of Fish and Game to manage the Gustavus moose hunt. The permit condition established the Gustavus moose hunt as a 'super exclusive' hunt, meaning that, if a person hunted in the Gustavus hunt, they were restricted from other moose hunting. ADF&G has stated that this permit condition will not be in place in the future.

The proponent was contacted. He agreed with this permit condition change, and agreed that no action was needed on his proposal.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-12**

**Take no action**, as recommended by the Southeast Alaska Subsistence Regional Advisory Council.

**Justification**

The Alaska Department of Fish and Game (ADF&G) agreed to drop the "super-exclusive" registration permit conditions during the Southeast Alaska Regional Advisory Council's meeting in Saxman. Therefore, a Federal permit is not needed to administer a hunt on Federal lands in Unit 1C, as requested by the proponent. The intentions of the proponent are accomplished by ADF&G's action, so no action is needed on this proposal.

**WRITTEN PUBLIC COMMENTS  
WP06-12**

**11 Support.** Eleven individuals signed a petition of support for proposal WP06-12 when it was submitted.

**STAFF ANALYSIS  
WP-06-12**

**ISSUES**

Proposal WP06-12, submitted by Chuck Burkhardt of Gustavus, requests creating a Federal registration permit hunt for moose in Unit 1C to be defined as the area of the Chilkat Range south of the southernmost National Park Service (NPS) boundary (**Map 1**). The original interpretation of the proponent's request, as published in the wildlife proposal book, was to apply the Federal permit to all of Unit 1C remainder. The proponent later clarified his intent to apply the use of a Federal permit to just the lower Chilkat Range.

**DISCUSSION**

The proponent requests changing the requirement for hunting moose in part of the remainder of Unit 1C from a State registration permit to a Federal registration permit. Recent changes to the State registration permit prohibit hunters who register for moose hunting on the Gustavus Forelands of Unit 1C from hunting moose anywhere else in Unit 1C (**Map 2**). This "super exclusive" restriction was added at the request of the Icy Strait Advisory Committee, in an attempt to reduce the number of hunters who applied for and hunted the Gustavus Forelands (Barten 2005, pers. comm.). This State restriction prohibits some Federally qualified rural residents in Gustavus from meeting their subsistence needs for moose. If the permit condition is changed, rural residents who were not successful in the forelands hunt could then hunt Federal public lands in Unit 1C remainder, which remains open until Oct. 15.

**Existing Federal Regulations**

**Unit 1C—Moose**

*That portion south of Point Hobart including all Port Houghton drainages—1 antlered bull with spike-fork or 50-inch antlers or 3 or more brow times on either antler by State registration permit only.* *Sept. 15–Oct. 15*

*Berners Bay Drainages* *No Federal open season.*

*Remainder, excluding drainages of Berners Bay—1 antlered bull by State registration permit only.* *Sept. 15–Oct. 15*

**Proposed Federal Regulations**

**Unit 1C—Moose**

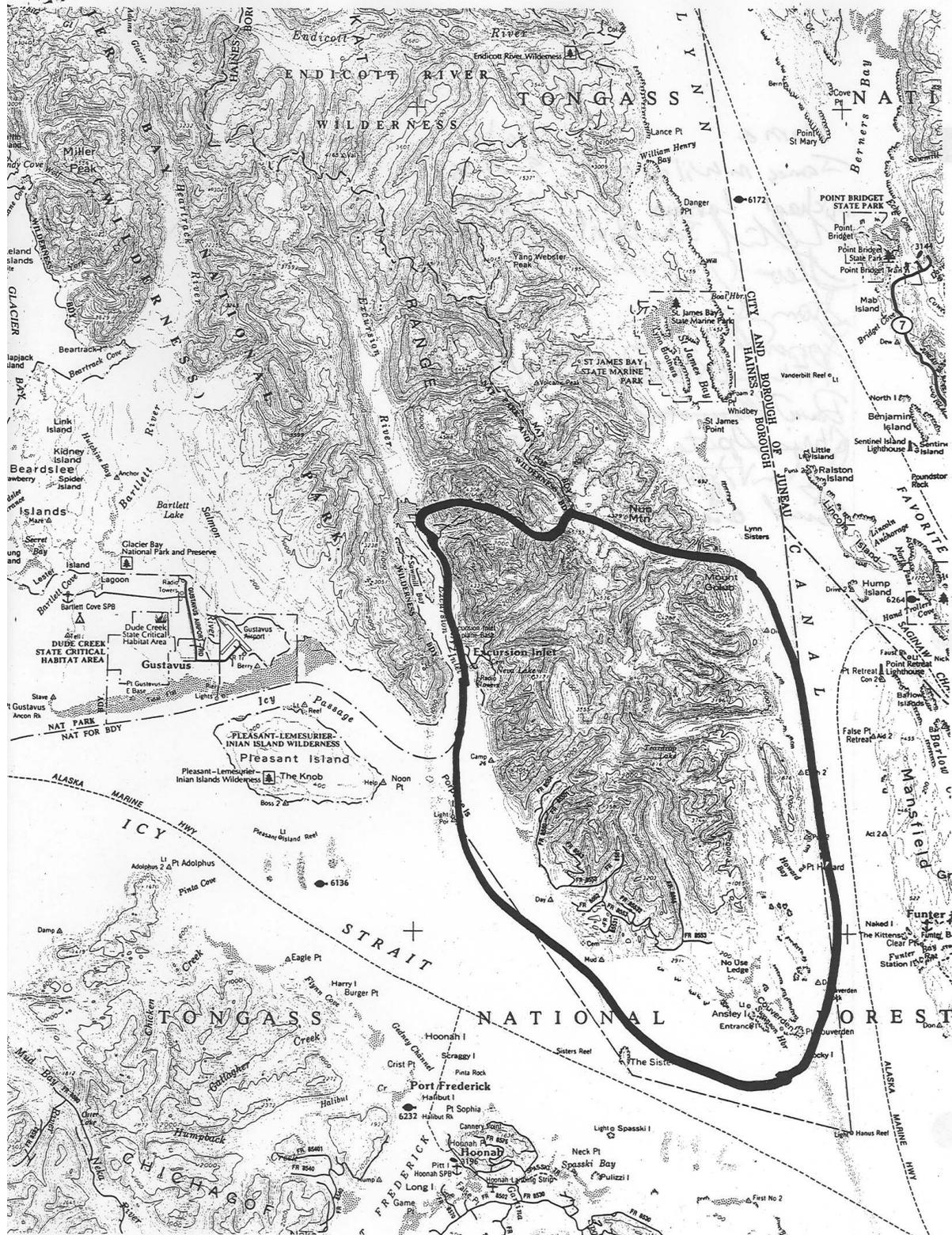
*That portion south of Point Hobart including all Port Houghton drainages—1 antlered bull with spike-fork or 50-inch antlers or 3 or more brow times on either antler by State registration permit only.* *Sept. 15–Oct. 15*

*Berners Bay drainages* *No Federal open season.*

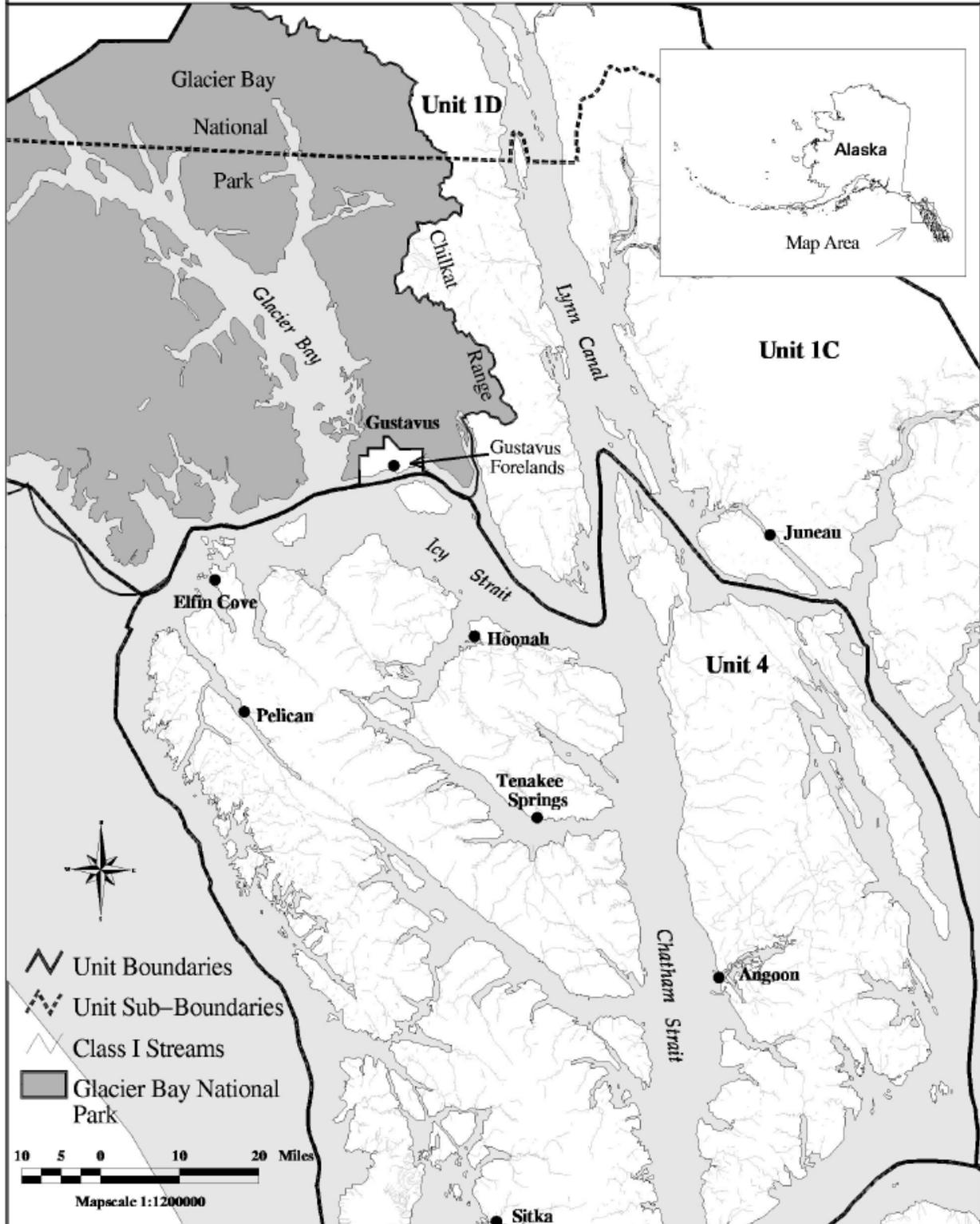
***That part within the Chilkat Range south of the southern most National Park Service (NPS) boundary —1 antlered bull by Federal registration permit only.*** ***Sept. 15–Oct. 15***

*Remainder, excluding drainages of Berners Bay—1 antlered bull by State registration permit only.* *Sept. 15–Oct. 15*

Map 1. Area defined by Chuck Burkhardt for creating a Federal moose hunt.



## Proposal WP06-12 Map 2: Unit 1C



## Existing State Regulations\*

### Unit 1C—Moose

*Berners Bay drainages only: One bull by permit.* Sept. 15–Oct. 15

*That portion of south of Point Hobart, including all Port Houghton drainages: One bull with spike-fork or 50–inch antlers or antlers with 3 or more brow times on at least one side, by permit available in person in Douglas, Kake, Ketchikan, Petersburg, Sitka or Wrangell, or by mail from Petersburg beginning Aug. 16.* Sept. 15–Oct. 15

*West of Excursion Inlet and north of Icy Passage (Gustavus hunt area): One bull by permit available in person in Douglas, Ketchikan, Sitka or by mail from Douglas beginning Aug. 16.* Sept. 15–Oct. 15

*One antlerless moose\*\* (Note: by drawing permit)* Nov. 10–Dec 10

*Remainder of Unit 1C: One bull by permit available in person in Douglas, Ketchikan, Petersburg, Sitka or by mail from Douglas beginning Aug. 16.* Sept. 15–Oct 15

\*Additional restrictions have been added by the local managers in 2005, under authority granted by the Alaska Board of Game. These restrictions are described in “Regulatory History.”

\*\*Common usage in describing the hunt is to use the term “cow hunt.” The intent of this hunt is to reduce the cow:bull ratio. Restriction to “antlerless” allows for the misidentification of sex in the field as is often difficult to determine sex when antlers drop.

## Extent of Federal Public Lands

Federal public lands comprise approximately 98% of Unit 1C. The USDA FS manages 63% of the Unit; NPS manages 35%; and the remaining 2% is under State, municipal or private ownership. NPS lands are closed to all hunting.

## Customary and Traditional Use Determinations

There is no Federal subsistence priority for Berners Bay and its drainages of Unit 1C. No customary and traditional use determination has been made for moose in Unit 1C. As a result, all rural residents of Alaska are eligible to harvest moose in Unit 1C (except the area in Berners Bay and its drainages) under Federal subsistence management regulations.

## Regulatory History

Unit 1C is currently divided into three areas for moose management under Federal subsistence management regulations. These management areas are: 1) Berners Bay drainages; 2) that portion south of Point Hobart including all of Port Houghton; and, 3) the remainder of Unit 1C.

Unit 1C is divided into four areas for moose management under State regulations: 1) Berners Bay drainages; 2) that portion south of Point Hobart, including all Port Houghton drainages; 3) west of Excursion Inlet and north of Icy Passage (Gustavus hunt area); and, 4) the remainder of 1(C).

Moose first appeared in the Gustavus area in 1968. Twenty years passed before the first moose was harvested. Since then the population has expanded rapidly to become the largest in the unit, accounting for the highest harvest. The number of animals in this herd has reached a level that is not sustainable, given the limited winter range. Because of this concern ADF&G began a browse study on the Gustavus Forelands in 1999, and used resultant data to convince the Alaska Board of Game in 2000 to adopt a drawing permit hunt for cow moose (Barten 2004).

In 1998, the ADF&G revised Unit 1C management objectives based on hunt and survey data. They separated the Gustavus Forelands herd from moose in the remainder of the Chilkat Range because of its discrete nature. The Gustavus moose hunt takes place entirely on non-Federally managed land, and is surrounded by Glacier Bay National Park, where moose hunting is not allowed. Management objectives for the Gustavus forelands are to maintain a population of 250 and an annual harvest of 40-45 animals. Management objectives for the Chilkat Range are to maintain a post hunting population of 200 moose and an annual harvest of 20 moose (Barten 2004, Barten 2005, pers. comm.). The Gustavus Forelands bull moose harvest is currently managed for a harvest of 35-45 bull moose under a registration permit and ADF&G has the authority to issue up to 100 cow moose permits under a drawing permit annually (Barten 2005, pers. comm.). Since 1997, the bull moose hunt at Gustavus has been closed by emergency order each year. During 1998-2002, the bull moose hunting season lasted at least 20 days each year, before being closed by emergency order. However, during the last three years, the bull season has been closed after 7, 3 and 2 days respectively (Barten 2005, pers. comm.). In 2002, 10 cow permits were issued and harvested. In 2003, 35 permits were issued and 30 cow moose were harvested. In 2004, 60 permits were issued and 54 cow moose harvested. In 2005, 90 permits were issued. The 2005 hunt data is not available (Barten 2005, pers. comm.).

In 2005, at the request of the Icy Strait Advisory Committee, the Alaska Department of Fish and Game added a permit condition that prohibits hunters who register for hunting moose on the Gustavus Forelands of Unit 1C, from hunting moose anywhere else in Unit 1C. They also requested adding odd and even day hunt requirements, where hunters are allowed to hunt only on an odd or even day. These restrictions were added to reduce the number of hunters who applied for and hunted the Gustavus Forelands (Barten 2005, pers. comm.). According to Barten (2005, pers. comm.) these restrictions did not function exactly as intended. The restrictions did result in fewer hunters taking part in the bull hunt. However, the hunt closed in two days and some Gustavus hunters found it difficult to harvest moose. The guideline harvest level was exceeded with 46 moose taken. The situation created on the Gustavus Forelands prompted the proponent to submit this proposal in an attempt to provide an opportunity previously available to Federally qualified subsistence hunters. The desire is to allow Federally qualified subsistence users who are not successful in this short Gustavus moose hunt to hunt Federal public land in the Chilkat Range portion of the remainder of Unit 1C.

### **Biological Background**

Moose were first documented in western Unit 1C in 1962 on the Bartlett River. In 1963 moose were observed in the Chilkat Mountain Range; these animals probably originated from the Chilkat Valley population near Haines. In 1965 moose were sighted for the first time along the Endicott River and St. James Bay area. The first sightings of moose in the Gustavus area occurred in 1968. It is likely moose migrated to this area via the Excursion River drainage.

Data collected to date reveal that moose at Gustavus are entering winter in poorer body condition and have lower pregnancy and twinning rates than would be expected of a moose herd on a high plane of nutrition. **Table 1** provides a summary of aerial moose survey data, by age, on the Gustavus Forelands as well as the Chilkat Range from 1998 and 1968 respectively, to 2004. So, although the herd appears to be healthy in numbers, ADF&G is concerned that the individual animals are showing signs of nutritional stress (Barten 2005, pers. comm.). In past years ADF&G was concerned the population of moose on the Gustavus Forelands was possibly at or above the capacity of the range and may not be sustainable. ADF&G thinks the current population is sustainable and will allow for a possible harvest of 30 or more bulls each season. ADF&G will continue to gather data about the herd and range and fine tune as new information becomes available (Barten 2005, pers. comm.). In past years the cow: calf ratio is difficult to determine as bulls drop their antlers when the snow cover is heavy enough to effectively complete aerial surveys making it difficult to distinguish cows from bulls. The survey data describing the percentage of calves surveyed is accurate. The calf:cow ratio in 2005 was 13 calves per 100 cows (Barten 2005, pers. comm.).

### Harvest History

Residents of Gustavus took approximately 80%–90% of the total harvest of bull moose in the early 1990s on the Gustavus Forelands. In recent years, residents of Gustavus and Juneau have taken roughly equal proportions of the total harvest of bull moose on the Gustavus Forelands (40%–50%). Over the last five years, residents of Juneau took more than 70% of the total cow moose harvest in the Forelands with Gustavus residents taking less than 16% (**Table 2**).

### Effects of the Proposal

This proposal would restore opportunity for Federally qualified subsistence users to meet their needs by allowing a hunt on Federal public lands if they are not successful during the Gustavus Forelands hunt. Residents of Gustavus would primarily hunt in the Chilkat Range area.

The proposed regulations would have minimal effect on moose populations. The Alaska Department of Fish and Game has a management strategy to maintain the moose herds over time on the Gustavus Forelands and the Chilkat Range (Barten 2005, pers. comm.). The Chilkat Range (**Map 1**) is to the east of Excursion Inlet, and is accessible by boat from Gustavus. Because of the difficulty and remoteness of the hunt, it is not expected that the harvest of moose would increase much over the average for the past years. In past years, hunters have not met the harvest objectives for the Chilkat Range, which calls for an annual harvest of 20 moose (Barten 2004, Barten 2005, pers. comm.). In 2005, 18 moose were harvested (Barten 2005, pers. comm.) from the Chilkat Range. Harvest has ranged from 6–28 moose from 1990–98; with the 1998 harvest of 28 the highest ever recorded (**Table 2**). The harvest from 2001–05 ranged from 12 to 22 with 18 taken in 2004 and 17 moose harvested in 2005 (Barten 2005, pers. comm.).

Adoption of the proposal would, however, result in the need for both a State and a Federal permit for hunting in the Unit 1C remainder. Dual permit systems often result in double reporting and other harvest data management problems.

### Alternatives Considered

If a consensus could be reached between the proponent, the Icy Strait Advisory Committee, and the ADF&G, it is possible that the intent of this proposal could be satisfied by modifying the State permit conditions for the Gustavus Forelands hunt to remove the “super exclusivity” for Federally qualified subsistence users and allow them to hunt the remainder of Unit 1C if a moose is not taken on the

**Table 1.** Part of Unit 1C aerial moose survey data (Barten 2004, 2005).

<b>Gustavus Forelands 1998–2004</b>						
<b>Year</b>	<b>Bulls</b>	<b>Cows</b>	<b>Calves</b>	<b>Unknown</b>	<b>Total Moose</b>	<b>Count Time (hrs.)</b>
1998	—	48	54	131	185	1.9
1999	—	No Survey				
2000	—	45	45	117	207	3.7
2001	1	52	62	161	276	2.0
2002	—	75	82	155	312	2.5
2003**	37	237	130	0	404	3.3
2004	13	48	53	184	298	3.8
2005	38	127	16	2	183	1.7

<b>Chilkat Range 1968–2004</b>						
<b>Year</b>	<b>Bulls</b>	<b>Cows</b>	<b>Calves</b>	<b>Unknown</b>	<b>Total Moose</b>	<b>Count Time (hrs.)</b>
1968	1	2	1	0	0	
1975	0	3	2	0	5	
1986	3	10	6	0	19	1.5
1987			No Survey			
1991			No Survey			
1992	—	—	11	79	97	1.3
1993			No Survey			
1995			No Survey			
1996	—	—	—	20	20	—
1997			No Survey			
1998	6	15	16	35	72	1.1
1999			No Survey			
2000	—	6	6	113	125	1.7
2001			No Survey			
2002			No Survey			
2003			No Survey			
2004			No Survey			

\* The values shown may not equal the sum of the animals surveyed. The survey results were provided by ADF&G.

\*\* The values shown may not be accurate, as it is difficult to determine sex of the animal when the antlers have dropped.

**Table 2.** Part of Unit 1(C) annual moose kill by community of residence (Barten 2004, 2005).

Year	Total Kill*	Gustavus	Juneau	Sitka	Wrangell	Petersburg	Haines	Other Alaska	Non-resident
<b>Chilkat Range</b>									
1990	16	0	13	0	0	0	3	0	0
1991	6	0	6	0	0	0	0	0	0
1992	9	0	8	0	0	0	1	0	0
1993	17	0	11	0	0	0	5	1	0
1994	7	0	6	0	0	0	0	1	0
1995	13	2	10	0	0	0	0	1	0
1996	17	0	14	0	0	0	0	3	0
1997	13	0	12	0	0	0	0	1	0
1998	28	1	20	0	0	0	1	6	0
1999	11	0	7	0	0	0	0	2	1
2000	14	1	10	1	0	0	0	1	1
2001	12	0	10	0	0	0	1	1	0
2002	15	0	13	0	0	0	0	2	0
2003	22	0	15	0	0	0	0	7	0
2004	18	1	13	0	0	0	0	3	1
2005	17	1	12	1	0	0	0	3	0
<b>Gustavus Forelands</b>									
1990	8	7	1	0	0	0	0	0	0
1991	6	6	0	0	0	0	0	0	0
1992	11	10	0	0	0	0	0	0	1
1993	11	2	0	0	0	0	0	0	0
1994	20	15	4	0	0	0	0	0	1
1995	21	13	7	0	0	0	0	1	0
1996	30	22	7	0	0	0	0	0	1
1997	31	20	7	1	0	0	0	2	1
1998	48	27	16	1	0	0	1	2	1
1999	42	21	13	0	0	0	1	6	1
2000	49	29	15	0	0	0	1	3	1
2001	46	21	18	2	0	0	1	2	2
2002	49	23	20	2	0	0	0	2	2
2003	52	25	20	4	0	0	1	2	0
2004	45	18	20	4	0	0	0	2	1
2005	47	20	21	3	0	0	0	3	0
<b>Gustavus Forelands (Cow Harvest)</b>									
2002	10	0	10	0	0	0	0	0	0
2003	32	5	23	1	0	1	1	1	0
2004	53	6	39	3	0	2	1	2	0
2005	Data Not Available								

\* The values shown may not equal the sum of the animals taken. The harvest data was provided by ADF&G.

Gustavus Forelands hunt. The Alaska Department of Fish and Game area management biologist has the authority to set permit conditions. No action would be needed on this proposal if the exclusive conditions were removed. The proponent stated he would recommend withdrawal of this proposal if the problem could be addressed under the State process.

Another alternative would be to issue a joint State/Federal permit or a Federal only permit that would allow Federally qualified subsistence users the additional opportunity to hunt the remainder of Unit 1C. The permit would indicate that the Federally qualified subsistence user may hunt in other areas of Unit 1C even though they hunted in the Gustavus Forelands.

#### **LITERATURE CITED**

Barten, N.L. 2004. Unit 1(C) moose management report. Pages 22–44 in C. Brown, ed. Moose management report of survey and inventory activities, 1 July 2001–30 June 2003. ADF&G Fed. Aid in Wildl. Rest. Prog. Rep. Proj. 1.0, Juneau, AK.

Barten, N. 2005. Wildlife biologist. Personal communication. ADF&G, Douglas, AK.

<i>WP06-03 Executive Summary</i>	
<b>General Description</b>	Require Federally qualified subsistence users to forfeit all antlers from caribou and moose taken in Unit 13 to the State of Alaska for auction. <i>Submitted by Mr. Brian McGuire.</i>
<b>Proposed Regulation</b>	<p><b>Unit 13—Caribou</b></p> <p><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></p> <p style="text-align: right;"><i>Aug. 10–Sept. 30 Oct. 21–Mar. 31</i></p> <p><i>Unit 13 remainder—2 bulls by Federal registration permit only.</i></p> <p style="text-align: right;"><i>Aug. 10–Sept. 30 Oct. 21–Mar. 31</i></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> <p><b>Unit 13—Moose</b></p> <p><i>Unit 13E—1 antlered bull moose by Federal registration permit only; only 1 permit will be issued per household.</i></p> <p style="text-align: right;"><i>Aug. 1–Sept. 20</i></p> <p><i>Unit 13 remainder—1 antlered bull moose by Federal registration permit only.</i></p> <p style="text-align: right;"><i>Aug. 1–Sept. 20</i></p> <p><b><i>In Unit 13, you must forfeit to the State of Alaska for auction the antlers of any caribou or moose taken in Unit 13</i></b></p>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Oppose.</b>

*Continued on next page*

<i>WP06-03 Executive Summary</i>	
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Oppose-5</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-03**

**EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose** the proposal. The Eastern Interior Alaska Subsistence Regional Advisory Council felt this proposal discriminates against Alaskans. The Council noted that many rural subsistence users oppose this proposal. Antlers are used for arts and crafts by subsistence users.

**SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose** the proposal. The Southcentral Alaska Subsistence Regional Advisory Council listened to public testimony in addition to written public comments in opposition of the proposal. The Council commented that the estimated total harvest is about 10 % of the moose population, insignificant to the total population, and no biological concern exists.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-03**

**Oppose** the proposal as recommended by the Eastern Interior and Southcentral Alaska Subsistence Regional Advisory Councils.

**Justification**

Requiring Federally qualified subsistence users to forfeit the antlers places an unnecessary restriction on them. Many subsistence hunters leave the antlers in the field, rather than bring them in. Additionally, this proposal is detrimental to Federally qualified subsistence users who would utilize moose or caribou antlers as part of their regalia, for arts and crafts, or just as a spiritual reminder of a hunt. This proposal does not respond to any specific biological concerns in moose or caribou populations in Unit 13.

**WRITTEN PUBLIC COMMENTS**  
**WP06-03**

**Oppose.** We are opposed to this proposal because a lot of people will sell antlers or use them for artwork for income or make tools out of them.

*–Mentasta Traditional Council*

**Oppose.** We do not support and strongly oppose WP06-03 to forfeit Caribou and Moose antlers to the State of Alaska auction.

*–Ahtna Tene Nene' Subsistence Committee*

**Oppose.** Real subsistence users use antlers for making crafts, jewelry, etc. Antlers, whether trophies or not hold Value for hunters as reminders of their Hunts.

*–Paxson Fish & Game Advisory Committee*

**Oppose.** Wrangell-St. Elias National Park Subsistence Resource Commission unanimously opposes the proposal as written. The proposed change would unnecessarily limit subsistence users. Subsistence users often make use of the entire animal, and this proposal would deny them the opportunity to use the antlers for handicrafts or other traditional uses.

*–Wrangell-St. Elias National Park Subsistence Resource Commission.*

**Oppose.** Requiring Federal subsistence hunters to forfeit the antlers places an unnecessary restriction on them. This proposal does not respond to any specific biological concerns in the moose or caribou populations in Unit 13.

*–Denali National Park & Preserve Subsistence Resource Commission*

**STAFF ANALYSIS  
WP06-03**

**ISSUES**

Proposal WP06-03, submitted by Mr. Brian McGuire, Anchorage, Alaska, requests that Federally qualified subsistence users forfeit to the State of Alaska for auction all antlers from caribou and moose taken in Unit 13.

**DISCUSSION**

The proponent claims that the Federal subsistence hunts have been abused by some and become a trophy hunt. He states that subsistence users need the meat, but not the antlers. He also has stated that Federally qualified subsistence users are using ATVs and accessing non-Federal lands, where they are harvesting moose using Federal subsistence management regulations. Federally qualified subsistence users would be required to forfeit the antlers from their moose or caribou. The proponent states that the proposed regulatory change would help keep the peace between Federally qualified subsistence hunters and other hunters.

**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.*

**Unit 13—Moose**

<i>Unit 13E—1 antlered bull moose by Federal registration permit only; only 1 permit will be issued per household.</i>	<i>Aug. 1–Sept. 20</i>
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<i>Unit 13 remainder—1 antlered bull moose by Federal registration permit only.</i>	<i>Aug. 1–Sept. 20</i>
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**Proposed Federal Regulations**

**Unit 13—Caribou**

*Units 13A and 13B—2 caribou by Federal registration permit only. The sex of animals that may be taken will be announced by the Glennallen Field Office manager of the Bureau of Land Management in consultation with the Alaska Department of Fish and Game area biologist and Chairs of the Eastern Interior Alaska Regional Advisory Council and the Southcentral Alaska Regional Advisory Council.* Aug. 10–Sept. 30  
Oct. 21–Mar. 31

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

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

**Unit 13—Moose**

*Unit 13E—1 antlered bull moose by Federal registration permit only; only 1 permit will be issued per household.* Aug. 1–Sept. 20

*Unit 13 remainder—1 antlered bull moose by Federal registration permit only.* Aug. 1–Sept. 20

***In Unit 13, you must forfeit to the State of Alaska for auction the antlers of any caribou or moose taken in Unit 13.***

**Existing State Regulations**

**Unit 13—Caribou**

*Unit 13 residents—1 caribou by Tier II permit.* Aug. 10–Sept. 20  
Oct. 21–Mar. 31

*OR Unit 13—1 caribou by Tier II permit.*

**Unit 13—Moose**

*Unit 13 residents—1 bull by Tier II permit.* Aug. 15–Aug. 31  
Sept. 1–Sept. 20

*OR—1 bull with spike-fork or 50-inch antlers or antlers with 4 or more brow tines.*

**Extent of Federal Public Lands**

Federal public lands in Unit 13 are slightly less than 10% of the total and consist of 1.7% BLM, 5.9% Denali National Park and Wrangell-St. Elias National Preserve, and 1.8% Chugach National Forest lands. (See **Unit 13 map**)

### Customary and Traditional Use Determinations

AREA	SPECIES	DETERMINATION
Unit 13B	Caribou	Residents of Units 11, 12 (along the Nabesna Road), 13, residents of Unit 20D 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.
Units 13A and 13D	Caribou	Residents of Units 11, 12 (along the Nabesna Road), 13, and the residents of Chickaloon.
Unit 13E	Caribou	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).
Units 13A and 13D	Moose	Residents of Unit 13, Chickaloon, and Slana.
Unit 13B	Moose	Residents of Units 13, 20D except Fort Greely, and the residents of Chickaloon and Slana.
Unit 13C	Moose	Residents of Units 12, 13 and the residents of Chickaloon, Healy Lake, Dot Lake and Slana.
Unit 13E	Moose	Residents of Unit 13, Chickaloon, McKinley Village, Slana, and the area along the Parks Highway between mileposts 216 and 239 (except no subsistence for residents of Denali National Park headquarters).

### Regulatory History

#### *Caribou*

A Tier II system for the Nechina caribou herd harvest was established in 1990, with the addition of Tier I permits issued for the 1996/97 and 1997/98 seasons to allow any resident to harvest cows or young bulls to reduce the herd to the management objective. In 1998/99 and 1999/00 the harvest of cows was limited. In 2005 the season dates for the Tier II hunt were Aug. 10–Sept. 20 and Oct. 21–Mar. 31. The harvest limit was one caribou of either sex.

The current Federal subsistence caribou hunting regulations in Units 13A and 13B allow the harvest of two caribou by Federal registration permit, Aug. 10–Sept. 30 and Oct. 21–Mar. 31. The sex of animals taken is determined by the BLM Glennallen Field Office. This local determination is a result of a proposal for the 2005/06 season (WP05-08) that modified the harvest limit, providing more flexibility to the BLM Field Office in an effort to be more responsive to local needs and caribou population levels. In the remainder of Unit 13, season dates are the same, with the harvest limited to two bull caribou.

#### *Moose*

Historically for the State, Unit 13 has been an important area for moose hunting in Alaska. Annual harvests were large, averaging more than 1,200 bulls and 200 cows during the late 1960s and early 1970s. Hunting seasons were long, with both fall and winter hunts. As moose numbers began to decline, harvests

were reduced by eliminating both the cow hunt and shortening the season. Moose seasons were again liberalized in 1993, with harvests again increasing and remaining high until the late 1990s (Tobey 2004). State season dates were Sept. 1–20 for the general State moose hunt. The bag limit was one bull with a spike/fork antler on one side, or four brow tines on one side, or a spread of 50 inches or more. A Tier II subsistence permit hunt was established in 1995. Permits are limited to one per household. The Tier II hunting season was Aug. 15–31.

The existing Federal subsistence moose regulations have been in place since 1995, when the season start was changed from Aug. 25 to Aug. 1, providing a 14-day period for Federally qualified subsistence users to harvest a moose without the interference from State Tier II hunters. The current Federal subsistence moose hunting regulations for Unit 13 allow the harvest of one antlered bull by Federal registration permit, Aug. 1–Sept. 20, except in Unit 13E, where the harvest is by Federal registration permit with only one permit issued per household.

## **Biological Background**

### *Caribou*

The fall 2002 Nelchina caribou herd estimate of 34,380 indicated the herd increased, but was still below the management objective of 35,000 caribou (Tobey 2003). Most recently, the herd has increased above the management objectives for 2004 and 2005. The 2005 estimate, though no photo-census was conducted, was 36,428, and the herd is now within the management objective range (Kelleyhouse 2005, pers. comm.).

### *Moose*

A total population estimate for moose for Unit 13 is not available. Density estimates from fall trend count areas range from a low of 0.5 moose/sq.mi. in Unit 13D, to a high of 1.7 moose/sq.mi. in Unit 13C (Tobey 2004). The unit-wide population decline seemed to stop in 2002 with slight increases being observed through 2005 (Kelleyhouse 2005, pers. comm.). Survey data for 2004 and 2005 showed an average bull:cow ratio for the continuous count areas to be about 27 bulls:100 cows (Kelleyhouse 2005, pers. comm.).

## **Harvest History**

### *Caribou*

The reported harvest of the Nelchina caribou herd in 2003/04 for the State hunt was 1,092 caribou (ADF&G 2005). The Federal subsistence harvest in Unit 13 in 2003/04 was 351 animals; in 2004/05, it was 339; and thus far in 2005/06, it is 256 caribou (FWS 2005).

### *Moose*

Based on harvest and hunting effort figures for Unit 13, there has been a large decline in both the number of moose harvested and the number of individuals reporting hunting. Over the past three years, the harvest was an average of 502 moose, with a steady increase each year to 558 animals taken in 2003/04 (ADF&G 2005). Sixty moose were taken in 2003/04 under Federal subsistence management regulations. An additional 50 moose were taken in 2004 under Federal subsistence management regulations, and the 2005 Federal harvest was 51 moose (FWS 2005).

## Effect of the Proposal

This proposal does not respond to any specific biological concerns in caribou or moose populations in Unit 13. While there are serious low-density biological issues with moose in Unit 13, this proposal will not solve the proponent's concern that some moose or caribou may be taken by Federally qualified subsistence users outside of Federal public lands or by using ATVs. Although there is some likelihood of this occurring, law enforcement officers indicate that it is not a significant problem in Unit 13 where the proponent has concerns (Nelson 2005, pers. comm.). Federally qualified subsistence users, some of whom use the antlers as part of their regalia, for arts and crafts, or just as a spiritual reminder of a hunt, would be required to forfeit the antlers from their moose or caribou. Other subsistence hunters who normally leave the antlers in the field, would now be required to pack them out. Many Federally qualified subsistence users would feel insulted by such requirements. Non-Federally qualified subsistence users would not have to forfeit the antlers from their moose or caribou.

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<i>WP06-04 Executive Summary</i>	
<b>General Description</b>	Change the Federal subsistence regulatory language for moose harvests in Units 11, 13, and 15 to require that a legal bull moose meet the State of Alaska requirement for a legal bull for those units. <i>Submitted by Mr. Brian McGuire.</i>
<b>Proposed Regulation</b>	<b>§__.25(g)(3)</b> <i>(i) In Units 11, 13, and 15, a legal bull moose shall meet the State of Alaska definition of a legal bull for that hunt.</i>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Oppose-5</b> <b>No comment-1</b> (Proposal not specific enough)

## REGIONAL ADVISORY COUNCIL RECOMMENDATIONS WP06-04

### EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Oppose** the proposal. The proposal is unnecessary for the conservation of healthy moose populations, it adds complexity to the regulations, and it removes an important element of the rural preference established by the Federal Subsistence Board. The Eastern Interior Alaska Subsistence Regional Advisory Council noted there was significant opposition to this proposal by rural Alaska subsistence users.

### SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Oppose** the proposal. The Southcentral Alaska Subsistence Regional Advisory Council listened to public testimony in addition to written public comments in opposition of the proposal. No biological concern exists to require that legal bull moose meet the State requirement for legal bull.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-03**

**Oppose** the proposal as recommended by the Eastern Interior and Southcentral Alaska Subsistence Regional Advisory Councils.

**Justification**

The proposed modification to the current Federal subsistence management regulations is unnecessary for the conservation of healthy moose populations, it adds complexity to the regulations, and, it removes an important element of the rural preference established by the Board in accordance with section 802(2) of ANILCA.

**WRITTEN PUBLIC COMMENTS  
WP06-04**

**Oppose.** We are opposed to this proposal. We believe it would increase poaching not decrease. Subsistence users have a difficult time to meet their needs.

*–Mentasta Traditional Council*

**Oppose.** We do not support and strongly oppose WP06-04 to revise harvest limits to reflect State antler restrictions. We take any bull moose, the size of the antlers for trophy, is not considered. We oppose any antler restriction.

*–Ahtna Tene Nene' Subsistence Committee*

**Oppose.** Subsistence regulations should not restrict harvest using “trophy” measures, such as antler size. Proposal #4 would restrict subsistence moose harvest in Units 11, 13, and 15 to only those bulls with an antler size the same as that required for sport hunting. There is currently no statewide antler requirement for moose in Federal Subsistence Regulations. This proposal seems contrary to the purpose of subsistence, which is to harvest meat to eat regardless of the size and/or age of an adult animal. Should there be a biological reason for restricting harvest to certain age classes and that age restriction is best implemented by antler size, horn curl, or some other measure, then such restrictions could be used. We have not seen any biological reason for proposal #4 and implementation of this moose harvest restriction may result in an increased burden on subsistence hunters.

*–Alaska Regional Office, National Parks Conservation Association*

**Oppose.** The proposed modification to the current Federal subsistence hunting regulations is unnecessary for the conservation of healthy moose populations, it adds complexity to the regulations, and it removes an important element of the rural preference established by the Federal Subsistence Board in accordance with section 802 of Alaska National Interest Lands Conservation Act.

*–Denali National Park & Preserve Subsistence Resource Commission*

**Oppose.** The proposed change would unnecessarily limit subsistence users.

*–Wrangell-St. Elias National Park & Preserve Subsistence Resource Commission*

**No comment.** Proposal is not specific enough.

*–Paxson Fish & Game Advisory Committee*

**STAFF ANALYSIS  
WP06-04**

**ISSUES**

Proposal WP06-04, submitted by Mr. Brian McGuire, of Anchorage, requests that regulatory language for moose harvests in Units 11, 13, and 15 be changed to require that a legal bull moose meet the State of Alaska requirement for a legal bull for those units.

**DISCUSSION**

The proponent states that the current Federal subsistence management regulations allow any bull during the State hunting season, thus increasing the odds of poaching.

**Existing Federal regulation**

§\_\_.25(g)(3) [Currently, there are no regulations (statewide or unit specific) that require antler restrictions to be consistent with State of Alaska antler restrictions.]

**Proposed Federal regulation**

§\_\_.25(g)(3)

*(i) In Units 11, 13, and 15, a legal bull moose shall meet the State of Alaska definition of a legal bull for that hunt.*

**Existing State regulation**

*Unit 11—One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side. Aug. 20–Sept. 20*

*Unit 13—One bull by permit (Tier II) Aug. 15–Aug. 31*

*OR*

*One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side. Sept. 1–Sept. 20*

*Unit 15A—east of Mystery Creek road and the Pipeline Road, and north of the Sterling Hwy—One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side. Aug. 20–Sept. 20*

*OR*

*One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side by permit. Oct. 10–Nov. 10*

*Remainder of Unit 15A—One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side. Aug. 20–Sept. 20*

<i>Unit 15B—that portion bounded by a line running from the mouth of Shantatalik Creek on Tustumena Lake, northward to the headwaters of the west fork of Funny River; then downstream along the west fork of Funny River to the Kenai National Wildlife Refuge boundary; then east along the refuge boundary to its junction with the Kenai River; then eastward along the north side of the Kenai River and Skilak Lake; then south along the western side of Skilak River, Skilak Glacier, and Harding Icefield; then west along the Unit 15B boundary to the mouth of Shantatalik Creek—One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side by permit.</i>	<i>Sept. 1–Sept. 20 OR Sept. 26–Oct. 15</i>
<i>Remainder of Unit 15B—One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side.</i>	<i>Aug. 20–Sept. 20</i>
<i>Unit 15C southwest of a line from Point Pogibshi to the point of land between Rocky and Windy Bays—One bull by permit.</i>	<i>Aug. 20–Sept. 20</i>
<i>Unit 15C south of the south fork of the Anchor River and northwest of Kachemak Bay—One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side.</i>	<i>Aug. 20–Sept. 20</i>
<i>OR</i>	
<i>One antlerless moose by permit (taking of calves or cows accompanied by calves prohibited).</i>	<i>Aug. 20–Sept. 20</i>
<i>Remainder of Unit 15C—One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side.</i>	<i>Aug. 20–Sept. 20</i>

### **Extent of Federal Public Lands**

Federal public lands in Unit 11 are comprised of Wrangell-St. Elias National Park/Preserve (78.9%) and a small portion of the Chugach National Forest (2.1%).

Federal public lands in Units 13 are slightly less than 10% and consists of BLM lands (1.7%), Denali National Park and Wrangell-St. Elias National Preserve lands (5.9%) and Chugach National Forest lands (1.8%).

In Unit 15, 52.4% of the lands are managed by the Kenai National Wildlife Refuge. Less than 1% are NPS and USDA Forest Service managed lands.

### **Customary and Traditional Use Determinations**

In Unit 11 North of the Sanford River—Rural residents of Units 11, 12, 13A, 13B, 13C, 13D, Healy Lake, Chickaloon, and Dot Lake have a positive customary and traditional use determination for moose. In Unit 11 remainder—Rural residents of Units 11, 13A, 13B, 13C, 13D, and Chickaloon have a positive customary and traditional use determination for moose.

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

Unit 13C—Rural residents of Units 12, 13, Healy Lake, Chickaloon, Dot Lake, and Slana have positive customary and traditional use determinations for moose. In Unit 13E—Rural residents of Unit 13, Chickaloon, McKinley Village, Slana and the area between mileposts 216–236 of the Parks Highway have a positive customary and traditional use determination for moose; however, no Federal subsistence priority is provided for the residents of Denali National Park headquarters.

In Unit 15—Rural residents of Ninilchik, Nanwalek, Port Graham and Seldovia have a positive customary and traditional use determination for moose.

### **Regulatory History**

In 1992, the Federal Subsistence Board (Board) added 10 days to the moose season in Unit 11, aligning it with the seasons in adjoining units. In 1999, the Board revised the customary and traditional use determinations and added five days to the start of the Unit 11 moose season. In Unit 11, proposal WP00-20 revised the evidence of sex requirements. Since 2000, no changes have been made to the subsistence hunting seasons or harvest limits for moose in Unit 11.

The Federal moose harvest in Unit 13 has a long history of discussion by the Board, but in the past few years the issues have centered on changing the customary and traditional use determinations. The existing Federal subsistence moose regulations have been in place since 1995, when the season start was changed from Aug. 25 to Aug. 1 providing a 14-day period for subsistence users to harvest a moose without the interference from State Tier II hunters. The current Federal subsistence moose hunting regulations for Unit 13 allow the harvest of one antlered bull by Federal registration permit, Aug. 1–Sept. 20, except in Unit 13(E) where the harvest is by Federal registration permit with only one permit issued per household.

Unit 15 moose regulations have also been the subject of extensive Board and court actions. In July 1995, the Board adopted a positive customary and traditional use determination for Ninilchik, Nanwalek, Port Graham and Seldovia and a harvest season of Aug. 10–Sept. 20 for moose in Units 15B and 15C. In addition, the Board adopted a spike fork/50-inch antler restriction for subsistence hunters in Units 15B and 15C, and authorized a harvest season from Aug. 10–Sept. 20 with the first ten days being reserved for subsistence hunts.

At the end of 1995, Ninilchik Traditional Council submitted three proposals dealing with moose in Unit 15. In Proposal 23, the Traditional Council sought to expand the positive customary and traditional use determination for Ninilchik, Nanwalek, Port Graham and Seldovia for moose into Unit 15A. In Proposal 24, the Traditional Council requested a harvest limit for all of Unit 15 of 1 cow, and a season of Sept. 11–30. In Proposal 25, the Traditional Council requested a moose season for all of Unit 15 from Sept. 11–30, with a harvest limit of one antlered bull. The Southcentral Alaska Subsistence Regional Advisory Council supported Proposal 23, the customary and traditional use determination in Unit 15A for the four communities; opposed proposal 24, allowing a cow season; and supported a modified Proposal 25. The modified Proposal 25 was for an Aug. 15–Sept. 25 season, with a harvest limit of any bull from Aug. 15–19 and Sept. 21–25, and with the spike/fork-50 restriction in effect Aug. 20–Sept. 20. At its May 3, 1996 meeting, the Board rejected all three proposals (FSB 1996a).

The Traditional Council then filed a complaint in the District Court for the District of Alaska. That complaint challenged the Board's decisions to impose the spike fork/50-inch rule on Federally qualified subsistence users and to defer making a customary and traditional use determination in Unit 15A. On June 13, 1996, the District Court upheld the antler restriction, but remanded the customary and traditional use determination for Unit 15A back to the Board. The Court found that the Board had not adequately

explained its rationale for making positive customary and traditional use determinations for Units 15B and 15C, but not doing so for Unit 15A.

On July 16, 1996, the Board took up the issue of the remand and was provided additional information on customary and traditional uses of moose in Unit 15A. The Board reversed its May 3rd decision and made a positive customary and traditional use determination for moose in Unit 15A for Nanwalek, Port Graham, Seldovia and Ninilchik. The Board also provided for a 1996 season in Unit 15A from Aug. 18–Sept. 20 for one bull moose with the spike-fork, or 50-inch antler or with three or more brow tines on either antler (FSB 1996b).

The Kenai Peninsula Outdoor Coalition submitted a Request for Reconsideration (RFR 96-01) on July 29, 1996, seeking a reversal of the Board’s decision. Specifically, the Coalition argued that the Board should abolish the Federal subsistence opportunity for moose in 15A and eliminate the season. On Aug. 14, 1996, the Board met and rejected the RFR (FSB 1996c).

Subsequent to the Board’s actions, the Traditional Council filed an amended complaint in Oct. 1996, re-asserting its challenge to the antler size restriction and claiming that the Board had failed to properly provide for a subsistence priority as required by ANILCA. The District Court ultimately found in favor of the government. The Traditional Council then appealed to the Ninth Circuit Court of Appeals.

The Southcentral Alaska Subsistence Regional Advisory Council submitted a proposal to make permanent the regulations adopted for the 1996 season. This proposal (98-039) had the same season dates, Aug. 18–Sept. 20 and a harvest limit of one antlered bull with the spike-fork or 50-inch restriction. There was no discussion of the length of season in the proposal. This proposal was adopted by the Board at its May 1998 meeting.

The Ninth Circuit Court of Appeals rendered its decision on the Traditional Council’s lawsuit on July 31, 2000. (*Ninilchik Traditional Council et al. v. U.S.*, 227 F. 3d 1186 (9th Cir. 2000)). The Court held that the Board’s interpretation of the term “priority” within the meaning of ANILCA as allowing it to balance the competing aims of subsistence use, conservation, and recreation; while at the same time providing Federally qualified subsistence users with a meaningful use preference, was reasonable. However, the Court also found that the Board had failed to provide any support in the record for its conclusion that the two days reserved for Federally qualified subsistence users in Unit 15A qualified as a priority.

Consequently, in 2001, the Office of Subsistence Management submitted proposal WP01-50, which requested that the dates of the moose harvest season for Unit 15A be changed from Aug. 18–Sept. 20 to Aug. 10–Sept. 20. This change was adopted by the Board in May 2001 and provided a total of 10 days priority to Federally qualified subsistence users before the State’s general seasons start.

In 2005, proposal WP05-07 was submitted, requesting that the moose season for Units 15A remainder, 15B, and 15C be shifted by 10 days to Aug. 20–Sept. 30 from Aug. 10–Sept. 20. This proposal was deferred to the current regulatory cycle by the Board at its May 2005 meeting.

### **Effects of the Proposal**

Within Unit 11, the State antler requirement for moose is; *spike-fork antlers or 50-inch antlers with 3 or more brow tines on at least one side*. The Federal antler requirement with the same season dates is *one antlered bull*. As the State hunting regulations do not apply to National Park lands, the effective area where the difference occurs is on National Preserve Lands and National Forest lands, about 40% of

the unit. If adopted, the Federal harvest limit on the Preserve lands and National Forest lands would be changed to a spike-fork or 50-inch/3 brow tine regulation.

Within Unit 13, the State has two seasons, a Tier II subsistence hunt for *one bull*—Aug. 15–31, and a general hunt for one bull with *spike-fork or 50-inch antlers or antlers with 4 or more brow tines on at least one side*—Sept. 1–20. As the State hunting regulations do not apply to National Park lands, the effective area where the difference occurs is on National Preserve Lands, BLM lands and National Forest lands, less than 5% of the unit. The Federal season is currently for *one antlered bull* Aug. 1–Sept. 20. If adopted, the Federal harvest limit would be changed to a spike-fork or 50-inch/4 brow tine regulation during the period of Sept. 1–20.

Within Unit 15, that State has a number of hunts with a *spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side* regulation. The State also has two draw permit hunts in part of Unit 15B where spike-fork antlers are not legal (the requirement is *50-inch antlers or antlers with 3 or more brow tines on at least one side*) from Sept. 1–Oct. 15. The Federal hunts in Unit 15 all require a bull with *spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side*. If adopted, the Federal harvest limit for part of Unit 15B would change to *50-inch antlers or antlers with 3 or more brow tines on at least one side* after Sept. 1.

Adoption of the proposed regulation will eliminate the more liberal antler restrictions currently available to Federally qualified subsistence moose hunters. Law enforcement officers with the BLM, Glennallen field office have indicated that they will continue patrols and continue to contact both Federally qualified subsistence users and State hunters in the field, regardless of whether or not the proposed regulation is adopted. Currently, the field office's law enforcement has a relatively high percentage of Federal subsistence hunt reporting for moose, and utilize these reports to identify possible unlawful activities, including poaching. The hunt reports include specific locations of kill sites. The field office's law enforcement works closely with State wildlife enforcement, and have not documented any violations of Federally qualified subsistence users taking moose from outside of the Federal Subsistence Hunting Area (Rogers 2005, pers. comm.).

If adopted, the complexity of regulations would be increased. For example; Unit 13 would have a season for any bull Aug. 1–31, and then the proposed antler restrictions would be effective Sept. 1–20.

Adoption of the proposed regulation would also require law enforcement guidelines to address enforcement if a sub-legal moose, taken by Federally qualified subsistence users; i.e., would a hunter that killed a 30" moose be subject to the same penalty as another that killed a 49½" moose? At what point would a seizure of the animal occur? Currently BLM law enforcement is bound to Class A misdemeanors, and unlike the State, does not have the discretion to charge infractions or Class B misdemeanors. Adoption of the proposed regulation would require a public outreach and education process to address the regulation complexities, and to assist in the identification of legal and sub-legal moose. This process would increase the workload for law enforcement and managers, and would result in increased violations by Federally qualified subsistence users (Nelson, R., and B. Honerlaw 2005, pers. comm.).

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<b><i>WP06-05 Executive Summary</i></b>	
<b>General Description</b>	Require that Federally qualified subsistence users seal the skull of any moose taken under Federal subsistence management regulations in Units 11, 13, or 15. <i>Submitted by Mr. Brian McGuire.</i>
<b>Proposed Regulation</b>	<p><i>Unit 11—1 antlered bull by Federal registration permit only. Aug. 20–Sept. 20</i></p> <p><i>Unit 13E—1 antlered bull moose by Federal registration permit only; only 1 permit will be issued per household. Aug. 1–Sept. 20</i></p> <p><i>Unit 13 remainder—1 antlered bull moose by Federal registration permit only. Aug. 1–Sept. 20</i></p> <p><i>Unit 15A—Skilak Loop Wildlife Management Area. No open season.</i></p> <p><i>Units 15A remainder, 15B, and 15C—1 antlered bull with spike-fork or 50-inch antlers or with 3 or more brow tines on either antler; by Federal registration permit only. Aug. 10–Sept. 20</i></p> <p><b><i>In Units 11, 13, and 15, you must present in person to an authorized representative the skull of a moose taken under these regulations for sealing. At the time of sealing, you must also identify the specific place and date of the kill.</i></b></p>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Oppose—6 Support—1</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-05**

**EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose** the proposal. This proposal places an unnecessary restriction on Federally qualified subsistence hunters who already have a high compliance rate for reporting harvest. The proposal does not respond to any specific biological concerns for the units and requiring sealing the skull would be detrimental to Federal subsistence users who utilize the head for its nutritional value. There was significant opposition to this proposal by rural Alaska subsistence users.

**SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose** the proposal. The Southcentral Alaska Subsistence Regional Advisory Council opposed the proposal, stating that there is no public support for the proposal to require sealing of a moose skull taken on Federal public lands. Current reporting requirements are in place for moose harvest.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-05**

**Oppose** the proposal as recommended by the Eastern Interior and Southcentral Alaska Subsistence Regional Advisory Councils.

**Justification**

Requiring Federally qualified subsistence users to seal the skulls places an unnecessary restriction on subsistence hunters, who already have very high compliance rates for harvest reporting. This proposal does not respond to any specific biological concerns in moose populations in Units 11, 13, or 15. Also, this requirement for sealing of the skull would be detrimental to Federally qualified subsistence users who may utilize the head for its nutritional value.

**WRITTEN PUBLIC COMMENTS  
WP06-05**

**Oppose.** The proposal unnecessarily restricts subsistence users. Requiring subsistence users to seal the skulls places an unnecessary restriction on subsistence hunters who already have a very high compliance rate for harvest reporting. This proposal does not respond to any specific biological concern with the moose populations. This sealing requirement of the skull would be detrimental to Federal subsistence users who may utilize the head for its nutritional value.

*–Denali National Park & Preserve Subsistence Resource Commission*

**Oppose.** The proposed change would place unnecessary requirements on subsistence users.

*–Wrangell-St. Elias National Park & Preserve Subsistence Resource Commission*

**Oppose.** We do not support and strongly oppose WP06-05 which would require rural residents to physically go to a Federal or State office to report their harvest and sealing requirement. This proposal would impose additional hardship on rural residents.

–*Ahtna Tene Nene’ Subsistence Committee*

**Oppose.** We do not support this proposal because it is adding more requirements for subsistence users. Most of the users cannot afford to drive [too] far and this would add more cost to them.

–*Mentasta Traditional Council*

**Oppose.** This proposal will not address the problem. A hunter could bring in a skull and say they shot it anywhere.

–*Paxson Fish & Game Advisory Committee*

**Oppose.** Subsistence regulations should be culturally sensitive and not include unnecessary administration actions, such as sealing. Proposal #5 would require the sealing of moose skulls for no apparent biological reason. NPCA recognizes that good harvest data is important to making sound wildlife harvest decisions, but securing that data can be done in a manner far less intrusive and burdensome than sealing moose skulls.

–*National Parks Conservation Association*

**Support.** Sealing requirements are limited statewide and usually apply to bears and furbearers. However, if evidence of abuse is substantial in an area, sealing requirements may be necessary to avoid damage to a resource. If moose are being taken outside Federal public lands, a sealing requirement is justified. Federal managers may choose to specify a portion of the animal other than the skull if this is determined to be impractical for field transportation.

–*Defenders of Wildlife*

**STAFF ANALYSIS**  
**WP06-05**

**ISSUES**

Proposal WP06-05, submitted by Mr. Brian McGuire, Anchorage, Alaska, requests that Federally qualified subsistence users seal the skull of any moose taken under Federal subsistence management regulations in Units 11, 13, or 15.

**DISCUSSION**

The proponent claims that the Federal subsistence hunts have been abused. He indicates that Federally qualified subsistence users are using ATVs and accessing non-Federal lands, where they are harvesting moose using Federal subsistence management regulations.

Subsistence hunters would be required to seal the skulls of their harvested moose. The State does not require sealing of moose anywhere in the State. The proponent states that the proposed regulatory change would help keep the peace between Federally qualified subsistence users and other hunters.

**Existing Federal Regulations**

<i>Unit 11—1 antlered bull by Federal registration permit only.</i>	<i>Aug. 20–Sept. 20</i>
<i>Unit 13E—1 antlered bull moose by Federal registration permit only; only 1 permit will be issued per household.</i>	<i>Aug. 1–Sept. 20</i>
<i>Unit 13 remainder—1 antlered bull moose by Federal registration permit only.</i>	<i>Aug. 1–Sept. 20</i>
<i>Unit 15A—Skilak Loop Wildlife Management Area.</i>	<i>No open season.</i>
<i>Unit 15A remainder, 15B, and 15C—1 antlered bull with spike-fork or 50-inch antlers or with 3 or more brow tines on either antler; by Federal registration permit only.</i>	<i>Aug. 10–Sept. 20</i>

**Proposed Federal Regulations**

<i>Unit 11—1 antlered bull by Federal registration permit only.</i>	<i>Aug. 20–Sept. 20</i>
<i>Unit 13E—1 antlered bull moose by Federal registration permit only; only 1 permit will be issued per household.</i>	<i>Aug. 1–Sept. 20</i>
<i>Unit 13 remainder—1 antlered bull moose by Federal registration permit only.</i>	<i>Aug. 1–Sept. 20</i>
<i>Unit 15A—Skilak Loop Wildlife Management Area.</i>	<i>No open season</i>

*Units 15A remainder, 15B, and 15C—1 antlered bull with spike-fork or 50-inch antlers or with 3 or more brow tines on either antler; by Federal registration permit only. Aug. 10–Sept. 20*

***In Units 11, 13, and 15, you must present in person to an authorized representative the skull of a moose taken under these regulations for sealing. At the time of sealing, you must also identify the specific place and date of the kill.***

**Existing State Regulations**

The existing State regulations for hunting moose in Units 11, 13, and 15 can be found in the **Appendix**. There are no State requirements for sealing of a moose skull.

**Extent of Federal Public Lands**

Federal public lands in Unit 11 are comprised of Wrangell-St. Elias National Park/Preserve (78.9%) and a small portion of the Chugach National Forest (2.1%). Federal public lands in Unit 13 are slightly less than 10% of the total and consist of BLM lands (1.7%), Denali National Park and Wrangell-St. Elias National Preserve lands (5.9%) and Chugach National Forest lands (1.8%). In Unit 15, 52% of the lands are managed by the Kenai National Wildlife Refuge. Less than 1% are NPS and USDA Forest Service managed lands. (See **Unit maps**).

**Customary and Traditional Use Determinations**

<b>Area</b>	<b>Customary and Traditional Use Determination</b>
Unit 11, north of the Sanford River	Residents of Units 11, 12, 13A, 13B, 13C, 13D, Chickaloon, Healy Lake, and Dot Lake.
Unit 11 remainder	Residents of Units 11, 13A, 13B, 13C, 13D, and Chickaloon.
Units 13A and 13D	Residents of Unit 13, Chickaloon, and Slana.
Unit 13B	Residents of Units 13, 20D except Fort Greely, and the residents of Chickaloon and Slana.
Unit 13C	Residents of Units 12, 13 and the residents of Chickaloon, Healy Lake, Dot Lake and Slana.
Unit 13E	Residents of Unit 13, Chickaloon, McKinley Village, Slana, and the area along the Parks Highway between mileposts 216 and 239 (except no subsistence for residents of Denali National Park headquarters).
Unit 15	Residents of Ninilchik, Nanwalek, Port Graham, and Seldovia.

**Regulatory History**

*Federal Regulations*

In 1992, the Federal Subsistence Board (Board) added 10 days to the moose season in Unit 11, aligning it with the seasons in adjoining units. In 1999, the Board revised the customary and traditional use

determinations and added five days to the start of the Unit 11 moose season. Since 2000, no changes have been made to the subsistence hunting seasons or harvest limits for moose in Unit 11.

The Federal moose harvest in Unit 13 has a long history of discussion by the Board, but in the past few years the issues have centered on changing the customary and traditional use determinations. The existing Federal subsistence moose regulations have been in place since 1995, when the season start was changed from Aug. 25 to Aug. 1 providing a 14-day period for subsistence users to harvest a moose without the interference from State Tier II hunters. The current Federal subsistence moose hunting regulations for Unit 13 allow the harvest of one antlered bull by Federal registration permit, Aug. 1–Sept. 20, except in Unit 13E, where the harvest is by Federal registration permit with only one permit issued per household.

In July 1995, the Board adopted a harvest season of Aug. 10–Sept. 20 for moose in Units 15B and 15C. In addition, the Board adopted a spike fork/50-inch antler restriction for subsistence hunters in Units 15B and 15C, and authorized a harvest season from Aug. 10–Sept. 20, with the first ten days reserved for subsistence hunts. In 2001, the Board revised the dates of the moose harvest season for Unit 15A from Aug. 18–Sept. 20 to Aug. 10–Sept. 20. This change provided a total of 10 days priority to Federally qualified subsistence users before the State's general seasons start.

In 2005, proposal WP05-07 was submitted, requesting that the moose season for Units 15A remainder, 15B, and 15C be shifted by 10 days to Aug. 20–Sept. 30 from Aug. 10–Sept. 20. This proposal was deferred to the current regulatory cycle by the Board at its May 2005 meeting.

### *State Regulations*

In Unit 11 either-sex bag limits were in effect until 1974, when the harvesting of cows was prohibited. Between 1975 and 1989, fall seasons remained Sept. 1–20. During the spring 1993 Alaska Board of Game meeting, the Unit 11 season was changed to Aug. 20–Sept. 20 and the bag limit was changed to 1 bull with spike-fork antlers or antlers with a minimum 50-inch width or 3 brow tines. This action aligned the State moose season and bag limit in most game management units on the road system in Southcentral Alaska (Tobey 2004b).

Historically for the State, Unit 13 has been an important area for moose hunting in Alaska. State season dates are Sept. 1–20 for the State's general moose hunt. The bag limit is one bull with a spike/fork antler on one side, or four brow tines on one side, or a spread of 50 inches or more. A Tier II subsistence permit hunt was established in 1995. Permits are limited to one per household. The Tier II hunting season is Aug. 15–31.

A selective harvest strategy with a spike/fork-50-inch bag limit was initiated on the Kenai Peninsula in 1987 (Selinger 2004). The general open season in Unit 15A was Aug. 20–Sept. 20. In spring of 1995, the Alaska Board of Game approved an archery season for Aug. 10–17. Archery hunters were restricted to the same bag limit used during the general season. The bag limit was one bull with spike/fork or 50-inch antlers or at least three brow tines on at least one antler. A drawing hunt also occurred for the period of Oct. 10–Nov. 17. The Skilak Loop Wildlife Management Area was closed to all moose hunting. Most of the hunting within Unit 15B is by drawing permit only (Unit 15B East). Unit 15B East is managed as an area where hunters are able to view and harvest large-antlered bulls through a drawing permit system (McDonough 2004a). The general season in Unit 15C has been Aug. 20–Sept. 20 since 1993. Since 1987 the bag limit has been one bull with a spike or fork on at least one antler, or 50-inch antlers, or antlers with three or more brow tines on at least one side (McDonough 2004b).

## Biological Background

An accurate population estimate is not available for all of Unit 11 because a complete census has never been conducted. Unit 11 has relatively high numbers of brown bears and wolves. In areas with low calf:cow ratios and abundant bears and wolves, predation on calves has been shown to be an important limiting factor. Fall surveys have shown chronically low calf:cow ratios in Unit 11. Because of this, the moose population may remain relatively stable at the current low density for a long period.

The moose population in Unit 13 has fluctuated broadly since the 1940s, with the most recent peak in 1987 (Tobey 1998). Moose numbers declined an estimated 21% between 1988-94. A unit-wide total for moose is not available for Unit 13. Population declines in the Nelchina Basin were affected most by the severity of winters, a decline in the adult cow population and low calf survival (Testa 2001). The unit-wide decline seemed to stop in 2002, with slight increases being observed through 2005 (Kelleyhouse 2005, pers. comm.). The Unit 13 moose population increased slightly during the last two years of this reporting period. Two important factors contribute to this change: increased calf survival and overwinter moose survival. The winters of 2001/02 and 2002/03 were very mild, both in snowfall and temperature. During mild winters, there is little natural mortality, and predation rates decline as wolves have a more difficult time killing moose (Tobey 2004b). Survey data for 2004 and 2005 showed an average bull:cow ratio for the continuous count areas to be about 27 bulls:100 cows (Kelleyhouse 2005, pers. comm.).

In Unit 15A, data indicate a decline of approximately 39% from 1990 to 2001; however, it is believed that most of this decline occurred during the severe winters of 1998/99 and 1999/2000 (Selinger 2004). The winters of 2000/01 and 2002/03 were relatively mild and should have been favorable for moose survival and production. A Feb. 2001 census of the 650.4 square miles of suitable moose habitat in Unit 15B estimated the population at 958 moose (McDonough 2004a). During the winter of 2001/02, a census conducted in lowland portions of Unit 15C produced an estimate of 2,981 moose (McDonough 2004b). There were likely additional moose in the mountainous portion of Unit 15C outside of the census area.

## Harvest History

The average harvest for moose over the past three years in Unit 11 was 31 moose, with 29 moose taken in 2003/04 (ADF&G 2005). An additional nine moose were taken in 2003/04 under Federal subsistence management regulations. The Federal harvest for 2004 was 26 moose, and for 2005 it was 22 moose (FWS 2005). Many hunters receive both State moose harvest tickets and Federal subsistence moose permits. Unfortunately, there may be some double reporting, in which a hunter fills in both the harvest ticket and Federal permit with identical data, and harvests and effort data are inflated.

Based on harvest and hunting effort figures for Unit 13, there has been a large decline in both the number of moose harvested and the number of individuals reporting hunting. Over the past three years, the harvest average was 502 moose, with a steady increase each year to 558 animals taken in 2003/04 (ADF&G 2005). In 2004, 510 moose were taken in the general hunt and 51 animals were taken in the Tier II hunt (Kelleyhouse 2005, pers. comm.). An additional 50 moose were taken in 2004 under Federal subsistence management regulations (FWS 2005). The 2005 Federal harvest was 51 moose.

During the last three years the annual moose harvest in Unit 15 averaged 553 moose, with 572 taken in 2003/04 (ADF&G 2005). Three moose were taken in 2003, four moose in 2004, and none in 2005 under Federal subsistence management regulations (FWS 2005).

## Effect of the Proposal

This proposal does not respond to any specific biological concerns in moose populations in Units 11, 13, or 15. While there are serious low-density biological issues with moose in both Units 11 and 13, this proposal will not solve the proponent's concern that some moose may be taken by Federally qualified subsistence users outside of Federal public lands. Although there is some likelihood of this occurring, law enforcement officers indicate that it is not a significant problem in Unit 13 where the proponent has concerns (Nelson, 2005, pers. comm.). All Federal hunts in the subject units are only by Federal registration permit with mandatory harvest reporting. The report rate for these hunts exceeded 89% and ranged from a low of 82.89% to a high of 100%. Sealing with in person reporting would not be cost effective in achieving 100% reporting in these hunt areas and would impose an unnecessary administrative burden on Federally qualified subsistence users and administrators. Additionally, some subsistence hunters leave the skull in the field rather than bring it in. This proposal is also detrimental to Federally qualified subsistence users who cook the head in the field or immediately after they return from the field.

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## APPENDIX

## State of Alaska Harvest Limits, Permits, and Seasons

## Moose in Units 11, 13, and 15

Bag Limits	Required Ticket or Permit Type	Open Season
<b>Unit 11—Residents &amp; Nonresidents:</b> 1 antlered bull with spike-fork or 50-inch antlers or with 3 or more brow tines on at least one side.	Harvest	Aug. 20–Sept. 20
<b>Unit 13</b> —1 bull by permit	Tier II	Aug. 15–Aug. 31
<b>OR Residents:</b> 1 bull with spike-fork or 50-inch antlers or with 4 or more brow tines on at least one side.	Harvest	Sept. 1–Sept. 20
<b>Unit 15A</b> , the Skilak Loop Management Area		No open season
<b>Unit 15A</b> , east of Mystery Creek Road and the Pipeline Road, and north of the Sterling Highway: <b>Residents &amp; Nonresidents:</b> One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side, by bow and arrow only	Harvest	Aug. 10–Aug. 17
OR one bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side	Harvest	Aug. 20–Sept. 20
OR bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side by permit DM522	Drawing	Oct. 20–Nov. 20
<b>Remainder of Unit 15A: Residents &amp; NonResidents:</b> One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side, by bow and arrow only	Harvest	Aug. 10–Aug. 17
OR one bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side	Harvest	Aug. 20–Sept. 20
<b>Unit 15B</b> , that portion bounded by a line running from the mouth of Shantatalik Creek on Tustumena Lake, northward to the headwaters of the west fork of Funny River; then downstream along the west fork of the Funny River to the Kenai Nation Wildlife Refuge Boundary; then east along the refuge boundary to its junction with the Kenai River; then eastward along the north side of the Kenai River and Skilak Lake; then south along the western side of Skilak river, Skilak Glacier, and Harding Icefield; then west along the unit <b>15B</b> boundary to the mouth of Shantatilak Creek: <b>Residents &amp; NonResidents:</b> One bull with 50-inch antlers or antlers with 3 or more brow tines on at least one side by permit DM530, DM 532, DM534, DM536, OR DM538	Drawing	Sept. 1–Sept. 20
OR DM 531, DM533, DM535, DM 537, DM539	Drawing	Sept. 26–Oct. 15
<b>Remainder of 15B: Residents &amp; NonResidents:</b> One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side, by bow and arrow only	Harvest	Aug. 10–Aug. 17
OR one bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side	Harvest	Aug. 20–Sept. 20

<b>Bag Limits</b>	<b>Required Ticket or Permit Type</b>	<b>Open Season</b>
<b>Unit 15C</b> , southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay: Residents: One Bull by permit TM549	Tier II	Sept. 1–Sept. 30
<b>Nonresidents:</b>		No open season
<b>Unit 15C</b> , south of the south fork of the Anchor River and northwest of Kachemak Bay: <b>Residents &amp; NonResidents:</b> One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side	Harvest	Aug. 20–Sept. 20
OR One antlerless moose by permit DM549: the taking of calves or cows accompanied by calves is prohibited	Drawing	Aug. 20–Sept. 20
<b>Remainder of Unit 15C: Residents &amp; NonResidents:</b> One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side	Harvest	Aug. 20–Sept. 20

<b>WP06-13 Executive Summary</b>	
<b>General Description</b>	Requests that the Federal goat hunting closure in Unit 6D (subarea RG245) be eliminated and that a season be established from Aug. 20–Jan. 31 allowing one goat total to be harvested by Federal registration permit. <i>Submitted by the Office of Subsistence Management.</i>
<b>Proposed Regulation</b>	<p><b>Unit 6D—Goat</b></p> <p><i>Unit 6D (subareas RG242, RG243, RG244, <b>RG245</b>, RG249, RG266 and RG252 only)—1 goat by Federal registration permit only. In each of the Unit 6D subareas, goat seasons will be closed when harvest limits for that subarea are reached. Harvest quotas are as follows: RG242—2 goats, RG243—4 goats, RG244—2 goats, <b>RG245</b>—1 goat, RG249—4 goats, RG266—4 goats, RG252—1 goat</i></p> <p><i>Unit 6D (subarea RG245)—Federal public lands No open season are closed to all taking of goats.</i></p>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support with modification.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

<b>WP06-14 Executive Summary</b>	
<b>General Description</b>	Requests that the Federal goat hunting closure in Unit 6D (subarea RG245) be eliminated and the harvest of one goat by State registration permit be allowed under State regulations. <i>Submitted by the Alaska Department of Fish and Game.</i>
<b>Proposed Regulation</b>	<p><i>Unit 6D (subarea RG245)—Federal public lands are closed to all taking of goats. 1 goat by State registration permit only.</i></p> <p style="text-align: right;"><i>No open season</i></p>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Take no action.</b>

*continued on next page*

<i>WP06-14 Executive Summary</i>	
<b>Interagency Staff Committee Recommendation</b>	<b>Take no action.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-13/14**

**SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL:**

WP06-13

**Support with modification.** The Southcentral Alaska Subsistence Regional Advisory Council supports the proposal with the modification to remove the Federal closure, but not establish a season or harvest limit for goat in Subarea 245. The opportunity to harvest goat should be addressed by region, additionally, wildlife proposals should originate from the subsistence users and should not come from the Office of Subsistence Management.

The modified regulations should read:

<i>Unit 6D (subareas RG242, RG243, RG244, RG249, RG266 and RG252 only)—1 goat by Federal registration permit only. In each of the Unit 6D subareas, goat seasons will be closed when harvest limits for that subarea are reached. Harvest quotas are as follows: RG242—2 goats, RG243—4 goats, RG244—2 goats, RG249—4 goats, RG266—4 goats, RG252—1 goat</i>	<i>Aug. 20—Jan. 31</i>
<i>Unit 6D (subarea RG245)—Federal public lands are closed to all taking of goats.</i>	<i>No open season</i>

WP06-14

**Take no action**, based on the action taken on WP06-13.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATIONS**  
**WP06-13/14**

WP06-13

**Support with modification**, as recommended by the Southcentral Alaska Subsistence Regional Advisory Council, to remove the Federal closure, but not establish a season or harvest limit for goat in Subarea 245.

<i>Unit 6D (subareas RG242, RG243, RG244, RG249, RG266 and RG252 only)—1 goat by Federal registration permit only. In each of the Unit 6D subareas, goat seasons will be closed when harvest limits for that subarea are reached. Harvest quotas are as follows: RG242—2 goats, RG243—4 goats, RG244—2 goats, RG249—4 goats, RG266—4 goats, RG252—1 goat</i>	<i>Aug. 20—Jan. 31</i>
<i>Unit 6D (subarea RG245)—Federal public lands are closed to all taking of goats.</i>	<i>No open season</i>

WP06-14

**Take no action** as recommended by the Southcentral Alaska Subsistence Regional Advisory Council.

**Justification**

The goat population had declined from 44 goats in 1986 to 25 goats in 1992 prompting the original closure (FSB 1993). The current goat population in this subarea has grown significantly, from 25 animals to over 150 animals, since the original closure. In 2000, the goat population in subarea RG245 had grown to a point where a State harvest was allowed on non-Federal lands. The recommended action on Proposal WP06-13 will provide harvest opportunity under State regulations for all hunters using a State registration permit.

## STAFF ANALYSIS WP06-13/14

### ISSUES

Proposal WP06-13, submitted by the Office of Subsistence Management, requests that the Federal goat hunting closure in Unit 6D (subarea RG245—registration goat subarea 245) be eliminated and that a season be established from Aug. 20–Jan. 31 allowing one goat total to be harvested by Federal registration permit.

Proposal WP06-14, submitted by the ADF&G requests that the Federal goat hunting closure in Unit 6D (subarea RG245) be eliminated and the harvest of one goat by State registration permit be allowed under State regulations.

### DISCUSSION

In its Federal Wildlife Closure Review (WCR-05-26) for this hunt area, the Office of Subsistence Management recommended that a proposal should be initiated to modify or eliminate this closure, stating that “This Federal closure should receive a more thorough review to examine the potential to provide a harvest opportunity for Federally qualified rural residents and the potential to modify or eliminate the closure to non-Federally qualified hunters, based on the increase in the goat population.”

The goat population within RG245 has increased since the closure of this area in 1993. The Alaska Board of Game reestablished the State hunt, on non-Federal lands, in 2000. The removal of the closure and the reestablishment of this Federal hunt would provide additional opportunity for Federally qualified subsistence users.

#### Existing Federal Regulation

##### Unit 6D–Goat

*Unit 6D (subarea RG245)—Federal public lands are closed to all taking of goats. No open season*

#### Proposed Federal Regulation

##### Unit 6D–Goat

##### WP06-13

*Unit 6D (subareas RG242, RG243, RG244, **RG245**, RG249, RG266 and RG252 only)—1 goat by Federal registration permit only. In each of the Unit 6D subareas, goat seasons will be closed when harvest limits for that subarea are reached. Harvest quotas are as follows: Aug. 20—Jan. 31*

*RG242—2 goats, RG243—4 goats, RG244—2 goats, **RG245**—1 goat, RG249—4 goats, RG266—4 goats, RG252—1 goat*

~~Unit 6D (subarea RG245)–Federal public lands are closed to all taking of goats.~~ *No open season*

**WP06-14**

*Unit 6D (subarea RG245)–Federal public lands are closed to all taking of goats. 1 goat by State registration permit only.* *No open season*

**Existing State Regulation**

<b>Species and Bag limits–Unit 6D Goat</b>	<b>Permit/Ticket Required</b>	<b>Open Season</b>
<p><i>One goat, by permit available in person in Anchorage, Cordova, Fairbanks, Glenallen, Palmer, Soldontna, and Valdez beginning Aug. 1</i></p> <p><i>Taking of nannies with kids is prohibited. Taking of males is encouraged.</i></p>	<p><i>RG 242-266</i></p>	<p><i>Sept. 15–Jan. 31</i></p>

**Extent of Federal Public Lands**

Federal public lands comprise approximately 67% of the lands in Unit 6D. The Chugach National Forest manages 67% of the lands in the unit, and BLM manages less than 1% of the lands in the unit (**Map 1**).

**Customary and Traditional Use Determinations**

The rural residents of Units 6C and 6D have a positive customary and traditional use determination for goats in Unit 6D.

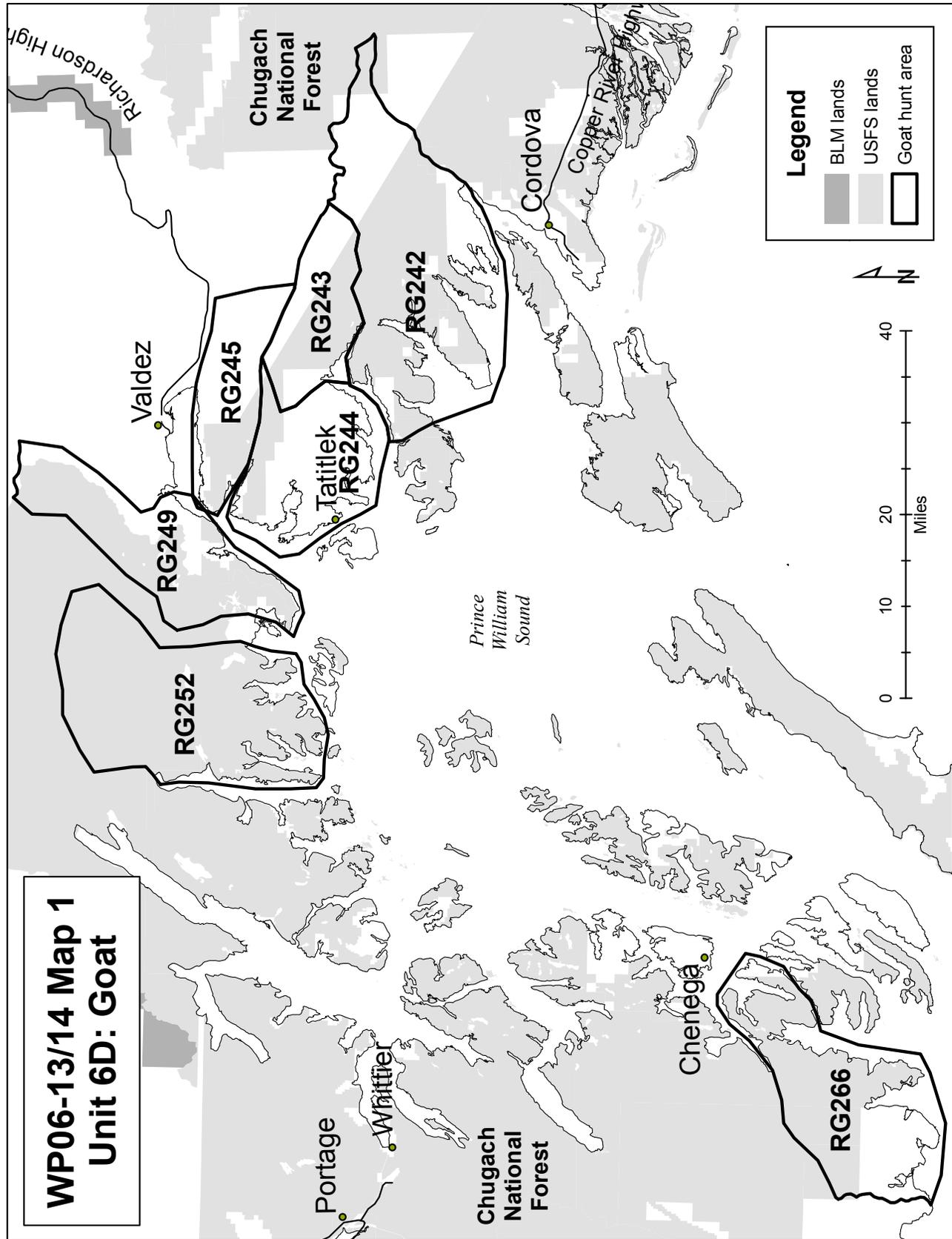
**Regulatory History**

Subareas in Unit 6D were adopted from the State regulations and placed into Federal subsistence management regulations. The Federal Subsistence Board initially instituted this closure by special action effective Nov. 4, 1992, based on a 57% decline in the goat population between 1989 and 1991. At its April 1993 meeting, the Board adopted Proposal #33, placing the closure into permanent regulations until such time that the population has recovered. The closure has remained in place since then.

**Biological Background**

The goat population in Subarea RG245 appeared to be stable from 1986 through 1988, then in 1992 it dropped sharply to less than half. A 1986 survey revealed 44 goats, 11 of them were kids. In 1989, 44 goats were counted, 6 of them were kids. An Aug. 1992 survey located only 25 goats, 3 of which were kids. The biologists who conducted the survey believed that all the goats in the population were seen. The reduction in the population by 57% in only a 3–year timeframe and the recruitment rate of only 3 kids:22 adults, indicated a serious problem. The population was believed to be isolated from other goat herds, therefore recruitment to or from other herds was unlikely.

Based on survey efforts in 2003 the goat population in Subarea RG245 was estimated to be 152 animals. The management objectives for goats in all of Unit 6 are to: maintain a minimum population of 2,400



goats and to achieve a minimum of 70% males in the harvest. There are no specific Subarea RG245 management objectives.

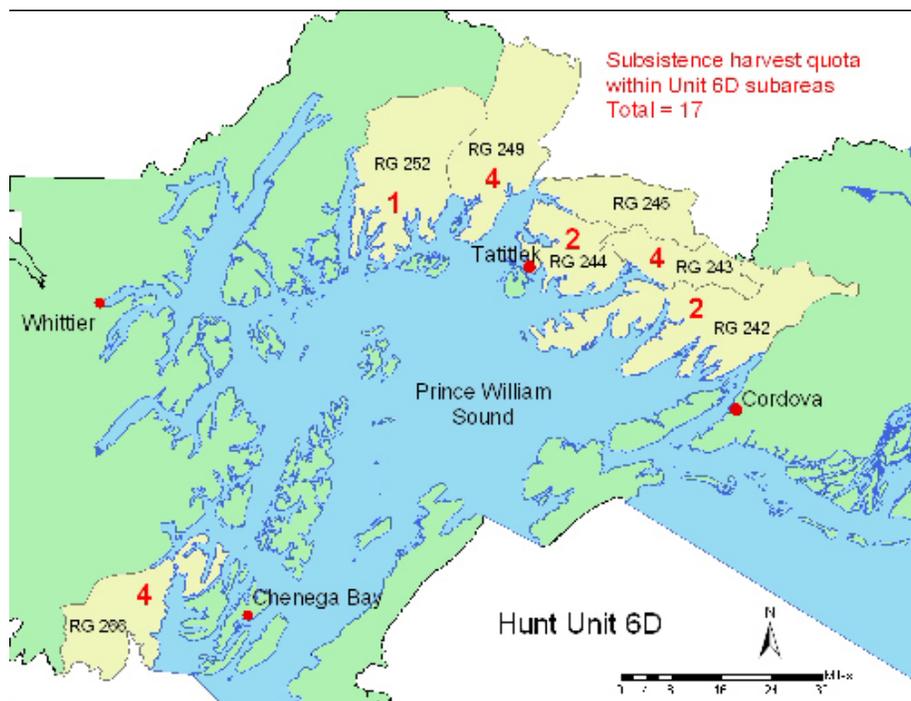
The last survey conducted in RG245 was conducted in 2003 and was only a partial survey. The results can be found in **Table 1**.

**Table 1.** Subunit RG245 summer/fall mountain goat composition counts and estimated population size, 1998–2003 (Crowley 2004).

Year	Survey Coverage	Older Goats	Kids	Kids :100 older goats	Total goats observed	Estimated population size
1998	None	–	–	–	–	102
1999	Partial	42	4	10	99	109
2000	None	–	–	–	–	117
2001	None	–	–	–	–	124
2002	None	–	–	–	–	132
2003	Partial	61	16	26	131	152

**Harvest History**

Subsistence mountain goat harvest in Unit 6D is light. Only 5 mountain goats have been reported harvested between 2001 and 2005. This averages to 1 mountain goat out of a quota of 17 mountain goats per year (Burcham 2005, pers. comm.). Even if there may be additional unreported kill by qualified subsistence users, this represents a largely unused Federal subsistence quota of 17 mountain goats annually (Burcham 2005, pers. comm.). Additionally, the distribution of subsistence mountain goat quotas (**Figure 1** and **Map 1**) provides subsistence harvest opportunity within close proximity of the populations of Chenega Bay, Cordova, and Tatitlek (Burcham 2005, pers. comm.).



**Figure 1.** Distribution of Federal Subsistence mountain goat harvest quotas in Unit 6D (Burcham 2005, pers. comm.)

There has been no reported harvest of goats in subunit RG245 on Federal public lands since the closure was initiated. However, there has been some harvest under State regulations on non-Federal lands in Subarea RG245 (**Table 2**).

Year	Permits issued	Number who did not hunt	Males harvested	Females harvested	Maximum allowable harvest <sup>1</sup>
1994–1999	None	–	–	–	–
2000	30	14	4	1	6
2001	24	11	5	0	6
2002	31	10	5	0	7
2003	–	–	1	3	5*

<sup>1</sup> Harvest is managed using Weighted harvest: males counted as 1, females counted as 2, and unknowns counted as 2.  
\* Includes one unknown sex animal

### Current Events Involving the Species

At the Mar. 14–16, 2006 Southcentral Alaska Subsistence Regional Advisory Council meeting, the Council discussed the goat season, harvest limits and the Federal Closure for Subarea RG245. The Council felt that it was appropriate to remove the closure; however the Council stated that a season and harvest limit was not justified at this time. The Council stated that the State permit system is more appropriate and many of the goats taken in the area are harvested on State lands. If a season and harvest limit is to be established on Federally managed lands, the Council stated that the request should come from a Federally qualified user and not from the Office of Subsistence Management. The Council voted to support WP06-13 with modification, to remove the closure, but not to establish a season or harvest limit for Subarea RG245. Based on the action taken on WP06-13 the Council voted to take no action on WP06-14.

### Effects of the Proposal

The current State harvest quota for RG245, 7 mountain goats, has been met by nonsubsistence hunters in 4 of the 5 seasons that the season has been open (Burcham 2005, pers. comm.). At this time, there have been no requests from Federally qualified subsistence users to add a subsistence harvest quota in subarea RG245 (Burcham 2005, pers. comm.).

The goat population within Subarea RG245 has increased from 25 goats when the closure was placed in permanent regulation in 1993 to over 153 in 2003. The removal of the closure and the reestablishment of a Federal hunt will provide additional opportunity for Federally qualified subsistence users.

A small annual harvest from this managed population should have no significant negative impacts on the goat population.

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<b>WP06-15 Executive Summary</b>	
<b>General Description</b>	Requests that same-day airborne hunting be allowed for moose in Unit 6C. <i>Submitted by Steven Ray Barnes from Cordova.</i>
<b>Proposed Regulation</b>	<p><b>Unit 6C—Moose</b></p> <p>§ ____ .26(b) <i>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:</i></p> <p><i>(16) Taking or assisting in the taking of ungulates, bear, wolves, wolverine, or other furbearers before 3:00 a.m. following the day in which airborne travel occurred (except for flights in regularly scheduled commercial aircraft); however, this restriction does not apply to subsistence taking of deer, the setting of snares or traps, or the removal of furbearers from traps or snares; except that</i></p> <p><i>(A) You may hunt moose the same day you have flown in Unit 6C. The plane must be fully stopped and you must be clear of the plane to shoot a moose.</i></p>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Oppose-2.</b>

### REGIONAL ADVISORY COUNCIL RECOMMENDATION WP06-15

#### SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Oppose.** The Southcentral Alaska Subsistence Regional Advisory Council opposed the proposal based on broad public opposition. Success rate for Unit 6C moose harvest is 100% since this area is a registration hunt only. Allowing same-day airborne hunting will set an undue precedent for other Units.

### INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-15

**Oppose** the proposal as recommended by the Southcentral Alaska Subsistence Regional Advisory Council.

## Justification

Under current Federal subsistence management regulations, Federally qualified subsistence users have little problem harvesting a moose. Success is already 100%. This, coupled with the fact that most animals are taken well before the end of the season, indicates that there is no need to increase hunt efficiency by allowing same-day airborne hunting.

Same-day airborne hunting of moose may create potential competition between airborne hunters and land-based subsistence moose hunters. Same-day airborne hunting may also cause disruption of land-based hunts, while flying over looking for a moose to harvest. Land-based subsistence moose hunters may also perceive airborne hunters as having an unfair advantage.

Adoption of this proposal could create significant enforcement problems, as it would allow airborne hunting on USDA Forest Service lands, but not on State controlled lands.

Passage of this proposal would create a precedent by linking subsistence hunting with airborne hunting. Allowing same-day airborne hunting for subsistence on Federal public lands would be highly controversial and draw attention of people opposed to airborne hunting, conservation groups and other interests.

## WRITTEN PUBLIC COMMENTS WP06-15

**Oppose.** Allows same-day airborne moose hunting in Unit 6C, Cordova area (1) We believe that the use of aircraft does not meet the customary and traditional subsistence use of resources test under Section 803 of Title VIII of ANILCA; (2) Allowing improved access to hunt moose in Unit 6C is not justified because sufficient access is available by using the Copper River Highway road system. Other subunits in Unit 6 have no roads at all; (3) The language of the proposal requiring a hunter to be “clear of the plane” is vague and unenforceable; [and] (4) State regulations have never allowed same-day airborne moose hunting. This exception would be unprecedented statewide. The use of aircraft has never been considered essential to providing for a reasonable subsistence moose hunting opportunity.

*–Alaska Defenders of Wildlife*

**Oppose.** This committee agrees with the author that there is no resource concern as this hunt is fully utilized with harvest success near 100% every year. The concerns we have deal with enforcement with neighboring units with different same-day airborne restrictions by Federal and State law enforcement, fair chase, ability for aircraft to target extremely large breeding bulls in unusually high numbers.

*–Copper River/Prince William Sound Advisory Committee*

**STAFF ANALYSIS  
WP06-15**

**ISSUES**

Proposal WP06-15, submitted by Steven Ray Barnes from Cordova, requests that same-day airborne hunting be allowed for moose in Unit 6C.

**DISCUSSION**

This proposal would allow Federally qualified subsistence users to hunt moose while same-day airborne. The proponent believes that there are no harvest concerns to the resource and no advantage gained over other hunters if this proposal was adopted. The proponent believes this proposal would help the quality of meat and quality of the hunt. The proponent also states, same-day airborne harvest of moose “would broaden the way of harvesting a moose for the better.” The proponent also believes a hunter who is lucky enough to get drawn for the subsistence hunt should be able to harvest a moose as he chooses.

**Existing Federal Regulation****Unit 6C—Moose**

*Unit 6C—1 cow by Federal registration permit only* *Sept. 1–Oct. 31*

*Unit 6C—1 bull by Federal registration permit only* *Sept. 1–Dec. 31*

*(In Unit 6C, only one moose permit may be issued per household. A household receiving a State permit may not receive a Federal permit. The annual harvest quota will be announced by the USDA Forest Service, Cordova Office, in consultation with ADF&G. The Federal harvest allocation will be 100% of the cow permits and 75% of the bull permits.)*

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

...

*(16) Taking or assisting in the taking of ungulates, bear, wolves, wolverine, or other furbearers before 3:00 a.m. following the day in which airborne travel occurred (except for flights in regularly scheduled commercial aircraft); however, this restriction does not apply to subsistence taking of deer, the setting of snares or traps, or the removal of furbearers from traps or snares;*

Additionally, the Airborne Hunting Act (50 CFR, Part 19) prohibits, while airborne in any aircraft, shooting or attempting to shoot for the purpose of capturing or killing any wildlife. It also prohibits use of an aircraft to harass any wildlife.

*50 CFR Part 19 § 19.11 General Prohibitions*

*(a) Except as otherwise authorized by the Fish and Wildlife Act of 1956 as amended, no person shall: (1) While airborne in any aircraft shoot or attempt to shoot for the purpose of capturing or killing any wildlife; (2) Use an aircraft to harass any wildlife; or (3) Knowingly participate*

*in using an aircraft whether in the aircraft or on the ground for any purpose referred to in paragraph (a) (1) or (2) of this section. (b) The acts prohibited in this section include, but are not limited to, any person who: (1) Pilots or assists in the operation of an aircraft from which another person shoots or shoots wildlife while airborne, or (2) While on the ground takes or attempts to take any wildlife by means, aid, or use of an aircraft.*

## Proposed Federal Regulations

### Unit 6C—Moose

*Unit 6C—1 cow by Federal registration permit only* *Sept. 1–Oct. 31*

*Unit 6C—1 bull by Federal registration permit only* *Sept. 1–Dec. 31*

*(In Unit 6C, only one moose permit may be issued per household. A household receiving a State permit may not receive a Federal permit. The annual harvest quota will be announced by the USDA Forest Service, Cordova Office, in consultation with ADF&G. The Federal harvest allocation will be 100% of the cow permits and 75% of the bull permits.)*

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

*(16) Taking or assisting in the taking of ungulates, bear, wolves, wolverine, or other furbearers before 3:00 a.m. following the day in which airborne travel occurred (except for flights in regularly scheduled commercial aircraft); however, this restriction does not apply to subsistence taking of deer, the setting of snares or traps, or the removal of furbearers from traps or snares; **except that***

***(A) you may hunt moose the same day you have flown in Unit 6C. The plane must be fully stopped and you must be clear of the plane to shoot a moose.***

## Existing State Regulation

### General Hunting Restrictions—Big Game Hunting Restrictions:

*Same-day airborne: You may not hunt or help someone else take big game until 3:00 am the day following the day you have flown. This section does not apply if you have flown on a regularly scheduled commercial or commuter airplane. You may hunt deer the same-day airborne, and you may hunt caribou the same day you have flown, Jan. 1–April 15 in Units 9B, 17B, that portion of 17C east of the Nushagak River, Unit 22 (where caribou season is open), and in Unit 8 all year, provided the hunter is 300 feet from the airplane.*

## Extent of Federal Public Lands

Federal public lands comprise approximately 64% of Unit 6C and are managed by the Chugach National Forest.

## **Customary and Traditional Use Determinations**

The rural residents of Units 6A, 6B, and 6C have a positive customary and traditional use determination for moose in Unit 6C.

## **Regulatory History**

Federal subsistence management regulations regarding same-day airborne hunting became effective on July 1, 1990, when the Federal government took over management of subsistence harvest of fish and wildlife resources on Federal public lands in Alaska. Federal subsistence management regulations were derived from State regulations (5AAC 92.090) which prohibited the same-day airborne hunting of big game, except deer.

The Federal Subsistence Board (Board) has reviewed numerous wildlife proposals requesting same-day airborne hunting by Federally qualified subsistence users. All of these proposals were rejected by the Board. Same day hunting of deer on non-National Park Service public lands has been legal since the Federal government took over management of subsistence on Federal public lands on July 1, 1990.

The USDA Forest Service currently does not have any regulations related to the use of aircraft same-day airborne for hunting moose, but is governed by the provisions of the Airborne Hunting Act.

Because Federal public lands are not closed, hunters currently have the opportunity to harvest moose on Federal public lands under both the existing State and Federal seasons. In 2000, a Federal subsistence proposal was submitted by the Native Village of Eyak to establish a new Federal subsistence harvest in both Units 6B and 6C, with the season dates of Aug. 15–Dec. 31. A compromise was reached by the Board (FSB 2000) and ADF&G, moving the five cow permits into the Federal subsistence system, but leaving the rest of the State managed moose harvest in place for both Units 6B and 6C.

In 2002, Proposal WP02-48 was submitted to the Board. It requested an extension to the Federal moose harvest in Unit 6C to split the bull permit allocation 75% Federal/25% State, with the restriction of one Federal registration permit per household. At its May 2002 Board meeting, the Board adopted this proposal.

## **Biological Background**

Moose populations in Unit 6C originated from transplants of 24 moose calves to the western Copper River Delta in Unit 6C, 1949 to 1958, through a cooperative effort of the Cordova Chapter of the Isaac Walton League, other local citizens and FWS (Nowlin 1998). This introduced population rapidly expanded eastward, reaching a record high of 1,600 moose in 1988 (Griese 1990). The first hunt was held in 1960. A hunt has occurred yearly since 1962, managed through harvest tickets, drawing permits, registration permits or Tier II permits. The State's current Unit 6C hunt has been a drawing permit hunt since 1984 (Stratton 1989).

During the 1990s, the Copper River/Prince William Sound Advisory Committee, local residents, and ADF&G developed a Cooperative Moose Management Plan. The resulting plan encompassed long-term needs of the community (Cordova), population biology, maximizing hunting opportunity, and the variable access in Unit 6. The current management strategies in Unit 6 are a direct result of the Moose Management Plan. Current cooperative moose management objectives are to maintain a post-hunting population of 400 moose by 2006 with a bull:cow ratio of 15:100 for Unit 6C (Crowley 2004). In Unit 6C, the population is currently estimated at 350 moose, and is considered stable (Crowley 2004).

## Harvest History

Moose harvest in Unit 6C takes place under State and Federal regulations. The total harvest for the unit is determined through the cooperation of the USDA Forest Service and ADF&G. Of that total harvest, 75% of the bull permits are issued through a Federal subsistence drawing, while the remaining 25% of bull permits are issued through a State drawing. All cow permits and a bull permit for the Native Village of Eyak Memorial/Sobriety Potlatch also fall under Federal subsistence management. In 2004 and 2005, a total of 35 bull permits were issued in Unit 6C, 26 permits through the Federal drawing and 9 through the State drawing (Burcham 2005, pers. comm.).

Hunter success is nearly 100% for the Federal and State hunts in Unit 6C. Federal subsistence harvest success in Unit 6C has been nearly 100% since the hunt started in 1999 (Burcham 2005, pers. comm.). In the 2005 season, however, two out of 36 Federal permits were not filled by hunters who drew permits but left town during the season (Burcham 2005, pers. comm.).

Currently, the Federal subsistence cow moose season in Unit 6C runs from Sept. 1–Oct. 31, while the bull moose season runs from Sept 1–Dec. 31. Moose harvested in Unit 6C between 2001 and 2005 have been taken in an average of 4.2 days of hunting (Burcham 2005, pers. comm.). During the first week of the season, 31% of the moose are taken. Two-thirds of the total harvest is taken during the month of September, and 96% of the harvest takes place before the end of October (Burcham 2005, pers. comm.).

## Current Events Involving Species

At the Mar. 14–16, 2006 Southcentral Alaska Subsistence Regional Advisory Council meeting, the Council voted to oppose WP06-15 based on several factors. The Council felt that there was no need for the use of aircraft, as the hunt success rate is already near 100%. The Council also believed that allowing the same day airborne harvest of moose would set an undue precedent, which could jeopardize large bulls by allowing selective harvest.

## Effects of the Proposal

Currently, same-day airborne harvest of moose is not permitted in the State of Alaska by either State or Federal regulations. If this proposal is adopted it would be the first time that same-day airborne hunting for moose would be allowed on Federal public lands in Alaska.

The proponent believes since hunter success is nearly 100%, there is no advantage gained by hunting the same day as flying. Biologically, this proposal would have no or little effect on the moose population, since it would not result in additional harvest as hunters must possess a drawing permit to harvest a moose on Federal public lands in Unit 6C.

There are two aspects to same-day airborne hunting: a) landing and shooting on the same day, and b) pursuing animals based on knowledge obtained from the air. On the western Copper River Delta (Unit 6C), landing aircraft is restricted to relatively few ponds that are large enough and deep enough for an airplane on floats to land and take-off (Burcham 2005, pers. comm.). There are very few if any opportunities to land on wheels. The aspect of hunting the same day as flying, using information obtained from pilots to pursue a moose on the same day, has the greater opportunity for use in the Copper River Delta area. Airplanes are commonly used by Cordova residents to scout moose (Burcham 2005, pers. comm.). Most of the habitat is relatively open, allowing moose to be located effectively from the air (Burcham 2005, pers. comm.).

Specific animals, large antlered bulls for instance, could be harvested more efficiently using a same-day airborne advantage. If same-day airborne hunting of moose is allowed in Unit 6C, local residents of these units who rely on ground access to harvest moose for subsistence could be adversely affected by the competition, disruption, and what some will perceive as an unfair advantage from same-day airborne hunters.

Since a State hunt, which does not allow same-day airborne hunting, is taking place concurrently with the Federal hunt, enforcement difficulties might arise. The enforceability of this regulation could also create a problem as it relates to the Airborne Hunting Act (Pruszenski 2003).

There is significant public sensitivity and controversy attached to these potential regulations. The extent of aircraft use by Federally qualified subsistence users, and the practical effects of passage or denial of this proposal on those users, are central and yet extremely difficult to assess.

Under this proposal it would be legal to hunt moose same-day airborne on USDA Forest Service lands, but not on State lands unless the State modifies its prohibition against same-day airborne hunting.

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<b>WP06-16 Executive Summary</b>	
<b>General Description</b>	Requests that the antler restriction for Unit 7, that portion draining into Kings Bay—be eliminated and the harvest of either sex moose be allowed. The proposal also requests that the harvest season be changed from Aug. 10–Sept. 20 to Aug. 10–Feb. 28. <i>Submitted by Andrew T. McLaughlin from Chenega Bay.</i>
<b>Proposed Regulation</b>	<p><b>Unit 7–Moose</b></p> <p><i>Unit 7, that portion draining into Kings Bay—1 bull with spike-fork or 50-inch antlers or 3 or more brow tines on either antler <b>moose of either sex</b> may be taken by the community of Chenega Bay and also by the community of Tatitlek. Public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations.</i></p> <p style="text-align: right;"><del>Aug. 10–Sept. 20</del> Aug. 10–Feb. 28</p>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

<b>WP06-17 Executive Summary</b>	
<b>General Description</b>	Requests that the public lands closure for Unit 7—that portion draining into Kings Bay, be eliminated. <i>Submitted by ADF&amp;G.</i>
<b>Proposed Regulation</b>	<p><b>Unit 7–Moose</b></p> <p><i>Unit 7, that portion draining into Kings Bay—1 bull with spike-fork or 50-inch antlers or 3 or more brow tines on either antler may be taken by the community of Chenega Bay and also by the community of Tatitlek. <del>Public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations.</del></i></p> <p style="text-align: right;">Aug. 10–Sept. 20</p>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Take no action.</b>

*continued on next page*

<i>WP06-17 Executive Summary</i>	
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-16 AND 17**

**SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

WP06-16

**Support with modification.** The Southcentral Alaska Subsistence Regional Advisory Council. The Council supported the proposal with an amendment to allow the harvest of one bull by registration permit and a seven day reporting requirement from September 1 to December 31, and retain the Federal Closure. This registration hunt will provide an opportunity for the residents of Chenega Bay and Tatitlek to harvest one bull per each community by removing the antler restriction.

The modified proposed regulation should read:

*Unit 7, that portion draining into Kings Bay—1 bull with spike-fork or 50-inch antlers or 3 or more brow tines on either antler may be taken by the community of Chenega Bay and also by the community of Tatitlek by Federal registration permit. Only 2 Federal registration permits will be issued and permits must be returned within 7 days of harvest. Public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations.*

*Aug. 10–Sept. 20  
Sept. 1–Dec. 31*

WP06-17

**Take no action** due to action taken on WP06-16.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-16 AND 17**

WP06-16

**Oppose** the proposal, contrary to the recommendation of the Southcentral Alaska Subsistence Regional Advisory Council. In addition, **close the season** based on conservation concerns.

The new regulation would read:

### Unit 7–Moose

*Unit 7, that portion draining into Kings Bay—1 bull with spike-fork or 50-inch antlers or 3 or more brow tines on either antler may be taken by the community of Chenega Bay and also by the community of Tatitlek. Public lands are closed to the taking of moose by all hunters. except by Federally qualified subsistence users hunting under these regulations.*

~~Aug. 10–Sept. 20~~  
**No open season.**

### Justification

New information has become available since the Southcentral Alaska Subsistence Regional Advisory Council meeting in Anchorage. Because of the significance of this information, the Interagency Staff Committee recommends that the Federal Subsistence Board take action to close the season to Federally qualified subsistence users. Federal public lands are already closed to the taking of moose by non-Federally qualified hunters.

A moose index survey was flown on March 27, 2006 using the Alaska Department of Fish and Game's moose survey protocol. The conditions were generally good for counting. A total of five moose were observed, including four cows, one bull, and no calves. Surveyors estimate the undercount at no more than 25 to 50 percent (Zemke, personal communication). This number is considerably below any prior population estimates and cannot sustain any harvest. The Inter-agency Staff Committee recommends closing the season because the population is so small that any harvest will violate sound principles of wildlife management and potentially result in the extirpation of the population. This would be detrimental to the satisfaction of subsistence needs.

Another moose survey is planned for late October or November, 2006 to survey the fall population. If numbers of moose are considerably higher than the March survey, the Federal season could be reopened through future regulatory action.

### WP06-17

**Oppose** the proposal, consistent with the intent of the Southcentral Alaska Subsistence Regional Advisory Council's recommendation to take no action.

### Justification

The small population of moose in Kings Bay cannot support any additional mortality. This population may also not be able to support existing levels of mortality without becoming extirpated. The recommendation for proposal WP06-16 is contrary to the Southcentral Alaska Subsistence Regional Advisory Council's recommendation, and is to close Kings Bay to all moose hunting, because to allow any hunting would be contrary to sound principles of wildlife management. Allowing non-Federally qualified users to hunt could also eliminate this small population of moose, and thus would be detrimental to the satisfaction of subsistence needs. To oppose this proposal is a stronger action than simply to take no action, as recommended by the Southcentral Council. However, it does support the intent of the Council, while ensuring that the moose population is given the greatest opportunity for recovery so that it may again be a viable subsistence resource for hunters from Chenega Bay and Tatitlek.

## STAFF ANALYSIS WP06-16/17

### ISSUES

Proposal WP06-16 submitted by Andrew T. McLaughlin from Chenega Bay, requests that the antler restriction for Unit 7, that portion draining into Kings Bay—be eliminated and the harvest of either sex moose be allowed. The proposal also requests that the harvest season be changed from Aug. 10–Sept. 20 to Aug. 10–Feb. 28.

Proposal WP06-17 submitted by ADF&G, requests that Federal public lands closure for Unit 7, that portion draining into Kings Bay, be eliminated.

### DISCUSSION

The proponent for WP06-16 believes the regulation should be changed because the customary and traditional use of the moose harvest from the Kings Bay drainages has never been limited by an antler restriction, such as the spike-fork/50 inch or 3 brow tine bulls limitations. The proponent states they have never been confined to harvest dates before Sept. 20, primarily because that time of year (in the early season) the moose are rarely (if at all) harvestable as the snow has not yet pushed them down from their upper topography habitat that they normally occupy in the early fall at the higher elevations. The proponent states the historical moose harvests by Prince William Sound rural residents in the Kings Bay drainages did not take place until later into the winter months, and the limited harvest of any moose (regardless of gender) has always been considered a time honored and customary subsistence practice.

The proponent for WP06-17, ADF&G, believes the regulation should be changed because, according to information presented in the Office of Subsistence Management Federal Wildlife Closure Review WCR-05-03, few moose have been harvested by Federally qualified subsistence users in this area since the closure was implemented affecting other users. Removing the closure would provide limited opportunity for other hunters to utilize this area for moose hunting.

### Existing Federal Regulation

#### Unit 7—Moose

*Unit 7, that portion draining into Kings Bay—1 bull with spike-fork or 50-inch antlers or 3 or more brow tines on either antler may be taken by the community of Chenega Bay and also by the community of Tatitlek. Public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations. Aug. 10–Sept. 20*

**Proposed Federal Regulation**

**Unit 7—Moose**

**WP06-16**

*Unit 7, that portion draining into Kings Bay—1 bull with spike-fork or 50-inch antlers or 3 or more brow tines on either antler **moose of either sex** may be taken by the community of Chenega Bay and also by the community of Tatitlek. Public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations.*

*Aug. 10–Sept. 20  
Aug. 10–Feb. 28*

**WP06-17**

*Unit 7, that portion draining into Kings Bay—1 bull with spike-fork or 50-inch antlers or 3 or more brow tines on either antler may be taken by the community of Chenega Bay and also by the community of Tatitlek. ~~Public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations.~~*

*Aug. 10–Sept. 20*

**Existing State Regulation**

**Species and Bag limits—Moose**

*Remainder of Unit 7: One bull with spike-fork or 50-inch antlers or antlers with 3 or more brow tines on at least one side.*

**Permit/Ticket Required**

Harvest

**Open Season**

*Aug 20–Sept 20*

**Extent of Federal Public Lands**

Federal public lands in the Kings Bay area consist solely of Chugach National Forest, administered by the USDA Forest Service. The Federal subsistence moose harvest in Kings Bays is restricted to the residents of Chenega Bay and Tatitlek (see **Unit 7 map**).

**Customary and Traditional Use Determinations**

Residents of Chenega Bay and Tatitlek have a customary and traditional use determination for moose in Unit 7, that portion draining into Kings Bay.

**Regulatory History**

The existing Federal subsistence moose harvest in the Kings Bay portion of Unit 7 was established by the Federal Subsistence Board (Board) in 1997 (FSB 1997) based on a proposal submitted by the Chenega Bay IRA Council. Prior to that, only a State regulated general harvest was allowed in the area.

Special Action WSA01-02, submitted by the Chugach National Forest, USDA Forest Service, requested that the Kings Bay moose harvest in Unit 7 scheduled for Aug. 10–Sept. 20, 2001, be closed. This special action was adopted by the Board. The Board determined that the moose population was too small to support a harvest.

## Biological Background

The amount of moose habitat in the Kings Bay area is very small, and consists of narrow riparian areas along the Kings River and Nellie Juan River. An aerial survey conducted by ADF&G on Jan. 8, 1997, revealed 20 moose in the area. Nineteen of these were in a one-half to one mile long area along the upper Kings River in Unit 7. The herd consisted of 8 bulls, 10 cows, and 2 calves. Counting conditions were good, with heavy snow cover and excellent visibility.

The entire drainages of the Nellie Juan and Kings River were flown in Mar. 2001 by ADF&G, from Nellie Juan Lake downstream to the head of Kings Bay, and up the Kings River to the glacier country in which it rises. Nine moose were counted during the survey in conditions characterized as being excellent for aerial counting. The observers believe that no more than one or two moose could have been missed, if any (Spraker 2001, pers. comm.).

The small area of moose habitat at Kings Bay is isolated—with only one accessible route for moose to enter the area across the mountains from the Paradise Lakes or Nellie Juan Lake areas, and then down the Nellie Juan River—a distance of 15 to 20 miles over difficult terrain. Interchange of moose with other areas is therefore likely minimal. The fact that only nine moose were observed is significant. Black bear have high densities in western Prince William Sound (Crowley 2002) and brown bears are regularly present in the Kings Bay area. These two predators may elevate the importance of safe calving habitat, which appears to be limited. Productivity and viability of this small group of moose, therefore, is marginal. Their restricted use area makes the remaining herd vulnerable to hunters who walk up the river valley or use authorized motorized access.

## Harvest History

Based on harvest records, no moose were harvested from this area since Federal subsistence management regulations established this hunt in 1997 (ADF&G 2000). Some hunting has occurred from the Village of Tatitlek with no success (Vlasoff 2001, pers. comm.). The hunters of Chenega Bay informally discussed this hunt on May 5, 2001, concluding that they knew of no one from the village who had hunted the Kings Bay herd in recent years (Robertson 2001, pers. comm.). USDA Forest Service law enforcement officer Jeffrey Bryden, from Seward, reported that he was aware of three legally harvested and one illegal take of moose in the Nellie Juan Lake area in the fall of 2001. A review of the State moose harvest records for 2000-2001 for the Kings Bay and Nellie Juan Lake areas indicate that five hunters reported hunting in these two areas and none reported harvesting a moose.

The general hunt under State regulations was closed on Federal public lands in the Kings Bay drainage in 1997 by the establishment of exclusive Federal subsistence management regulations for the area. The State's general hunt regulations apply to non-Federal lands in the vicinity of Nellie Juan Lake, with a harvest limit of one bull with spike-fork or 50-inch antlers or antlers with 3 or more brow tines on at least one side. The landowner (Chugach Corporation), however, has restricted access to the area. According to the corporation's permit specialist, no trespass permits for hunting have been issued by the corporation since 1997.

According to the recollections of several hunters from Chenega Bay or Tatitlek, Kings Bay has been used for moose hunting by residents of these two villages at least since the 1960s. Moose harvests have taken place incidental to commercial fishing, seal hunting, or goat hunting. ADF&G Division of Subsistence studies of the old village of Chenega in the 1960s and the re-established village of Chenega Bay in the 1980s (Stratton and Chisum 1986); and of Tatitlek in the 1980s (Stratton 1990) also report that while

moose harvests were not common, Kings Bay was the moose hunting location most frequently used by these villages.

### **Effects of the Proposal**

If Proposal WP05-16 were adopted, it would lengthen the harvest season by 161 days and would allow the take of any moose. Extending the season may have detrimental effects on the moose population. Although the harvest limit would not change, the longer season could allow moose to be harvested more easily when they move near the coastline during the winter. Currently, no moose harvests have been reported. If the season is extended and both villages harvest a moose this could lead to over harvest of this small herd.

Allowing the possibility of cow harvest in such a small population could also have detrimental effects on the health of the moose population. Cows are important to maintain the herd. If a pregnant cow is taken, it will reduce the recruitment of new moose into the population and thus have a negative impact on the small herd.

If Proposal WP05-17 were adopted it would not change the harvest season or limits for Chenega Bay and Tatitlek, but it would remove the closure to non-Federally qualified subsistence users, which may lead to competition from non-Federally qualified hunters. However, few moose have been harvested in this area since the closure was implemented. Removing the closure would provide the possibility of additional harvest, which could jeopardize the conservation of this small population.

### **Current Events Involving Species**

At the Mar. 14–16, 2006 Southcentral Alaska Subsistence Regional Advisory Council meeting, the Council discussed changing the Kings Bay moose harvest limit, harvest season, and removing the Federal closure. Based on testimony and Council discussions on the proposed changes, the Council voted to support WP06-16 with modifications to: Remove the antler restrictions, but retain the bull harvest; add a permit with a seven-day reporting requirement; change the harvest dates to Sept. 1–Dec. 31; and retain the Federal closure. The Council believed that no moose have been harvested from Kings Bay because of the timing of the hunt. In August and September, the moose may still be in the higher elevations, making them harder to harvest, thus the season change suggested by the Council. The Council was concerned about the small population of moose in the area, therefore, they add these permit requirements: the one bull harvest; and the Federal closure. The Council heard testimony from the USDA Forest Service that a survey will be conducted in the area, weather permitting, to obtain more current information on the herd. The Council felt that this information would be very valuable to help with management of this small herd and could be used in conjunction with permit data to manage the herd effectively.

The Council voted to take no action on WP06-17, based on actions recommended on WP06-16.

A moose index survey was flown on March 27, 2006 (this data was not available to the Council). The survey was funded by the USDA Forest Service and conducted by ADF&G Personnel, using the standard ADF&G moose survey protocol. The conditions were generally good for counting. Extra time was spent following moose tracks to try to obtain a better observation of the total moose numbers (Zemke 2006 pers. comm.).

A total of five moose were observed. Four cows were observed, two were seen south of the Nellie Juan River confluence with Kings Bay and two were seen in the area between the Nellie Juan River and Kings River (Zemke 2006 pers. comm.). One bull moose was observed upstream in the Kings River watershed

(Zemke 2006 pers. comm.). No calves were observed in the area. Most of the tracks observed were within ½ mile of the shoreline. The surveyors believed that this is not the total number of moose in this heavily timbered steep country, and were not sure the total number of moose missed, however it could be as high as 25–50% of the total moose population. The surveyors were relatively certain there was a limited number of moose in the area during this late winter period.

The number of moose in this area in the fall would be hard to predict from this late spring survey. Moose may transition out of the area before heavy winter snowfall. A moose survey is planned for late October to November 2006 to survey the fall population (Zemke 2006 pers. comm.). This will better estimate the number of moose available for a fall to winter hunt, and allow for gathering demographics on the herd.

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<i>WP06-18 Executive Summary</i>	
<b>General Description</b>	<p>Requests that residents of Chenega Bay be added to those with a positive customary and traditional use determination for moose in Unit 6C. The Native Village of Chenega also requested a permit to take one bull moose annually for a ceremonial potlatch. <i>Submitted by the Native Village of Chenega.</i></p> <p><b>*NOTE: The Federal regulation proposal book was in error and included all residents of Unit 6D; the original proposal only requested a positive customary and traditional use determination for Chenega Bay.</b></p>
<b>Proposed Regulation</b>	<p><b>Unit 6– Moose, Customary and Traditional Use Determination</b></p> <p><i>Unit 6C                      Residents of Units 6A, 6B 6C, and Chenega Bay.*</i></p> <p>§ __.26(n)(6)(iii) <i>Unit-specific regulations:</i>  <i>(C) One permit will be issued to the Native Village of Eyak to take one bull moose from Federal public lands in Units 6B or 6C for their annual Memorial/Sobriety Day potlatch. One permit will be issued to the Native Village of Chenega to take one bull moose annually from Federal public lands in Unit 6C for a ceremonial potlatch;</i></p>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Oppose</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATION  
WP06-18**

**SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose** the proposal. The Southcentral Alaska Subsistence Regional Advisory Council opposed the proposal based on lack of evidence and action taken on Proposal 16. No new information on the issue was presented. Mainly used by residents of Cordova, Unit 6C moose is a registration hunt and the harvest rate is 100%.

## INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-18

**Oppose** the proposal as recommended by the Southcentral Alaska Subsistence Regional Advisory Council.

### **Justification**

No new information has been provided or become available to alter the Board's decision in 2000 to oppose giving Chenega Bay a positive customary and traditional use determination for taking moose in Unit 6C. Testimony provided at the Sept. 1998 Southcentral Alaska Subsistence Regional Advisory Council meeting indicated that while few moose have been available in Unit 6D, residents of Chenega Bay have hunted for moose in Unit 6C, but the evidence brought forward included past long-term temporary migrations to Cordova by Chenega residents, as well as commercial fishing by residents of Chenega Bay near Cordova's moose hunting areas. Some residents of Chenega began moose hunting in Cordova's use areas in Unit 6C when they settled for a decade or more in Cordova following the 1964 earthquake and tsunami which destroyed their village.

At the Southcentral Alaska Subsistence Regional Advisory Council meeting on Mar. 24, 1999, it was clarified that most of the use of Unit 6C for moose by Chenega residents described by Mr. Kompkoff and others at the Sept. 1998 meeting had actually taken place while residents of those villages were residents of Cordova. The Council did not find evidence of a consistent pattern of use by people living in Chenega Bay. Mr. Kompkoff had said that he would try to bring Chenega Bay residents to the fall 1999 Council meeting to testify to their uses of moose in Units 6A, 6B, and 6C while they resided in Chenega Bay. No one came to testify at the Council meeting and no public comments were received. The Board rejected the proposal in 2000. Since 2002 there has been no record of Chenega Bay residents taking moose in Unit 6C. There is no new information to support changing the Board's decision in 2000.

If the Board were to adopt this proposal, Chenega Bay residents would be added to the list of rural residents eligible to harvest moose in Unit 6C. However, there is limited participation in this hunt because of conservation concerns. Therefore, an ANILCA Section 804 analysis would be needed to determine if Chenega Bay residents could participate in the drawing hunts. This Section 804 analysis should go through a public review process. The analysis would be published in the Federal regulations proposal book for public comment in the fall of 2006. If, based on the Section 804 analysis, the Board determined that Chenega Bay residents could participate in moose drawing hunts in Unit 6C, then, the next step would be for the Board to evaluate whether or not the Native Village of Chenega Bay could receive a ceremonial potlatch permit.

### WRITTEN PUBLIC COMMENTS WP06-18

**Oppose.** This is a proposal this committee has seen twice the last ten years. Both instances proved unsubstantial evidence to allow for a Customary and Traditional use determination for Residents of Prince William Sound, and the Federal Subsistence Board agreed both times by voting against the proposal. The lack of harvest in Unit 6C being the greatest determining factor.

*–Copper River/Prince William Sound Advisory Committee*

**STAFF ANALYSIS  
WP06-18**

**ISSUES**

Proposal WP06-18, submitted by the Native Village of Chenega, requests that residents of Chenega Bay be added to those with a positive customary and traditional use determination for moose in Unit 6C. The Native Village of Chenega also requested a permit to take one bull moose annually for a ceremonial potlatch.

**DISCUSSION**

The analysis for this proposal is a two-step process. First, the Federal Subsistence Board (Board) must make a determination as to whether or not Chenega Bay residents have a positive customary and traditional use determination for moose in Unit 6C. If the Board approves the request, Chenega Bay residents would be added to the list of rural residents eligible to harvest moose within Unit 6C. However, there is limited participation in this hunt because of conservation concerns. Therefore, an ANILCA Section 804 analysis would be needed to determine if Chenega Bay residents could participate in the drawing hunts. The Section 804 analysis should go through a public review process. The analysis would be published in the Federal regulations proposal book for public comment in the fall of 2006. If, based on the Section 804 analysis, the Board determined that Chenega Bay residents could participate in moose drawing hunts in Unit 6C, then, the next step would be for the Board to evaluate whether or not the Native Village of Chenega Bay could receive a ceremonial potlatch permit. Thus, this analysis for Proposal WP06-18 only covers the first step in the request: whether or not Chenega Bay should have a positive customary and traditional use determination for moose in Unit 6C.

Chenega Bay is in Unit 6D and does not have a Federal moose hunt due to the lack of moose in Unit 6D. As a result, the residents of Unit 6D do not have a positive customary and traditional use determination for moose in Unit 6D.

**Existing Federal Regulation**

**Unit 6–Moose, Customary and Traditional Use Determination:**

*Unit 6C*

*Residents of Units 6A, 6B and 6C.*

**Proposed Federal Regulation**

**Unit 6–Moose, Customary and Traditional Use Determination:**

*Unit 6C*

*Residents of Units 6A, 6B 6C, and Chenega Bay.\**

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**\*NOTE: The Federal regulation proposal book was in error and included all residents of Unit 6D; the original proposal only requested a positive customary and traditional use determination for Chenega Bay.**

§ \_\_\_\_ .26(n)(6)(iii) *Unit-specific regulations:*

*(C) One permit will be issued to the Native Village of Eyak to take one bull moose from Federal public lands in Units 6B or 6C for their annual Memorial/Sobriety Day potlatch. One permit will*

*be issued to the Native Village of Chenega to take one bull moose annually from Federal public lands in Unit 6C for a ceremonial potlatch;*

### **Extent of Federal Public Lands**

Federal public lands comprise approximately 64% of Unit 6C and are managed by the Chugach National Forest.

### **Customary and Traditional Use Determinations**

The rural residents of Units 6A, 6B, and 6C have a customary and traditional use determination for moose in Unit 6C.

### **Regulatory History**

In May 1997, the Board deferred the request for a Unit 6C ceremonial moose harvest (Proposal 97-019) because there was no customary and traditional use determination for moose in the unit. In 1998, Donald Kompkoff, Southcentral Alaska Subsistence Regional Advisory Council member from Chenega Bay and living in Valdez, submitted Proposal 98-019 requesting a customary and traditional use determination for Chenega Bay and Tatitlek residents in Unit 6. Due to Mr. Kompkoff's unavoidable absence, the proposal was deferred by the Council and the Board in the Spring of 1998. The deferral was taken to provide Mr. Kompkoff an opportunity to obtain more specific information on moose harvests by Chenega Bay and Tatitlek residents. When the Southcentral Alaska Subsistence Regional Council discussed the issue at its Fall 1998 meeting, Don Kompkoff, Ralph Lohse (Southcentral Alaska Regional Council member from Cordova), and Nat Good (Eastern Interior Alaska Regional Advisory Council member who worked as a teacher in Cordova in the 1970s and early 1980s) all attested to the uses of moose in Unit 6 by residents of Chenega Bay and Tatitlek. After considering the testimonies of Council members and staff, the Southcentral Alaska Regional Council concurred that the proposal should be considered in the upcoming winter 1999 meeting.

Based on the information provided at the Fall 1998 meeting, the Proposal 99-003 analysis provided to the Council in Mar. 1999 supported adding the communities of Tatitlek and Chenega Bay to the moose customary and traditional determination for Units 6A, 6B, and 6C. However, both the Alaska Department of Fish and Game (ADF&G) and the Southcentral Alaska Regional Advisory Council opposed the staff recommendation. After considerable public testimony and extensive Council deliberation, the Council voted to oppose the proposal. During a reconsideration of the proposal the following day, the Council agreed to defer action on the issue and provide the proposal's author, Donald Kompkoff Sr., another chance to "bring some other testimony" supporting the request. The Board supported the Council's action.

Mr. Kompkoff was not at the Oct. 1999 meeting of the Southcentral Alaska Regional Council to provide additional support for his proposal. No new information was provided at the meeting and the sole public comment was in opposition. The Council acknowledged that the issue, as Proposal 00-016, should be afforded one more official hearing in the winter Council meeting. The Council did not support the proposal to provide Chenega Bay and Tatitlek with a positive customary and traditional use determination for moose in Unit 6. The Board rejected the proposal in the spring of 2000, based on the recommendations from the Council, Interagency Staff Committee, and the ADF&G.

## Harvest History

Moose harvest in Unit 6C takes place under State and Federal regulations. The total allowable harvest for the unit is determined by the USDA Forest Service and ADF&G. Of that total allowable harvest, 75% of the bull permits are issued through a Federal subsistence drawing while the remaining 25% of bull permits are issued through a State drawing. All cow permits and a bull permit for the Native Village of Eyak Memorial/Sobriety Potlatch also fall under Federal subsistence management. In 2004 and 2005, a total of 35 bull permits were issued each year in Unit 6C, 26 permits through the Federal drawing and 9 through the State drawing (Burcham 2005, pers. comm.).

Hunter success is nearly 100% for the Federal and State hunts in Unit 6C. Federal subsistence harvest in Unit 6C has been nearly 100% since the hunt started in 1999 (Burcham 2005, pers. comm.).

Current cooperative moose management objectives are to maintain a post-hunting population of 400 moose with a bull:cow ratio of 15:100 for Unit 6C (Crowley 2004). In Unit 6C, the population is currently estimated at 350 moose, and is considered stable (Crowley 2004).

## Community Characteristics

Chenega Bay is a contemporary village located in traditional settlement areas of Chugach Alutiiqs. The majority of the residents in Chenega Bay today are Chugach Alutiiq. Chenega Bay, located on Evans Island, was resettled in 1983 by residents from the original community of Chenega, located on Chenega Island. The original settlement in Chenega was destroyed by a tsunami in the 1964 earthquake (Fall et al. 1996:11; Davis 1984:199). Survivors were relocated to Cordova and Tatitlek. Before this event, some Chenega families had lived temporarily in Cordova to allow their children to attend high school (Stratton and Chisum 1986:13). The histories of Chenega Bay, Tatitlek, and Cordova have created strong kinship ties between these three communities. The population of Chenega Bay was 86 in the 2000 census (ADCED 2004).

## 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 an application of these eight factors (50 CFR 100.16B and 36 CFR 242.16B). 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 100.16B and 36 CFR 242.16B).

Long-term, consistent pattern of use

The only parts of Unit 6 where moose are indigenous are small areas near Valdez and around Kings Bay in Unit 6D. In 1949, a few calves were introduced in Unit 6C through a cooperative effort with the Cordova Chapter of Isaac Walton League, citizens, and the U.S. Fish and Wildlife Service. Twenty-four moose calves were brought to the Cordova area over nine years (Griese 1989:49). The first harvest (of 25 bulls) in Unit 6C took place in 1960. The moose expanded into Unit 6B within a few years of their introduction, and by the late 1960s, they had migrated into Unit 6A.

Except through trade with other groups, there was very little use of moose by residents of Unit 6 until hunting seasons were opened in 1960. Trade with other groups was extensive, however, along with intermarriage, warfare, and other communication that resulted in familiarity with resources used by neighboring groups. Moose hides (for use in boats and clothes) were a major item of trade between the Ahtna Athabaskans and the Eyaks, Tlingits, and Chugach Alutiiq (de Laguna and McClellan 1981:647). Although they were familiar with moose and used it, this animal was not among the land mammals customarily hunted by the Chugach Alutiiqs.

Following the introduction of moose, the Native and non-Native residents of the Cordova area quickly adopted moose harvesting. Residents of the community used moose in ways comparable to their harvest, processing, distribution, and consumption of other animals.

In eight household harvest studies conducted by the ADF&G, Division of Subsistence from 1984 to 1997, residents of Chenega Bay reported taking one moose in 1984, one in 1985, and 3 in 1997 (**Table 1**) (ADF&G Division of Subsistence 2001). Harvest tickets indicate that Chenega Bay residents took nine moose since 1985; five were taken on the Kenai Peninsula and one in Unit 16A, but none in Unit 6. No moose have been reported harvested since 1985 in Unit 6C by Chenega Bay residents (ADF&G 2005).

At the Sept. 1998 meeting of the Southcentral Alaska Subsistence Regional Council, Donald Kompkoff testified that residents of Chenega Bay historically hunted moose in Units 6A, 6B, and 6C. He specifically mentioned that Chenega people had used the area of the Bering River, which is in Unit 6A, and had hunted across the Copper River at the Martin River in Unit 6B. Mr. Kompkoff said,

*Yes, we had several people from Chenega and Tatitlek, like four or five people that got two moose, you know, in 198- --early 1980s, and in Chenega in 1970, 1975. My brother Joe got one from there, and Paul Vlasoff got two when he was living in--he was living in Tatitlek at the time. He's--that's where he's from. And we'd just like to continue doing it with--to get moose from there, even if it is one [SCRAC 1998:104].*

There was no village of Chenega in the 1970s. It appears that Mr. Kompkoff was recalling hunting done by former Chenega residents then living in Cordova.

Ralph Lohse, Southcentral Alaska Subsistence Regional Advisory Council member from Cordova, agreed that residents of Chenega Bay had taken part in the limited moose hunt in Unit 6 in the past. Mr. Lohse said, "Everybody in the area puts in for the drawing, and you don't get drawn very often" (SCRAC 1998:105).

Nat Good, member of the Eastern Interior Alaska Subsistence Regional Advisory Council, testified that when he taught school in Cordova from 1970 until 1982, he had observed Chenega residents involved with the moose hunt in the Cordova area. Residents frequently sent their children to live in Cordova to go to school there. They spent a great deal of time in Cordova, including hunting there. At that time, former

Chenega residents were living in Cordova and they hunted there. Mr. Good hunted moose when he lived in Cordova, and he recalled meeting people from Chenega on the Copper River Flats while he was out hunting (SCRAC 1998:109–110).

On Mar. 23, 1999, at the Spring meeting of the Southcentral Alaska Subsistence Regional Advisory Council, the issue of Chenega residents hunting in the Cordova area was clarified in Council discussion between Ralph Lohse and Donald Kompkoff. Mr. Kompkoff confirmed that much of the hunting done by Chenega people in areas close to Cordova took place while they were living in Cordova. Customary and traditional use determinations are made based on the uses of the people in the community, not on the users. Thus, participation in the moose hunt by people from Chenega Bay while living in Cordova does not indicate a consistent pattern of hunting by residents of Chenega.

#### Seasons of use

Moose hunting seasons in Unit 6C have been established by regulation since the first season was opened in Unit 6C in 1960. The Federal hunting season is by permit only and currently is Sept. 1 through Dec. 31.

#### Methods and means

While the traditional methods of taking large land animals were by spears, snares, and deadfalls, firearms have been in wide use since long before the arrival of moose in Unit 6. Presently, almost all moose hunting is conducted with firearms (Stratton and Chisum 1986).

#### Areas of use

Commercial fishing activities take residents of Chenega Bay throughout Prince William Sound. At the Sept. 1998 Southcentral Alaska Subsistence Regional Council meeting, Ralph Lohse stated that residents of the Prince William Sound, including Chenega Bay, all fish together. This supports the idea that moose hunting might occur in places where residents of these two villages had traveled for commercial fishing. The salmon fishing areas used by Chenega residents in the early 1960s were all in the western part of Prince William Sound. In 1984, however, while much of their salmon fishing took place near their village, some Chenega Bay residents fished commercially for king salmon on the Copper River Flats, while others reported taking silver salmon in the Copper River commercial gillnet fishery (Stratton and Chisum 1986:27–29, 75).

Mr. Lohse also stated that there has been a lot of moving back and forth between the communities in Prince William Sound (Southcentral Alaska Regional Advisory Council 1998:108), perhaps referring to a pattern of temporary or long-term migration from the two Chugach Alutiiq villages of Tatitlek and Chenega to the commercial hubs of Cordova and Valdez. Mr. Lohse later recalled that right after the 1964 earthquake and tsunami a lot of people from Chenega and Tatitlek lived in Cordova (Southcentral Alaska Regional Advisory Council 1998:112). In particular, many residents of the destroyed village of Chenega lived in Cordova for nearly 20 years before Chenega Bay was established.

When harvest use areas for the former village of Chenega in the 1960s were mapped in 1985 and 1986, the only use areas reported for moose was at Kings Bay in Unit 6D to the east of the old village. No past or contemporary use areas were reported in Units 6A, 6B, and 6C. Respondents indicated that only a few individuals in Old Chenega hunted moose prior to the earthquake (Stratton and Chisum 1986:42). In Sept. 1984, three households in the newly settled village of Chenega Bay reported moose hunting, and two reported taking a moose. One hunt was at Icy Bay, in Unit 5B—“prior to moving to Chenega Bay”—and the other on the Copper River Delta in Unit 6C (Stratton and Chisum 1986:82–84). These harvest areas

reflect the fact Chenega residents who relocated to Cordova after their village was destroyed in 1964 hunted for moose in the areas used by other Cordova residents. This is also supported by the very low levels of moose hunting and harvest by Chenega Bay residents since the first years after Chenega Bay was established. Hunters interviewed in the early years of the new village expressed hope that they could hunt moose at Kings Bay in Unit 6D in the future (Stratton and Chisum 1986:84); while this points to Kings Bay as a traditional harvesting area for Chenega Bay, evidently the Chenega hunters did not mention other areas.

#### Handling, preparing, preserving and storing

Moose meat is generally cut up and preserved by freezing in Unit 6, and this is the main technique of preservation which has been used since moose were first introduced to the area. In an ADF&G Division of Subsistence harvest study conducted in Cordova in 1985–1986, several respondents commented that because one household could not use a moose over a year, hunters commonly divided moose meat among others in the hunting party and the community. As the new season approached, people made room in their freezers by sharing leftover frozen moose meat with non-harvesting households (Stratton 1986:114).

#### Handing down of knowledge

As is true of hunting for other resources, groups of moose hunters of different ages (often father and son, or other male relatives) hunt together. This facilitates intergenerational transmission of knowledge regarding moose hunting techniques. In the past, for Chugach Alutiiqs as well as for other Alaska Natives, it was as important to convey spiritual and religious aspects of hunting to the younger generation as it was to teach technical skills of hunting and processing (Clark 1984).

#### Sharing

Moose meat is widely shared by residents of Unit 6D. Residents of Chenega Bay share and distribute moose meat within and beyond their villages. Even in years when no one in these communities harvested moose, there are reports of receiving moose from relatives or friends in other communities. In most years, a higher percentage of respondents reported receiving moose meat than did harvesting moose, suggesting a pattern of redistribution of shared resources (see **Table 1**; ADF&G 2001).

Because of its large size, moose is an appropriate animal to serve at community feasts. In the past it was customary to give a feast for the dead where the favorite foods of the deceased were served, and guests who had assisted with funeral preparations were given gifts (Clark 1984). Today, funeral potlatches and other ceremonies continue to be held. Guests include visitors from several communities. When it is available, moose meat may be served at these ceremonies and exchanged between groups.

#### Reliance upon a wide diversity of fish and wildlife resources

Chenega Bay residents depend on a wide range of fish and wildlife resources. The species used include a variety of fish, shellfish, migratory birds, bird eggs, small land mammals, furbearers, marine mammals, berries, plants, and seaweed.

Chenega Bay has a relatively high average subsistence harvests and a diversity of resources harvested that is consistent with other rural non-road connected communities in Alaska (**Table 2**). They depend heavily on subsistence harvests and uses for their cultural, economic, social and nutritional well-being. Chenega Bay experienced one or two years of depressed harvests following the disruptions of the Exxon Valdez oil

spill; by 1991, however, Chenega Bay had per capita harvests that were at or near pre-spill levels (Fall et al. 1996 and 1999).

### Effects of the Proposal

Whether or not a community receives a customary and traditional use determination is only contingent on fulfilling the eight factors—it is not contingent on whether or not there are enough of the resource for everyone eligible to harvest the resource or what the effects on the resource might be.

If this proposal is adopted, the residents of Chenega Bay would be added to the list of rural residents eligible to harvest moose in Unit 6C. Due to the limited number of moose (estimated at 350 animals) and, consequently, permits available (26 Federal permits), a Section 804 analysis would be needed to determine if Chenega Bay residents would be eligible to participate in the moose drawing permit hunt. If they were determined to be eligible to take moose in Unit 6C, they could also be eligible for a memorial potlatch permit. This permit would be deducted from the total harvest quota for moose within the unit. The effects would be on the residents of Unit 6A, 6B, and 6C, who currently have a positive customary and traditional use determination to take moose in Unit 6C. If Chenega Bay were given a positive customary and traditional use determination for moose in Unit 6C, it would add approximately 21 eligible households (there were 21 households in 1997 in Chenega Bay [ADF&G 2001]) to the pool of eligible users and could create fewer permits for the residents of Units 6A, 6B, and 6C.

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<i>WP06-68 Executive Summary</i>	
<b>General Description</b>	Requests that an additional moose harvest season be added in Units 15B and 15C between Oct. 20–Nov. 10. <i>Submitted by the Southcentral Alaska Subsistence Regional Advisory Council.</i>
<b>Proposed Regulation</b>	<b>Unit 15—Moose</b> <i>Units 15B and 15C—1 antlered bull with spike-fork or 50-inch antlers or with 3 or more brow tines on either antler, by Federal registration permit only. Oct. 20–Nov. 10</i>
<b>Southcentral Alaska Regional Advisory Council Recommendation</b>	<b>Support with modification.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Oppose.</b>

### REGIONAL ADVISORY COUNCIL RECOMMENDATION WP06-68

#### SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support with modification** to add a seven-day reporting requirement. The Southcentral Alaska Subsistence Regional Advisory Council felt that this would provide the Federal land managers timely harvest information and would help them manage the moose hunt effectively.

### INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-68

**Support** the proposal as recommended by the Southcentral Alaska Subsistence Regional Advisory Council

*Note: a five-day reporting requirement is currently included in the Federal registration permits that would be used for this late season hunt.*

### **Justification**

This proposal would provide additional subsistence opportunities more in line with traditional seasonal subsistence activities. It provides a season when colder temperatures are more conducive for caring for the meat and vegetative cover is reduced. The proposed season should not have significant adverse impacts on the moose population as it avoids disturbance and harvest of moose during the rut and first estrus breeding. The Federal registration permit will have a five-day reporting requirement for successful hunters which will enable the Kenai NWR to closely monitor the hunt. This reporting requirement will satisfy the Southcentral Regional Council's intent to have harvested moose reported within seven days of taking. If the harvest of large bulls appears to be excessive a Special Action can be submitted to close the season.

### **WRITTEN PUBLIC COMMENTS WP06-68**

**Oppose.** Urge caution and recommend more conservative action. Late season winter moose hunts advocated by these [WP06 35, 38, and 68] proposals invites driving, herding and harassing moose with snow machines, activities currently prohibited under Federal subsistence law. Enforceability is extremely difficult in remote areas at this time of year. Abuses connected with this method of hunting can diminish healthy populations of moose in an area, counter to Section 802 of Title VIII, ANILCA. Unless it is absolutely necessary to provide a subsistence opportunity that is lacking in earlier seasons, we urge the board to take a very conservative approach with late season mechanized winter hunts.

*–Alaska Defenders of Wildlife*

**STAFF ANALYSIS  
WP06-68**

**ISSUES**

Proposal WP06-68, submitted by the Southcentral Alaska Subsistence Regional Advisory Council, requests that an additional moose harvest season be added in Units 15B and 15C between Oct. 20–Nov. 10.

**DISCUSSION**

The proponent believes these dates are more in line with traditional subsistence activities and will revive the spirit and tradition of the hunt. The proponent also stated “historically, hunts were postponed until later in the year, following the processing of salmon. When harvesting moose later in the year, there is a better opportunity for the meat to be properly cared for and preserved so there will be less wasting of the harvest. Due to changing climatic conditions, the late summer and early fall temperatures on the Kenai Peninsula have been increasingly hot and dry. The proponent believes this makes it difficult to locate an animal and process it efficiently enough to ensure there is no unnecessary waste. Later in the fall, there is reduced recreation from hiking, ATV use, etc. which would promote the safety of recreational users and hunters alike.”

**Existing Federal Regulation**

**Unit 15–Moose**

<i>Units 15A remainder, 15B, and 15C—1 antlered bull with spike-fork or 50-inch antlers or with 3 or more brow tines on either antler, by Federal registration permit only.</i>	<i>Aug. 10–Sept. 20</i>
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**Proposed Federal Regulation**

**Unit 15–Moose**

<i>Units 15A remainder, 15B, and 15C—1 antlered bull with spike-fork or 50-inch antlers or with 3 or more brow tines on either antler, by Federal registration permit only.</i>	<i>Aug. 10–Sept. 20</i>
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<i>Units 15B and 15C—1 antlered bull with spike-fork or 50-inch antlers or with 3 or more brow tines on either antler, by Federal registration permit only.</i>	<i>Oct. 20–Nov. 10</i>
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**Existing State Regulations**

The existing State regulations for hunting moose in Unit 15 can be found in **Appendix A**.

**Extent of Federal Public Lands**

In Unit 15, Federal public lands are comprised of 52% FWS/Kenai National Wildlife Refuge lands and less than 1% NPS and USDA FS lands (see **Unit 15 map**).

## Customary and Traditional Use Determination

Rural residents of Ninilchik, Nanwalek, Port Graham and Seldovia have a positive customary and traditional use determination for moose in Unit 15.

## Regulatory History

In July 1995, the Federal Subsistence Board (Board) adopted a positive customary and traditional use determination for Ninilchik, Nanwalek, Port Graham and Seldovia and a harvest season of Aug. 10–Sept. 20 for moose in Units 15B and 15C. At that time, the Board deferred making a decision with regard to customary and traditional uses of moose in Unit 15A “because use of this subunit by residents of Ninilchik and Seldovia is extremely low.” 60 Fed. Reg. 40462. In addition, the Board adopted a spike fork/50-inch antler restriction for subsistence hunters in Units 15B and 15C, and authorized a harvest season from Aug. 10–Sept. 20, 1995, with the first ten days reserved for subsistence hunts.

At the end of 1995, the Ninilchik Traditional Council submitted three proposals dealing with moose in Unit 15. In Proposal 23, the Traditional Council sought to expand the positive customary and traditional use determination for Ninilchik, Nanwalek, Port Graham and Seldovia for moose in Unit 15A. In Proposal 24, the Traditional Council requested a harvest limit for all of Unit 15 of one cow and a season of Sept. 11–30. In Proposal 25, the Traditional Council requested a moose season of Sept. 11–30 for all of Unit 15, with a harvest limit of one antlered bull.

The Southcentral Alaska Subsistence Regional Advisory Council supported Proposal 23, the customary and traditional use determination in Unit 15A for the four communities; opposed Proposal 24, allowing a cow season; and supported a modified Proposal 25 for an Aug. 15–Sept. 25 season, with a harvest limit of any bull from Aug. 15–19 and Sept. 21–25, and with the spike/fork-50 restriction in effect Aug. 20–Sept. 20. At the May 3, 1996, meeting the Board rejected all three proposals (FSB 1996a).

The Ninilchik Traditional Council then filed a complaint in the District Court for Alaska. That complaint, filed Jan. 1996, challenged the Board’s decisions to impose the spike fork/50-inch rule on Federally qualified subsistence users and to defer making a customary and traditional use determination in Unit 15A. On June 13, 1996, the District Court upheld the antler restriction, but remanded the customary and traditional use determination for Unit 15A back to the Board. The Court found that the Board had not adequately explained its rationale for making positive customary and traditional use determinations for Units 15B and 15C, but not doing so for Unit 15A.

On July 16, 1996, the Board took up the issue of the remand and was provided additional information on customary and traditional uses of moose in Unit 15A. The Board reversed its May 3rd decision and made a positive customary and traditional use determination for moose in Unit 15A for Nanwalek, Port Graham, Seldovia and Ninilchik. The Board also provided for a 1996 season in Unit 15A, from Aug. 18–Sept. 20 for one bull moose with the spike-fork, or 50-inch antler or with 3 or more brow tines on either antler. The Board justified its action as follows:

*The moose population in Unit 15A is stable at or near the carrying capacity of the habitat. The antler restrictions contained in this proposal should provide adequate protection from over harvest of breeding age bulls. The proposal is anticipated to have no significant impact on the total moose harvest in this unit, and is consistent with the conservation of a healthy moose population. (FSB 1996b).*

The Board's decision to change the start of the season from Aug. 10, which was the 1995 starting date in Units 15B and 15C, to Aug. 18, had the effect of reducing the subsistence-only hunt to 2 days, down from 10 days.

The Kenai Peninsula Outdoor Coalition submitted a Request for Reconsideration (RFR 96-01) on July 29, 1996, seeking a reversal of the Board's decision. Specifically, the coalition argued that the Board should abolish the Federal subsistence opportunity for moose in Unit 15A and eliminate the season. On Aug. 14, 1996, the Board met and rejected the RFR (FSB 1996c).

Subsequent to the Board's actions, the Ninilchik Tribal Council filed an amended complaint in Oct. 1996, re-asserting its challenge to the antler size restriction and claiming that the Board had failed to properly provide for a subsistence priority as required by ANILCA. The District Court ultimately found in favor of the government. The Traditional Council then appealed to the Ninth Circuit Court of Appeals.

The Southcentral Alaska Subsistence Regional Advisory Council submitted a proposal to make permanent the regulations adopted for the 1996 season. This proposal (98-039) had the same season dates, Aug. 18–Sept. 20, and a harvest limit of one antlered bull with the spike-fork or 50-inch restriction. There was no discussion of the length of season in the proposal. This proposal was adopted by the Board at its May 1998 meeting.

The Ninth Circuit Court of Appeals rendered its decision on the Ninilchik Tribal Council lawsuit on July 31, 2000. (*Ninilchik Traditional Council et al. v. U.S.*, 227 F.3d 1186 (9th Cir. 2000)). The Court held that the Board's interpretation of the term "priority" within the meaning of ANILCA as allowing it to balance the competing aims of subsistence use, conservation, and recreation; while at the same time providing subsistence hunters with a meaningful use preference, was reasonable. However, the Court also found that the Board had failed to provide any support in the record for its conclusion that the two days reserved for Federally qualified subsistence users in Unit 15A qualified as a priority.

Consequently, in 2001, the Office of Subsistence Management submitted Proposal WP01-50, in which it requested that the dates of the moose harvest season for Unit 15A be changed from Aug. 18–Sept. 20 to Aug. 10–Sept. 20. The Board adopted this change in May 2001 and provided a total of ten days priority to Federally qualified subsistence users before the State's general season starts.

In 2003, Proposal WP04-87 was submitted, requesting that the moose season for Unit 15A remainder be shortened by ten days to Aug. 20–Sept. 20 from Aug. 10–Sept. 20. The Board rejected this proposal at its May 2004 meeting.

At its May 3–4, 2005 meeting, the Board deferred Proposal WP05-07, based on conservation concerns with the Southcentral Alaska Subsistence Regional Advisory Council's recommendation, which was to maintain the current dates (Aug. 10–Sept. 20), but also to provide more opportunity by lengthening the season with the additional season dates of Sept. 26–Oct. 15. The Board stated that this was an additional three-week season not requested by the proponent. The additional season is also during the rut, which may have an adverse affect on the moose population. The Board also stated that the public should have an opportunity to comment on the season that was recommended by the Council, as well as other alternatives that may have less adverse impacts on the moose population.

## Biological Background and Harvest Information

### Unit 15A

ADF&G'S population goal for moose in Unit 15A is 3,600 animals, with a sex ratio of 20 bulls:100 cows (McDonald 2000). The Kenai National Wildlife Refuge has established a minimum of 25 bulls:100 cows for most refuge lands, with the exception of the Skilak Loop Wildlife Management Area, where a 40 bulls:100 cows management objective was set. The last reported aerial moose surveys (2005) for this unit, excluding the Skilak Loop Wildlife Management Area, revealed a bull/cow ratio of 26:100, with a calf/cow ratio of 18:100, calves made up 12% of the moose observed (**Table 1**) (Selinger 2005, pers. comm.). The 2005 fall sex and age composition survey observed a total of 524 moose (Selinger 2005, pers. comm.).

**TABLE 1:** Unit 15A Aerial moose composition counts 1992-1998 (Spraker 2002, Ernst 2003 pers. comm.).

Year	Bulls:100 cows	Yearling bulls:100 cows	Calves:100 cows	% Calves	Adults	Total Moose Observed
1992	16	5	36	23	1019	1331
1995	24	9	32	20	955	1199
1997	26	8	39	24	1120	1467
1998*	30		27	17	1132	1364
2003*	24		26	18	628	760

\*Does not include counts in Skilak Loop Wildlife Management Area

As a result of two severe winters, 1998/99 and 1999/00, there was a documented mortality due to starvation of 100 and 200 animals respectively. The Feb. 2001 population was estimated at 1,700–2,430 animals. The current moose population is not considered stable. The population has been declining as the habitat matures. Other factors that likely contributed to this decline include predation and weather patterns. Without an aggressive prescribed burn program in Unit 15A, it is expected that the moose population will continue to decline as the 1969 burn area matures (Ernst 2003 pers. comm.).

The State currently manages an archery moose hunt in Unit 15A. Since 1995, the archery season has been prior to the general season (Aug. 10–17) with the same bag limit as the general season. Although it is not possible to determine the number of participating archery hunters through State harvest ticket reports, ADF&G has estimated that between 200 and 250 archers participated each year from 1995 through 2000. The harvests from the latter two seasons (1999 and 2000) were 16 and 11 bulls respectively, representing 17% and 8% of the harvests (Spraker 2002).

According to available data for the period of 1992–2001, the majority (80%–85%) of hunters participating in the State's general season are residents of Unit 15. Eighty percent to 87% of moose harvested were taken by those residents (**Table 2**).

Based on Federal subsistence harvest results, there has been very little participation in the Federal season by the Federally qualified residents of the four communities that currently have a positive customary and traditional use determination for moose. No permit holders indicated hunting in Unit 15A during the fall

of 1996 or 1997. One hunter reported hunting in Unit 15A during 1998 with no success, and three hunters reported hunting in Unit 15A during the 1999 season with no success. In 2000 and 2002, there were no moose harvested in Unit 15A under the Federal Subsistence Management Program. In 2001 and 2003, one moose was harvested by Federal permit during the first ten days of each season (**Table 3**).

**TABLE 2:** Residency and Success of State Moose Hunters in Unit 15A (Spraker 2002)

Regulatory Year	Total Hunters	Unit 15 Residents	Number of Moose Harvested	Number Harvested by Unit 15 Residents
1992/93	1207	995	143	121
1993/94	1427	1161	232	193
1994/95	1425	1140	238	197
1995/96	1135	970	117	99
1996/97	1424	1213	260	208
1997/98	1346	1152	192	164
1998/99	1463	1163	271	246
1999/00	1195	1033	92	79
2000/01	1162	941	131	106
2001/02	1264	1044	228	196
2002/03	1161	954	141	119

**Table 3.** Federal Moose harvests permits issued and moose harvested 1995-2002 (OSM 2004).

Year	Number of Permits Issued	Number of Permits Reporting*	Number of Permits Hunted	Moose Harvested in Unit 15A	Moose Harvested in Unit 15B	Moose Harvested in Unit 15C	Moose Harvested in Unknown Area
1996	54	51	40	0	1	2	0
1997	40	34	29	0	2	1	0
1998	21	21	16	0	2	2	0
1999	34	27	20	0	1	1	1
2000	22	14	12	0	2	1	0
2001	46	44	33	1	1	5	0
2002	45	41	29	0	3	5	0
2003	42	33	27	1	1	1	0
<b>Total</b>	304	265	206	2	13	18	1

\*The information found in this table represents subsistence users that harvested a moose primarily during the first ten days of the season when the State season is closed.

Another noteworthy observation of the harvest data are the chronology of the harvest from the State's

archery and general seasons. During the 1993–2001 seasons, a large amount of the harvest typically occurs during the first week of the general season. As expected with archery gear, archery season harvests during the week prior to the general season have resulted in a lower percent harvest than the first week of the subsequent general season (**Table 4**).

**TABLE 4:** Unit 15(A) State moose harvest<sup>a</sup> chronology percent by week, 1992-96 (Spraker 2002).

Regulatory Year	Harvest Periods							Unk	Total Harvest
	8/10-19	8/20-25	8/26-31	9/1-5	9/6-10	9/11-15	9/16-20		
1992/93	--	--	8 <sup>b</sup>	33 <sup>c</sup>	18	13	25	4	143
1993/94 <sup>d</sup>	--	35	7	10	8	13	23	5	232
1994/95 <sup>d</sup>	--	34	11	8	6	15	21	6	238
1995/96	11 <sup>e</sup>	20	10	10	9	15	21	5	117
1996/97	12 <sup>e</sup>	26	10	6	7	18	18	4	260
1997/98	20 <sup>e</sup>	24	5	6	7	16	17	5	191
1998/99	17 <sup>e</sup>	23	8	8	8	15	13	8	271
1999/00	16 <sup>e</sup>	17	5	12	12	16	18	4	92
2000/01	11 <sup>e</sup>	24	7	8	8	13	28	2	131
2001/02	21	21	8	4	10	17	16	4	228
2002/03	24	23	9	4	4	14	18	4	141

<sup>a</sup> Excludes permit hunt harvest.

<sup>b</sup> Archery season - 8/25-29, 92; 8/10-17, 95 and 96, S/F-50".

<sup>c</sup> General open season Sept 1 - Sept 20; S/F-50".

<sup>d</sup> General open season Aug. 20 - Sept 20. S/F-50"; archery season (Aug 25-29) was closed in 1993 and 1994.

<sup>e</sup> Archery season August 10-17, S/F-50".

### Unit 15B

The State's management objectives for the central Kenai Peninsula for Unit 15B west are to maintain a population of moose with a bull:cow ratio of 20:100 and to allow for maximum opportunity to participate in hunting. The State's management objectives for Unit 15B east are to maintain a population of moose with a bull:cow ratio of 40:100 and to provide for the opportunity to harvest a large antlered bull under aesthetically pleasing conditions. In 2002, a census of 650 mi<sup>2</sup> of suitable moose habitat estimated a moose population of approximately 775–1,140 animals. Because the census was conducted in February after most bulls shed their antlers, composition by sex was not determined. However, it was estimated that calves comprised 20.6% of the population. This estimated population size is a slight decrease from 1990, when there were an estimated 885–1,200 moose in Unit 15B.

In Unit 15B west, State hunters harvested 41 bull moose in 2002 and 41 in 2003. In Unit 15B east State permit hunters harvested 12 moose in 2002 and 15 moose in 2003.

Reported harvest by Federal registration permits in Unit 15B has averaged approximately one moose per year between 1996–2003. A total of 13 moose were harvested, with 10 of them taken in the first 10 days of the season (**Table 3**).

### Unit 15C

The State's management objectives for Unit 15C are to maintain a population of approximately 3,000 moose and to maintain a minimum post-hunting sex ratio of 20 bulls:100 cows. Based on results from aerial surveys, the moose population has increased somewhat since 1993. A census conducted during Feb. 1993 produced a population estimate of 1,765–2,390 moose. A composition survey completed for Unit 15C in 2003 counted 1,207 moose with ratios of 31 calves:100 cows, and 19 bulls:100 cows. A census conducted in Feb. 2002 estimated the moose population between 2,500–3,450 animals.

Federal harvest in Unit 15C has averaged approximately two moose per year between 1996 and 2003. A total of the 18 moose were harvested, with 12 of them taken in the first 10 days of the season (**Table 3**).

The moose rutting period for Unit 15 is known to occur in late September through mid-October. Disruption of rut behavior could adversely affect both bulls and cows. Cows not bred during the first estrus period would probably be bred during the second or subsequent estrus periods. However, late-estrus calves show decreased rates of over-winter survival. Additionally, bulls utilize the greatest proportion of their body reserves of fat and protein during the rut, leaving only an extremely slim margin (often as low as 5%–7% of body fat) for over-winter survival. Increased hunting pressure during the peak of the rutting period may result in additional over-winter mortality of bulls as a result of increased stress.

### **Current events Involving Species**

At the Mar. 15–17, 2005, Southcentral Alaska Subsistence Regional Advisory Council meeting, individuals testified that they did not believe that there would be any immediate conservation concerns to the Unit 15 moose population if a longer subsistence harvest season were allowed, because the Federal harvests have been relatively small. There was also testimony that the State already allows a drawing permit hunt for moose in Unit 15B from Sept. 26 to Oct. 15, and that Federally qualified subsistence users should be provided the same opportunity to harvest moose later in the season. Several individuals who live in Unit 15 said that there should be a minimal increase in harvest if the season is extended, as most individuals have already harvested a moose by that time of year. They also felt that the road accessibility to good moose habitat was minimal, which should help minimize any increase in moose harvest.

After the Board deferred Proposal WP05-07, which requested that the current season dates of Aug. 10–Sept. 20 be maintained and the season lengthened to provide more opportunity with an additional season from Sept. 26–Oct. 15; ADF&G, the Kenai National Wildlife Refuge, and the Ninilchik Traditional Council further discussed the issue. At the Oct. 25–27, 2005, Southcentral Alaska Subsistence Regional Advisory Council meeting, the Council addressed this proposal again. After comments by the Kenai National Wildlife Refuge, the Ninilchik Traditional Council, ADF&G, and extensive public testimony, compromise regulatory language was proposed. The Council adopted a recommendation to add an additional moose season. The Council proposed to retain the original Aug. 10–Sept. 20 season dates, but also added an Oct. 20–Nov. 10 season in Units 15B and 15C, excluding Unit 15A. The harvest limit remained one antlered bull with spike-fork or 50-inch antlers with three or more brow tines. This late season addresses the issue of avoiding the moose rut season, and provides for more priority to

Federally qualified subsistence users to harvest moose closer to the time period when they customarily and traditionally harvested moose. Excluding Unit 15A addresses the moose conservation and road access concerns in the subunit.

At the Mar. 14–16, 2006 Southcentral Alaska Subsistence Regional Advisory Council meeting, the Council discussed this proposal and voted to support the proposal with one minor modification, to add a seven day reporting requirement. The Council felt that this would provide the Federal land managers timely harvest information and would help them manage the moose hunt effectively.

### **Effect of the Proposal**

If this proposal were adopted it would help alleviate some of the conservation concerns that arose regarding Proposal WP05-07. The additional hunting season would occur after the rut and avoid first estrus breeding thus having lesser impacts on the moose population. This proposal provides additional subsistence opportunities when the weather is cooler and meat can be more easily taken care of and vegetation is less of a problem, as it is in the early season. This proposal also addresses the concerns of the declining moose population in Unit 15A, by excluding this area from the additional season.

ADF&G has also expressed willingness to work to with the concept of the Council proposal (keeping old dates and adding an Oct. 20–Nov. 10 season), but they are concerned with the harvest of 50-inch or 3 brow tine moose during the late portion. ADF&G is not concerned with the additional take of spike or fork bulls at this time. However, they would be more comfortable with the additional time if the large bull take had a “cap” of five bulls, and if the take of the large bulls were distributed throughout the legal hunting area. The ADF&G area biologist believes that one of the main reasons that the spike-fork or 50-inch antlers or with three or more brow tines on either antler regulation has been successful on the Kenai, is that some large “legal” bulls make it through the hunting season.

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#### Appendix A. State species and bag limits for Unit 15.

Species and Bag Limits MOOSE	Required Ticket or Permit Type	Open Season
<b>Unit 15A</b> , the Skilak Loop Management Area		No open season
<b>Unit 15A</b> , east of Mystery Creek Road and the Pipeline Road, and north of the Sterling Highway: <b>Residents &amp; Nonresidents:</b> One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side, by bow and arrow only	Harvest	Aug. 10–Aug. 17
OR one bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side	Harvest	Aug. 20–Sept. 20
OR bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side by permit DM522	Drawing	Oct. 20–Nov. 20
<b>Remainder of Unit 15A: Residents &amp; Nonresidents:</b> One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side, by bow and arrow only	Harvest	Aug. 10–Aug. 17
OR one bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side	Harvest	Aug. 20–Sept. 20
<b>Unit 15B</b> , that portion bounded by a line running from the mouth of Shantatalik Creek on Tustumena Lake, northward to the headwaters of the west fork of Funny River; then downstream along the west fork of the Funny River to the Kenai Nation Wildlife Refuge Boundary; then east along the refuge boundary to its junction with the Kenai River; then eastward along the north side of the Kenai River and Skilak Lake; then south along the western side of Skilak river, Skilak Glacier, and Harding Icefield; then west along the unit <b>15B</b> boundary to the mouth of Shantatilak Creek: <b>Residents &amp; Nonresidents:</b> One bull with 50-inch antlers or antlers with 3 or more brow tines on at least one side by permit DM530, DM 532, DM534, DM536, OR DM538	Drawing	Sept. 1–Sept. 20
OR DM 531, DM533, DM535, DM 537, DM539	Drawing	Sept. 26–Oct. 15

**Appendix A.** *continued*

<b>Species and Bag Limits MOOSE</b>	<b>Required Ticket or Permit Type</b>	<b>Open Season</b>
<b>Remainder of 15B: Residents &amp; Nonresidents:</b> One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side, by bow and arrow only	Harvest	Aug. 10–Aug. 17
OR one bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side	Harvest	Aug. 20–Sept. 20
<b>Unit 15C</b> , southwest of a line from Point Pogibshi to the point of land between Rocky Bay and Windy Bay: Residents: One Bull by permit TM549	Tier II	Sept. 1–Sept. 30
<b>Nonresidents:</b>		No open season
<b>Unit 15 C</b> , south of the south fork of the Anchor River and northwest of Kachemak Bay: <b>Residents &amp; Nonresidents:</b> One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side	Harvest	Aug. 20–Sept. 20
OR One antlerless moose by permit DM549: the taking of calves or cows accompanied by calves is prohibited	Drawing	Aug. 20–Sept. 20
<b>Remainder of Unit 15C: Residents &amp; Nonresidents:</b> One bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on at least one side	Harvest	Aug. 20–Sept. 20

<i>WP06-19 Executive Summary</i>	
<b>General Description</b>	Eliminate the cow hunt and decrease the harvest limit from 2 caribou to 1 bull in Unit 9D. Also requests that Federal public lands be closed to caribou hunting except by Federally qualified subsistence users hunting under these regulations. <i>Submitted by the Kodiak/Aleutians Subsistence Regional Advisory Council.</i>
<b>Proposed Regulation</b>	<i>2 caribou 1 bull by Federal registration permit</i> <i>Aug. 1–Sept. 30</i> <i>Federal public lands are closed to hunting of</i> <i>Nov. 15–Mar. 31</i> <i>caribou except by Federally qualified subsistence</i> <i>users hunting under these regulations.</i>
<b>Kodiak/Aleutians Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support–3</b> (Comments same as for WP06-20)

<i>WP06-20 Executive Summary</i>	
<b>General Description</b>	Eliminate the cow hunt. <i>Submitted by the Alaska Department of Fish and Game.</i>
<b>Proposed Regulation</b>	<i>2 caribou bulls by Federal registration permit</i> <i>Aug. 1–Sept. 30</i> <i>Nov. 15–Mar. 31</i>
<b>Kodiak/Aleutians Regional Council Recommendation</b>	<b>Support.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support–3</b> (Comments same as for WP06-19)

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-19/20**

**KODIAK/ALEUTIANS SUBSISTENCE REGIONAL ADVISORY COUNCIL**

WP06-19

**Oppose** the proposal. The Kodiak/Aleutians Subsistence Regional Advisory Council members voted unanimously to oppose WP06-19 as it was originally proposed.

WP06-20

**Support** the proposal. The Kodiak/Aleutians Subsistence Regional Advisory Council supports the proposal and recognizes that a bulls-only hunt with a limit of 2 bulls would allow continued harvest of the SAPCH as the bull:cow ratio is sufficient and within management objectives, while also addressing the herd's population decline by eliminating the cow hunt.

Regarding the aspect of closing Federal public lands to hunting for non-Federally qualified subsistence users, several Council members expressed that this did not appear to be an issue at this time, and presently did not view it as a necessity to close Federal public lands. The point was brought up that if Federal public lands were closed, nonsubsistence users would concentrate their hunting efforts on State and corporation lands, which would especially affect the community of Nelson Lagoon. The Council Chair indicated that in the future the Council may need to restrict Federal public lands, but they would need more input from the communities.

An issue which was brought up multiple times was concern regarding the low calf:cow ratio. Council members would like to understand why and what could be done about the resultant population decline of the SAPCH. They would like more resources in the form of research efforts dedicated to this problem.

Also, options were discussed about how to change the existing State regulations to further benefit subsistence users of the SAPCH. The ADF&G area biologist provided information on procedural matters to change State regulations. Options suggested included closing the State winter season, adjusting the State seasons to provide advantages to subsistence hunters, and restricting the numbers of permits for guides hunting caribou in Unit 9D.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATIONS  
WP06-19/20**

**Oppose** WP06-19 and **Support** WP06-20, as recommended by the Kodiak/Aleutians Subsistence Regional Advisory Council.

The proposed Federal regulation should read:

**Unit 9D—Caribou**

*2 caribou bulls by Federal registration permit*

*Aug. 1–Sept. 30*

*Nov. 15–Mar. 31*

Changing the harvest limit to bulls only should improve cow survival somewhat and consequent production and recruitment of calves at a time of population decline. Poor nutrition appears to be one of the main factors for the population decline. A bulls-only harvest can be supported with the current bull:cow ratio. Closure of Federal public lands to non-Federally qualified users is not considered to be necessary at this time as the harvestable surplus of bulls can support both subsistence and nonsubsistence uses. Additional biological information about the population from population surveys and radio-collar monitoring studies should provide a basis for future management decisions.

**WRITTEN PUBLIC COMMENTS**  
**WP06-19/20**

**Support** the proposals. I think the limit should be one antlered bull. Early season and late season should be one antlered bull to protect the cows.

*–James Smith, Cold Bay*

**Support** the proposals. I support one bull. Drop the antlerless part. During the first part of the winter season through early December, 70% of the bulls still carry antlers.

*–John T. Maxwell, Cold Bay*

**Support** the proposals. I am not in any way suggesting that the hunt be cancelled, it is needed. It is my hope that you will only allow the collecting of mature bulls which will allow the herd to regain it's numbers.

*–Harry F. Lind, Cold Bay*

**STAFF ANALYSIS**  
**WP06-19/20**

**ISSUES**

Proposals WP06-19 and WP06-20, submitted by the Kodiak/Aleutians Subsistence Regional Advisory Council (Council) and by the Alaska Department of Fish and Game, respectively, request the Federal Subsistence Board to consider further restrictions to Federal harvest regulations for the Southern Alaska Peninsula Caribou Herd (SAPCH) in Unit 9D. Both proposals address conservation concerns about the declining population of the caribou herd, and propose regulatory changes to facilitate an increase in the size of the herd.

**DISCUSSION***WP06-19*

This proposal would eliminate the cow hunt and decrease the harvest limit from 2 caribou to 1 bull in Unit 9D. In addition, the Council requests that Federal public lands be closed to caribou hunting except by Federally qualified subsistence users hunting under these regulations. The proponent states that the existing management plan established in 1994 is no longer a viable management tool, and that a new planning process should be initiated to identify population thresholds so that future management actions may be taken in response to available resource information. Ultimately, the intent of the proposed change is to facilitate population growth of the SAPCH and provide for long term subsistence use of a properly managed resource.

*WP06-20*

This proposal requests an elimination of the cow hunt as well, while maintaining a harvest limit of two animals. The proponent, ADF&G, states that a bulls-only hunt is in accordance with guidelines established in the 1994 Southern Alaska Peninsula Caribou Herd Management Plan. The proponent advocates this regulatory change to slow the population decline and allow continued subsistence use of this resource.

**Existing Federal regulation****Unit 9D—Caribou**

*2 caribou by Federal registration permit*

*Aug. 1–Sept. 30*  
*Nov. 15–Mar. 31*

**Proposed Federal regulation****Unit 9D—Caribou***WP06-19*

*2 caribou 1 bull by Federal registration permit*  
*Federal public lands are closed to hunting of caribou except by Federally qualified subsistence users hunting under these regulations.*

*Aug. 1–Sept. 30*  
*Nov. 15–Mar. 31*

WP06-20

*2 caribou bulls by Federal registration permit**Aug. 1–Sept. 30  
Nov. 15–Mar. 31***Existing State Regulation:****Unit 9D—Caribou***1 bull  
Or 1 antlerless caribou  
Nonresidents: 1 bull**Aug. 10–Sept. 30  
Nov. 1–Mar. 31  
Sept. 1–Sept. 30***Extent of Federal public lands**

Approximately 40% of Unit 9D are Federal public lands managed by Izembek and Alaska Peninsula National Wildlife Refuges (see **Unit 9 map**).

**Customary and Traditional Use Determinations**

All residents of Unit 9D, False Pass, and Akutan have a positive customary and traditional use determination for caribou in Unit 9D.

**Regulatory History**

In Unit 9D, the Southern Alaska Peninsula Caribou Herd (SAPCH) began to decline in numbers during the early 1980s. In 1990, when a rapid decline was occurring, State and Federal resource managers agreed that all caribou harvest should cease when the herd population fell below 2,500 animals.

*Note:* This threshold level of 2,500 animals considers caribou inhabiting both Unit 9D and Unit 10—Unimak Island. ADF&G now recognizes the SAPCH on the Alaska Peninsula and the Unimak Caribou Herd (UCH) on Unimak Island as two separate caribou herds (Butler 2005*a*, Sellers 2003*a*, Sellers 2003*b*).

Federal public lands were closed to caribou hunting by non-Federally qualified subsistence users in 1991. The Alaska Board of Game closed State and private lands by emergency order in 1993. The Federal Subsistence Board closed Federal public lands to all caribou hunting in 1993.

Based on caribou surveys conducted in 1997, there was a sufficient surplus of bulls to allow a subsistence harvest to be resumed on Federal public lands in Unit 9D and Unit 10 (Unimak Island) by Special Action WSA97-01. Federal subsistence harvest seasons for the 1998/99 and 1999/00 seasons were authorized by Special Actions WSA98-05 and WSA99-04. The State season was opened again in 1999. In 2000, Proposal WP00-29, submitted by the Kodiak/Aleutians Subsistence Regional Advisory Council and modified by the Federal Subsistence Board, established a permanent caribou season for Unit 9D and Unimak Island.

In 2002, Proposal WP02-21, submitted by the Kodiak/Aleutians Subsistence Regional Advisory Council and adopted by the Federal Subsistence Board, extended the fall season for Unit 9D and Unit 10 (Unimak Island) from Sept. 25 to Sept. 30.

Special Action WSA03-08, submitted by the Kodiak/Aleutians Subsistence Regional Advisory Council and authorized by the Federal Subsistence Board on July 3, 2003, increased the caribou harvest limit from one to two for Unit 9D and from two to four for Unit 10 (Unimak Island) during the fall season of Aug. 1–Sept. 30, 2003.

Temporary Special Action WSA03-10, also authorized by the Federal Subsistence Board, requested that the increased harvest limit for caribou in Unit 9D and Unit 10 (Unimak Island) be extended for the Nov. 15, 2003–Mar. 31, 2004 caribou season.

In 2004, Proposal WP06-40 was adopted into permanent regulation to increase the harvest limit to two caribou in Unit 9D for the dates designated in the 2003 special actions (FWS 2004). This change allowed Federally qualified subsistence users the opportunity to harvest additional caribou during both the fall and winter seasons.

The State regulation for caribou in Unit 9D specify one bull during Aug. 10–Sept 30, *or* one antlerless caribou Nov. 15–Mar. 31. Male caribou are the first to drop their antlers, so the latter season is a hunt for primarily the males of the herd and is an option for residents who were unable to harvest a caribou in the first hunting period.

### **Biological Background**

The SAPCH population numbers in Unit 9D began to decline during the early 1980s, dropping from around 10,000 animals in 1983 to around 4,000 animals in 1989 and to an estimated 1,400 in 1996. Poor nutrition appears to be the primary factor for the population decline (Sellers 2003a). Predation by wolves and brown bears and human harvest also contributed to the decline.

By 2002, there was a rebound in population numbers when the count in Unit 9D totaled 4,100 caribou. However, the herd declined again by 2004 when the count was approximately 1,900 caribou (**Table 1**). In February 2005, an aerial survey for the SAPCH in Unit 9D resulted in a total of 1,840 caribou, reflecting similar results as the previous year (Siekaniec 2005). In January 2006, an aerial survey for the SAPCH completed in Unit 9D resulted in a total count of 1,651 caribou (Sowl 2006).

The most recent herd composition surveys observed by State and Refuge biologists were conducted on October 26, 2005 (**Table 1**). The bull:cow ratio of the SAPCH (30 bulls:100 cows) was within management objectives of 20 to 40 bulls:100 cows, but is lower than the bull:cow ratio observed in the previous 2 years (Butler 2005a). The calf:cow ratio (6 calves:100 cows) was low during the fall of 2005, as it has been over the last 4 years, indicating that a population decline is occurring. Current recruitment is not sufficient to offset adult mortality. Under normal circumstances for a caribou population, approximately 25 calves per 100 cows would offset adult deaths.

### **Management Direction**

A cooperative management plan, the Southern Alaska Peninsula Caribou Management Plan 1994, for the SAPCH was adopted in April 1994 (ADF&G and FWS 1994). Note that the threshold levels below combine population numbers for both the SAPCH in Unit 9D *and* the Unimak Caribou Herd (UCH) on Unimak Island. The following are population and management objectives outlined in the plan:

1. Sustain a total population of 4,000–5,000 animals.
2. Maintain a fall bull:cow ratio of 20–40:100.
3. Discontinue harvest when the herd is below 2,500 animals.

**Table 1. Unit 9D Southern Alaska Peninsula Caribou Herd (SAPCH) Composition Counts and Population Estimates, 1983-2005 (Butler 2005a).**

Regulatory year	Bulls: 100 cows	% Calves Summer	% Calves Fall	Calves: 100 cows	Cows (%)	Small bulls (% bulls)	Medium bulls (% bulls)	Large bulls (% bulls)	Sample size (for composition counts)	Postcalving survey results	INWR <sup>a</sup> counts
1983			15 <sup>a</sup>								10,203
1985		6 <sup>a</sup>	9 <sup>a</sup>								4,044
1986	32	17	13	20	66	59	28	13	2,307		4,543
1987	36	12	16	26	62	54	25	21	1,769	4,067	6,401
1988	41	16	12	19	59	61	37	4	886	3,407	
1989		17	5						1,718	3,386	3,957
1990	19	14	9	12	76				1,051	3,375	
1991	28	18	13	19	68	53	33	14	883	2,287	2,830
1992	22	15	15	22	70	46	32	21	746	2,380	
1993	30	16	16	24	65	59	24	17	745	1,495	1,929
1994	29	21	18	28	64	46	27	27	531	2,137	1,806
1995		11								1,434	
1996		10									1,403
1997	42	15	12	19	62	36	36	27	546	1,844	3,243
1998	32		21	35	60	42	23	36	987		3,127
1999	51	26	15	25	57	48	30	22	1,049	3,612	
2000	42	24	21	37	56	50	24	26	982		
2001	57		19	38	51	57	26	17	1,313		
2002	38		10	16	65	44	34	23	932		4,100
2003	40		5	8	68	40	26	33	1,257		
2004	36		5	7	70	24	38	38	966		1,872
2005	30		5	6	73	27	46	28	1,040		1,651

<sup>a</sup> Counts of mainland herd only, by Izembek National Wildlife Refuge staff from Herendeen Bay to Nelson Lagoon

4. Provide limited harvest of bulls when the herd exceeds 2,500 animals as long as there are at least 20 bulls:100 cows.
5. Phase in cow harvests when the population reaches 3,500. If the population reaches 4,000, harvests will be increased to prevent further growth.

The current population count conducted in November 2005 for the UCH is 1,009 caribou (Siekaniac 2005). See **Table 2** for UCH composition surveys and population estimates from 2000 to 2005. In a winter count in 1997, the FWS counted 603 caribou on Unimak Island. At the time, this had been the only comprehensive survey of Unimak Island in over two decades (Sellers 2003*b*).

### **Harvest History**

Harvest of the SAPCH was fairly high from 1980–1986. Beginning in 1986 restrictive regulations reduced harvests as the herd continued to decline. By 1993, the SAPCH and UCH were below 2,500 and hunting was closed.

Based on surveys conducted in 1997, there was a sufficient surplus of bulls in the herd to allow a subsistence caribou harvest on Federal public lands in Unit 9(D) by special action.

Permanent harvest regulations were established for Unit 9D in 2000. See **Appendix** (Fisher 2005) for totals of State and Federal hunter harvest for Unit 9D.

Caribou have historically been and are today the most important land mammal used for subsistence in the lower Alaska Peninsula communities. Most of the reported subsistence harvest in Unit 9D occurs along the Cold Bay road system during November and December when the herd is in the vicinity of Cold Bay.

### **Current Events Involving Species**

During their September 2005 meeting, the Kodiak/Aleutians Subsistence Regional Advisory Council discussed their concerns about the population decline of the SAPCH with representatives of ADF&G, Izembek National Wildlife Refuge, and the Office of Subsistence Management. Various issues were addressed, including the Council's request for a cooperative management plan agreement. This planning process would update the 1994 Management Plan, identify threshold levels for carrying out management objectives, and could assist local wildlife managers make timely recommendations to seasons and harvest limits. The population and management objectives outlined in the 1994 plan consist of population thresholds which included the caribou population on Unimak Island. Presently, the Unimak Caribou Herd is distinguished as separate from the SAPCH, so the new management plan would need to adjust the threshold numbers accordingly. Provisions for step down levels of harvest limits can be more readily determined based on a current population count.

Funding for \$25,000 was approved in 2006 for an ANILCA 809 Agreement between the ADF&G and the USFWS to put radio collars on adult female caribou in the SAPCH during spring and fall surveys. The radio collars will provide data on survival and reproduction. Blood and fecal samples will also be collected to monitor the presence of diseases and parasites. This monitoring effort will provide managers with additional information needed to regulate this caribou herd.

## Effect of the Proposal

### WP06-19

If adopted, the proposed regulation would reduce the caribou limit from two animals of either sex to one bull. In addition, Federal public lands would be closed to hunting of caribou except by Federally qualified subsistence users hunting under Federal regulations. By eliminating cow harvests to manage the herd for population growth, a projected increase in the size of the SAPCH should occur. If adopted, this regulation would exclude non-Federally qualified subsistence users from hunting caribou on Federal public lands in Unit 9D. Requirements established in Section 815 of ANILCA allow a closure for the taking of fish and wildlife on Federal public lands when necessary to assure the continued viability of a wildlife population, or to continue subsistence uses of that wildlife population.

### WP06-20

If adopted, the proposed regulation would change the Federal hunt to bulls only, with a harvest limit of two. This would benefit the herd by slowing the population decline. Federally qualified subsistence users could continue to harvest two caribou, however, only bulls. If adopted, the Federal harvest regulation for two bulls only would be more liberal than State regulations, which allows one bull caribou to be harvested. Non-Federally qualified subsistence users would be able to continue a general hunt on both Federal public lands, and State or private lands.

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**APPENDIX**

**Unit 9D Reported Caribou Harvest 1999-2004**  
 Southern Alaska Peninsula Caribou Herd

<b>Year</b>	<b>FRP*</b>	<b>Bulls</b>	<b>Cows</b>	<b>SGP*</b>	<b>Bulls</b>	<b>Cows</b>	<b>Totals</b>
<b>1999</b>	0	0	0	70	46	7,2 unk	55
<b>2000</b>	21	14	0	67	59	5,3 unk	81
<b>2001</b>	11	7	0	69	45	4	56
<b>2002</b>	14	10	1	84	40	5,2 unk	58
<b>2003</b>	26	5	1	64	43	1,1 unk	51
<b>2004</b>	30	5	2	92	63	6, 1 unk	77
<b>Totals</b>	<b>102</b>	<b>41</b>	<b>4</b>	<b>446</b>	<b>296</b>	<b>28, 9 unk</b>	<b>378</b>

\*FRP = Federal Registration Permit

\*SGP = State General Permit

**Unit 9D Reported Caribou Harvest Community Data, 1983–2002**  
ADF&G harvest ticket database

<b>Community</b>	<b>GMU</b>	<b>Permits</b>	<b>Hunted</b>	<b>Killed</b>
Ak. Res. Unk. Ak. City		7	7	6
Ak. Res. Non Ak. City		6	6	5
Blank Record		18	18	13
Non Resident		116	116	100
Resident Unk.		4	4	4
Adak	10	3	3	3
Anchorage	14C	70	70	54
Chugiak	14C	2	2	1
Cold Bay	9D	104	104	85
Cooper Landing	7	1	1	1
Craig	2	1	1	1
Dutch Harbor	10	5	5	4
Eagle River	14C	12	12	7
Elmendorf AFB	14C	2	2	1
Ester	20B	2	2	1
Fairbanks	20B	8	8	7
False Pass	10	7	7	6
Homer	15C	3	3	2
Juneau	1C	3	3	3
Kasilof	15B	2	2	0
Kenai	15A	5	5	5
King Cove	9D	88	88	67
King Salmon	9C	1	1	0
Kodiak	8	11	11	5
Moose Pass	7	1	1	0
Nelson Lagoon	9D	9	9	9
Nenana	20A	2	2	2
Nikiski	15A	1	1	1
Palmer	14A	7	7	7
Sand Point	9D	9	9	4
Seward	7	1	1	0
Sitka	4	1	1	1
Skagway	1D	2	2	0
Soldotna	15A	12	12	8
South Naknek	9C	1	1	1
Sutton	14A	1	1	1
Unalaska	10	3	3	2
Wasilla	14A	10	10	7
<b>Totals</b>		<b>542</b>	<b>542</b>	<b>427</b>

<i>WP06-21 Executive Summary</i>	
<b>General Description</b>	Requests that the opening date for the antlerless season for Sitka black-tailed deer in Unit 8 be changed from Nov. 1 to Oct. 1. This change would align Federal regulation with the opening date of the State season for any deer in Unit 8 remainder. <i>Submitted by the Kodiak/Aleutians Subsistence Regional Advisory Council.</i>
<b>Proposed Regulation</b>	<p><b>Unit 8—Deer</b></p> <p><i>All lands within the Kodiak Archipelago within the Kodiak National Wildlife Refuge, including lands on Kodiak, Ban, Uganik, and Afognak Islands—3 deer; however, antlerless deer may be taken only from <del>Nov. 1</del> <b>Oct. 1</b>–Jan. 31.</i></p> <p style="text-align: right;"><i>Aug. 1–Jan. 31</i></p>
<b>Kodiak/Aleutians Regional Council Recommendation</b>	<b>Support.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATION  
WP06-21**

**KODIAK/ALEUTIANS SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support** the proposal. The Kodiak/Aleutians Subsistence Regional Advisory Council supports this proposal. The deer population has increased and Federally qualified subsistence users can currently harvest antlerless deer starting Oct. 1 under State regulations. Annual harvests have been below management levels set by the State. This would increase subsistence harvest opportunity.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-21**

**Support** the proposal as recommended by the Kodiak/Aleutians Subsistence Regional Advisory Council.

**Justification**

The beginning date for the antlerless deer season under the proposed Federal regulation, Oct. 1, aligns with the starting date under State regulation for the harvest of any deer in Unit 8 remainder. This provides consistency for subsistence users who might be hunting under either State or Federal regulations.

**STAFF ANALYSIS  
WP06-21**

**ISSUES**

Proposal WP06-21, submitted by the Kodiak/Aleutians Subsistence Regional Advisory Council, requests that the opening date for the antlerless season for Sitka black-tailed deer in Unit 8 be changed from Nov. 1 to Oct. 1. This change would align Federal regulation with the opening date of the State season for any deer in Unit 8 remainder.

**DISCUSSION**

Currently, under State regulation, the season for harvesting any deer in Unit 8 remainder begins Oct. 1, while the current Federal regulation has an antlerless deer season beginning Nov. 1. The proponent requests the Federal antlerless season also begin Oct. 1 to provide a direct benefit to subsistence users by opening an antlerless harvest season the same date as State regulation.

**Existing Federal Regulation****Unit 8–Deer**

*All lands within the Kodiak Archipelago within the Kodiak National Wildlife Refuge, including lands on Kodiak, Ban, Uganik, and Afognak Islands—3 deer; however, antlerless deer may be taken only from Nov. 1–Jan. 31.* *Aug. 1–Jan. 31*

**Proposed Federal Regulation****Unit 8–Deer**

*All lands within the Kodiak Archipelago within the Kodiak National Wildlife Refuge, including lands on Kodiak, Ban, Uganik, and Afognak Islands—3 deer; however, antlerless deer may be taken only from ~~Nov. 1~~ Oct. 1–Jan. 31.* *Aug. 1–Jan. 31*

**Existing State Regulation****Unit 8 remainder–Deer**

*Three deer total: Bucks only* *Aug. 1–Sept. 30*  
*Any deer* *Oct. 1–Dec. 31*

**Extent of Federal Public Lands**

Federal public lands in Unit 8 are in the Kodiak National Wildlife Refuge (Refuge). Approximately two-thirds of Kodiak Island and 40% of all lands in Unit 8 are part of the Refuge (See **Unit 8 map**).

## **Customary and Traditional Use Determination**

All residents of Unit 8 have a positive customary and traditional use determination for deer in Unit 8.

## **Regulatory History**

Federal subsistence harvest regulations for deer in Unit 8 were adopted from State regulations in 1990. Since then, numerous changes have occurred to both State and Federal regulations. Most regulatory changes were initiated in response to deer population trends and hunting effort. Parts of the unit connected along the road system have had more restrictive regulations, while more remote areas have had more liberal regulations. In 1999, Proposal 41 was adopted to extend the Federal season through the winter one month longer than the State season, until Jan. 31 (FWS 1999). Previously, Federal and State deer regulations had become unclear and inconsistent for subsistence and general hunters. In 2001, the State simplified their Unit 8 deer regulations to include road system and non-road system areas. The State also changed to a three deer harvest limit and a Dec. 1–31 antlerless deer season. The harvest limit had been five deer for Unit 8 residents hunting in the Kodiak National Wildlife Refuge under Federal subsistence management regulations until June 2001, when it was reduced to three deer (FSB 2001). Under Federal regulations, WP02-22 was adopted in 2002 which simplified the Federal deer hunt area description and deer harvest limits, and revised the antlerless harvest season to Nov. 1–Jan. 31 (FSB 2002).

The beginning of the State season changed to Oct. 1, effective in regulatory year 2003/04, for harvesting any deer in Unit 8 remainder. Under the current proposal, WP06-21, the antlerless deer season would begin at the same time as State regulation, and subsistence users would continue to have an antlerless season one month longer, until Jan. 31.

## **Biological Background**

The Sitka black-tailed deer population originated from 4 transplants, totaling 30 deer, made to Long Island and Kodiak Island between 1924 and 1934. By the early 1940s deer occupied northeastern Kodiak Island, and the first hunt was established in 1953. The deer population continued to expand into unoccupied habitat and by the late 1960s deer were distributed throughout Kodiak, Afognak, and adjacent islands. The population suffered high mortality during the 1968/69 and 1970/71 winters, causing declines in harvests and hunter success. An increase in the population occurred from 1972 to the mid 1980s, when the population reached peak numbers, exceeding 100,000 animals. Winter severity, beginning in the 1987/88 winter, caused a decline in the population trend through 1992 (Van Daele 2003).

The deer population began to rebound in 1993. Survival was much improved during the 1992/93 and 1993/94 winters and the upward population trend continued through the winters of 1994/95 and 1995/96. However, the deer population suffered moderate winter kills in 1997/98, and winter mortality on Kodiak Island was very heavy during the winter of 1998/99, with at least 50% of the population suspected to have perished. Public concerns prompted the Alaska Board of Game to issue an emergency regulation reducing the harvest of antlered bucks in late December. Mortality was significantly lower during the 1999/00 winter as the population started to recover.

Prior to the winter of 1997/98, the deer population was estimated at 80,000–100,000. After the severe kills of 1998/99, the deer population in fall 2000 was estimated at about 40,000 animals for Unit 8, with approximately 65%–70% of the population occurring on Refuge lands. For five successive winters, from 1999/00 to 2004/05, conditions were relatively mild, and as previous patterns have shown, the deer population responded positively. Estimates of deer numbers or densities are derived from harvest data

and subjective accounts from hunters, which give an indicator of population trend. The 2004 population estimate was 60,000 deer and appeared to be increasing throughout Unit 8 (Van Daele 2005).

Deer populations in Unit 8 are highest on the southern one-third of Kodiak Island. As described above, abundance on the island is primarily a function of severity of winter on lower elevation (0–1000') winter range of deer and associated winter mortality. Deer populations can decline following a series of severe winters, but may also recover rapidly when winter conditions are more favorable.

The ADF&G and the Refuge conduct annual winter mortality index surveys in selected portions of Unit 8 each spring. The purpose of these surveys is to document the cyclic changes in deer numbers mainly in response to varying winter weather. A mild winter of 2004/05 prevailed in western Kodiak Island and likely promoted high deer survival. As a result, the deer herd on the Refuge has continued to increase and projections are that subsistence users should find sufficient deer harvest opportunities (FWS 2005).

The current management objective determined by the ADF&G for Unit 8 is to maintain a population of 70,000 to 75,000 deer and an annual harvest of 8,000 to 8,500 deer.

### **Harvest History**

Since their introduction on the island in 1924, deer have been integrated into the seasonal round of harvest activities among local residents. Based on information collected by the ADF&G during the 1990s from nine Kodiak Island communities, the portion of households utilizing deer as a food resource ranged from 51% on the Coast Guard Base to 80% in Port Lions, 70% in Kodiak City, 88% in Chiniak, and in excess of 90% of the households in the remaining study communities. The average harvest of Kodiak City households was about 58 pounds (ADF&G 2001).

Annual harvests during the 1990s averaged between 7,000–9,000 deer, approximately half of which occurred on Refuge lands. Following the population decline in 1998/99, the estimated annual harvest averaged 3,065 deer for the 4 winters from 1999/00 through 2002/03 (Van Daele 2005). Harvests have rebounded from these lower levels to 5,198 deer harvested in 2003/04. Information from Refuge deer hunting checks and ADF&G deer harvest questionnaire surveys indicates Alaskan residents account for approximately 75% of the total harvest on Refuge lands. Unit 8 hunters composed 46% of the hunters in 2003/04. Many subsistence hunters prefer to wait until late in the season to hunt, when snow at higher elevations forces deer to concentrate at lower elevations and on beaches, making them easier to find, harvest, and transport by boat. Also, there are fewer nonlocal hunters later in the season. In Unit 8 as a whole, nonlocal hunters take approximately 55% of the total harvest (FWS 2002).

Even though there was a reduction in hunter success and in the number of deer harvested after the population decline in 1999, the percentage of males harvested has remained high. Since the 1993/94 season, the percentage of males in the harvest has remained at least 75%, and peaked at 95% in 2001/02 (Van Daele 2005). The large proportion of males in the harvest can be attributed to more conservative doe seasons, harvest limits, and preference of hunters.

In recent years, for 2003/04, 23% of the reported harvest was from the northern islands, 45% was from northern Kodiak, and 30% was from southern Kodiak (Van Daele 2005). These proportions reflect patterns comparable to the five years prior to 2003/04.

## Effect of the Proposal

If this proposal were adopted, the subsistence antlerless season for deer would begin on Oct. 1, the same date as the State season for Unit 8 remainder. There should be no negative impact on the deer population in Unit 8, as the population has increased providing an additional harvestable surplus. There would be no effect expected from this change because subsistence users can currently harvest antlerless deer starting Oct. 1 under State regulations, and the harvestable surplus is sufficient to provide for this additional use. Given the current increasing trend in deer population across most of the unit, and annual harvests have been lower than the management levels set by the State, increasing the length of the season for Federally qualified subsistence users follows sound management practices for this species. The deer population is prone to considerable population swings, with past and current regulatory responses modified to adjust to these changes.

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<i>WP06-22 Executive Summary</i>	
<b>General Description</b>	Requests the Federal subsistence caribou hunting season be closed in Unit 9C remainder and Unit 9E until the Northern Alaska Peninsula Caribou Herd (NAPCH) population is considered healthy again. <i>Submitted by the Bristol Bay Subsistence Regional Advisory Council.</i>
<b>Proposed Regulation</b>	<p><b>Proposed Federal regulation</b></p> <p><b>Unit 9C remainder and Unit 9E—Caribou</b></p> <p><i>Unit 9C remainder—1 bull by Federal registration permit or State Tier II permit. Federal public lands are closed to the taking of caribou except by residents of Units 9C and 9E hunting under these regulations.</i></p> <p style="text-align: right;"><i>Aug. 10–Sept. 20 Nov. 15–Feb. 28</i></p> <p style="text-align: right;"><b>No Federal open season.</b></p> <p><i>Unit 9E—1 bull by Federal registration permit or State Tier II permit. Federal public lands are closed to the taking of caribou except by residents of Units 9C and 9E hunting under these regulations.</i></p> <p style="text-align: right;"><i>Aug. 10–Sept. 20 Nov. 1–Apr. 30</i></p> <p style="text-align: right;"><b>No Federal open season.</b></p>
<b>Bristol Bay Regional Council Recommendation</b>	<b>Support.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support</b> <b>Oppose</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATION  
WP06-22**

**BRISTOL BAY SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support.** The Bristol Bay Subsistence Regional Advisory Council heard biological data from the Office of Subsistence Management staff analysis which supports the Council's motion to close the caribou hunting season in Units 9C remainder and 9E until the Northern Alaska Peninsula Caribou Herd population is healthy again.

Calf recruitment is insufficient at this time to offset adult mortality. The State chose not to issue any Tier II permits, which for all practical purposes, closes the caribou hunting season at the State level. Lastly, the most recent census collected from the NAPCH found there were only 2,500 animals.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-22**

**Support** the proposal as recommended by the Bristol Bay Subsistence Regional Advisory Council.

**Justification**

Based on biological data, the NAPCH has declined to the point where any hunting of these animals would be catastrophic. Recruitment is insufficient at this time to offset adult mortality. Currently the Tier II and Federal registration permit hunts are closed and should remain so until a population recovery begins and harvest opportunities are reassessed by resource managers.

**WRITTEN PUBLIC COMMENTS  
WP06-22**

**Support.** Where the biological data dictates, a moratorium on hunting must be implemented. Proposal #22 recognizes very low caribou numbers in Unit[s] 9C and 9E in Bristol Bay and, for the sake of that herd's survival, should be supported.

*–Alaska Regional Office, National Parks Conservation Association*

**Oppose.** Although the Northern Alaska Peninsula Herd (NAPCH) is at low numbers, hunting opportunity has been allocated under the Tier II system. No allocation was made during this last season but the season is still on the books. I question the need to formally close the season if we are able to regulate by simply not offering any Tier II permits when there is not a harvestable surplus. Additionally, some Mulchatna caribou range into 9C during the winter on both State and Federal and a short season has been instituted in recent years which have been of benefit to locals. It appears this regulation if adopted would close that hunt. If and when the NAPCH recovers to a level which would allow some hunting, would it be simpler to leave the season on the books and then simply reinstitute a Tier II hunt?

*–Joe Klutsch, King Salmon*

**STAFF ANALYSIS  
WP06-22**

**ISSUES**

Proposal WP06-22, submitted by the Bristol Bay Subsistence Regional Advisory Council, requests the Federal subsistence caribou hunting season be closed in Units 9C remainder and 9E until the Northern Alaska Peninsula Caribou Herd (NAPCH) population is considered healthy again. Currently, the herd cannot sustain a Federal subsistence hunt or a State general hunt.

**DISCUSSION**

The proponent states there is a conservation concern with the NAPCH. Nearly 20 years ago, the herd's population was estimated to be 20,000 animals. Recent aerial surveys conducted in Oct. 2005 provide a population estimate of approximately 2,500 caribou (Butler 2005b). The proponent wants to change the existing Federal regulation because calf survival and recruitment are low and notes that the herd has not had any positive growth in the last 5 years. Due to the drastic population decline, the proponent recognizes the need for management action.

**Existing Federal Regulation****Unit 9C remainder and Unit 9E—Caribou**

<i>Unit 9C remainder—1 bull by Federal registration permit or State Tier II permit. Federal public lands are closed to the taking of caribou except by residents of Units 9C and 9E hunting under these regulations.</i>	<i>Aug. 10–Sept. 20 Nov. 15–Feb. 28</i>
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<i>Unit 9E—1 bull by Federal registration permit or State Tier II permit. Federal public lands are closed to the taking of caribou except by residents of Units 9C and 9E hunting under these regulations.</i>	<i>Aug. 10–Sept. 20 Nov. 1–Apr. 30</i>
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**Proposed Federal Regulation****Unit 9C remainder and Unit 9E—Caribou**

<i>Unit 9C remainder—1 bull by Federal registration permit or State Tier II permit. Federal public lands are closed to the taking of caribou except by residents of Units 9C and 9E hunting under these regulations.</i>	<i>Aug. 10–Sept. 20 Nov. 15–Feb. 28</i>
	<b><i>No Federal open season.</i></b>

<i>Unit 9E—1 bull by Federal registration permit or State Tier II permit. Federal public lands are closed to the taking of caribou except by residents of Units 9C and 9E hunting under these regulations.</i>	<i>Aug. 10–Sept. 20 Nov. 1–Apr. 30</i>
	<b><i>No Federal open season.</i></b>

## Existing State Regulation

### Unit 9C remainder and Unit 9E—Caribou

*Unit 9C remainder—1 bull by permit TC505.*

*Aug. 10–Sept. 20  
or Nov. 15–Feb. 28*

*Unit 9E—1 bull by permit TC505*

*Aug. 10–Sept. 20  
or Nov. 1–Apr. 30*

**Note:** The State did not issue any Tier II permits for the 2005/06 season.

## Extent of Federal Public Lands

In Unit 9C, 78% of Federal public lands are administered by the National Park Service in the Katmai National Park and Preserve. Subsistence uses are permitted in the Katmai National Preserve, which comprise 8% of those lands in Unit 9C. The remaining Federal public lands in Unit 9C include 3% administered by Becharof National Wildlife Refuge and 3% administered by the Bureau of Land Management. In Unit 9E, 45% of Federal public lands are administered by Alaska Peninsula/Becharof National Wildlife Refuge and 5% are administered by the National Park Service. The remaining lands are primarily State or Native Corporation lands (See **Unit 9 Map**).

## Customary and Traditional Use Determination

All residents of Units 9B, 9C, 17, and Egegik have a positive customary and traditional use determination for hunting caribou in Unit 9C. All residents of Units 9B, 9C, 9E, 17, Nelson Lagoon, and Sand Point have a positive customary and traditional use determination for hunting caribou in Unit 9E.

## Regulatory History

Federal subsistence hunting regulations became effective on July 1, 1990 when the Federal Government took over management of subsistence use of fish and wildlife resources on Federal public lands in Alaska. Refer to **Appendix 1** for a history of regulations for caribou hunting in Units 9C and 9E.

## Current Events Involving Species

Bull:cow ratios in Oct. 2004 (34 bulls:100 cows) were still within management objectives to have more than 25 bulls:100 cows for the NAPCH. These data provided early indications that a limited caribou hunt was justifiable for the 2005 season.

At the Mar. 2005 Bristol Bay Subsistence Regional Advisory Council meeting, the Refuge biologist for the Alaska Peninsula/Becharof National Wildlife Refuge briefed the Council on population surveys, studies, and satellite telemetry monitoring projects associated with the NAPCH. At that time, both Refuge and ADF&G biologists explained to Council members that a hunting closure of the NAPCH may be a possibility if the population continues to decline.

A closure for the fall caribou hunting season, Special Action WSA05-02, was adopted by the Federal Subsistence Board on July 25, 2005. In Oct. 2005, the Bristol Bay Subsistence Regional Advisory Council recommended to the Federal Subsistence Board to extend the closure to the end of the 2006 winter hunting season (FWS 2005). Effective Nov. 1, 2005 (Special Action WSA05-11), the winter subsistence

caribou hunting season on Federal public lands in Unit 9C remainder and Unit 9E was closed (FSB 2005). Also, the ADF&G announced in July 2005 that they will not issue Tier II permits for this hunt for the 2005/06 regulatory year (ADF&G 2005).

Recent aerial surveys of the NAPCH conducted in Oct. 2005 (Butler 2005*b*), provide herd composition and a revised population estimate of approximately 2,500 animals. For the third year in a row, calf:cow ratios were 7 calves:100 cows. These findings corroborate data collected earlier in the summer which documented poor calf production and survival. Based on the observed calf ratio, the NAPCH is still declining. These low calf survival and recruitment ratios are also evident with the Southern Alaska Peninsula Caribou Herd and with the Unimak Caribou Herd, indicating that poor calf recruitment is a region-wide problem in the area.

### **Biological Background**

The NAPCH ranges throughout Units 9C and 9E. Historically, the size of this population has fluctuated widely, reaching peaks at the turn of the 20<sup>th</sup> century and again in the early 1940s of approximately 20,000 caribou. Prior to 2005, the last population low was during the late 1940s, around 2,000 caribou. By 1963, the herd had increased to over 10,000 animals. In 1981 the estimate was 16,000 and the herd increased to 20,000 by 1984 (Sellers 2003). The NAPCH remained near 20,000 through the decade of the 1980s. Since then the herd has been in decline. By 1998 it had declined to around 9,200 animals, 7,200 animals in 2000, and 3,400 animals in 2004. The State of Alaska population objective for the NAPCH is 12,000–15,000 caribou (ADF&G 2004*b*).

Exact reasons for the NAPCH decline remain unknown but probably include nutritional stress in the herd due to overgrazing of the range south of the Naknek River, disease, predation, and poor habitat conditions throughout their entire range (Sellers 2003). Based on biological investigations the caribou are in mediocre body condition, cows have exhibited low pregnancy rates, and there is low calf survival. In 1998, calves had a high incidence of pneumonia possibly induced by lung worms. Calves examined in 2005 appeared healthy, but showed signs of exposure to parasites (Gude et al. 2005).

Composition surveys were conducted jointly with ADF&G and the Alaska Peninsula/Becharof National Wildlife Refuges during 2003 and 2004. Biologists documented the lowest calf:cow ratios for the NAPCH since 1970; findings were 11 calves:100 cows in 2003 and 7 calves:100 cows in 2004. As a comparison, cow:calf ratios averaged about 24 calves:100 cows during surveys from 1998–2002. However, bull:cow ratios have been above ADF&G's management objective of 25 bulls per 100 cows (Butler 2005*c*, pers. comm.).

A calf mortality study and health assessment was conducted during late May and early June 2005 (Gude et al. 2005). A pregnancy rate of 57% was observed for cows, 2 years of age or greater, which is 20% lower than the herd pregnancy rate in the mid to late 1990s. This provides evidence that factors other than harvest or predation (e.g. forage limitations or disease) are contributing to the lack of population growth of this caribou herd. Forty-two calves were collared on traditional calving grounds to monitor survival rates. Overall, calves had a 93% mortality rate during the first eight weeks of life. Evidence of bear predation or scavenging was observed at the majority of kill sites, but other causes of death could not be ruled out based on the amount of time between the animal's death and the field investigation.

Three adult caribou and four calves were collected to determine the health of the herd. Based on necropsies, several diseases are present in the population. Most notable among them were bovine respiratory diseases. While several of these diseases can be detrimental to the health of the caribou by

themselves, it is likely that the combined effect of these diseases has resulted in the increased mortality and reduced productivity observed in this herd (Butler 2005c, pers. comm.).

### Harvest History

September has historically been the most important month for the harvest of the NAPCH. This has been especially true for nonresidents because of the combination of weather and ease of access by boat and aircraft. The subsistence harvest has been primarily opportunistic and the chronology of harvests varies between villages depending upon caribou availability.

The continued decline of the NAPCH prompted both the Alaska Board of Game and the Federal Subsistence Board to implement harvest restrictions in the spring of 1999. These restrictions were designed to protect the survival of the herd yet allow for a limited harvest of bull caribou for qualified subsistence users. The State issued 600, 400, 400, 400, 400, and 100 Tier II permits during 1999, 2000, 2001, 2002, 2003, and 2004 respectively. The number of Federal permits issued was based on the fact that historical harvest of the NAPCH from Federal public lands constituted about 10% of the total harvest. The number of Federal permits were 60, 40, 40, 40, 40, and 10 for the same years respectively.

Since 1999 an average of 66% of those that reported hunting were successful. Local hunters reported taking over 95% of the reported harvest. **Table 1** provides the estimated NAPCH State and Federal harvest for the period 1997–2005. Estimated harvest from Federal public lands was about 10% of the estimated total harvest.

The ADF&G harvest objective, given the State's population objective of 12,000–15,000 animals, is 800–1,500 caribou (ADF&G 2004).

**Table 1.** NAPCH harvest, regulatory years 1997–2005 (Butler 2005c).

Year	Males	Females	Est. Unreported	Est. Total
1997–98	446	36	900–1,000	1,300–1,400
1998–99	453	31	500	1,000
1999–00	147	8	45	200
2000–01	76	6	30	112
2001–02	87	7	30	124
2002–03	80	4	30	120
2003–04	115	6	75	196
2004–05	23	1	30	54
Totals	1,427	99	1,730–1,830	3,106–3,206

### Effect of the Proposal

If adopted, the primary effect of this proposal would be to close the Federal hunting season for the NAPCH on Federal public lands in Unit 9C remainder and Unit 9E. Rural subsistence users who harvest caribou from this herd would no longer be able to harvest this subsistence resource. There would be no impact on other users since Federal public lands in these units are already closed to non-Federally qualified subsistence users.

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**APPENDIX 1**

**Regulatory History for Units 9C and 9E Caribou Hunts**

<b>Effective Dates</b>	<b>Regulation</b>
July 1, 1990–June 30, 1991	Units 9C and Unit 9E, 4 caribou, Aug. 10–Mar. 31; however, no more than 2 caribou may be taken Aug. 10–31 and no more than 1 caribou may be taken Sept. 1–Nov. 30.
July 1, 1991–June 30, 1992	Unit 9C, 4 caribou, Aug. 10–Mar. 31; however, no more than 2 caribou may be taken Aug. 10–31 and no more than 1 caribou may be taken Sept. 1–Nov. 30.
	Unit 9E, 4 caribou, Aug. 10–Mar. 31; however, no more than 2 caribou may be taken Aug. 10–Nov. 30. A Federal registration permit is required Sept. 1–Nov. 30.
July 1, 1992–June 30, 1993	Units 9C and 9E, 4 caribou Aug. 10–Mar. 31; however, no more than 2 caribou may be taken Aug. 10–Sept. 30 and no more than 1 caribou may be taken Oct. 1–Nov. 30.
July 1, 1993–June 30, 1995	Unit 9C, 4 caribou Aug. 10–Mar. 31; however, no more than 2 caribou may be taken Aug. 10–Sept. 30 and no more than 1 caribou may be taken Oct. 1–Nov. 30.
	Unit 9E, that portion south of Seal Cape on the Pacific side of the Alaska Peninsula divide, 4 caribou July 1 and April 30, only bulls may be taken between July 1 and Aug. 9.
	Unit 9E remainder, Aug. 10–April 30, 4 caribou.
July 1, 1995–June 30, 1999	Unit 9C, 4 caribou Aug. 10–Mar. 31; however, no more than 1 caribou may be a cow, no more than 2 caribou may be taken Aug. 10–Nov. 30 and no more than 1 caribou may be taken per calendar month between Dec. 1–Mar. 31.
	Unit 9E, that portion southwest of the headwaters of Fireweed and Blueberry creeks (north of Mt. Veniaminof) to and including the Sandy River drainage on the Bristol Bay side of the Alaska Peninsula; and that portion south of Seal Cape to Ramsey Bay on the Pacific side of the Alaska Peninsula divide is closed to all hunting of caribou. No open season.
	Unit 9E remainder, Aug. 10–April 30, 4 caribou.
July 1, 1999–July 24, 2005	Unit 9C remainder, Aug. 10–Sept. 20 and Nov. 15–Feb. 28, 1 bull by Federal registration permit or State Tier II permit. Federal public lands are closed to the taking of caribou except by residents of Units 9C and 9E.
	Unit 9E, Aug. 10–Sept. 20 and Nov. 1–April 30, 1 bull by Federal registration permit or State Tier II permit. Federal public lands are closed to the taking of caribou except by residents of Units 9C and 9E.
July 25, 2005–Sept. 20, 2005	Special Action WSA05-02, effective for the fall caribou hunting season
	Unit 9C remainder and Unit 9E, no Federal open season.
Nov. 1, 2005–April 30, 2005	Special Action WSA05-11, effective for the winter caribou hunting season
	Unit 9C remainder and Unit 9E, no Federal open season

<b>WP06-23 Executive Summary</b>	
<b>General Description</b>	Extend subsistence sheep hunting opportunities in Unit 9B from two months to six months. Start the season in July with annual harvest quota of 5 rams and add a winter season from Jan. 1–Apr. 1 with annual harvest quota of 2 rams. Change to a ¾ curl or larger horn size and include an elevation limit where sheep can be harvested. Require successful hunters to present the horns to the National Park Service for inspection. <i>Submitted by the Lake Clark Subsistence Resource Commission.</i>
<b>Proposed Regulation</b>	<p><b>Unit 9B Sheep</b></p> <p><i>Residents of Iliamna, Newhalen, Nondalton, Pedro Bay, Port Alsworth, and qualified residents of Lake Clark National Park and Preserve within Unit 9B—1 ram with 7/8 3/4 curl or larger horn by Federal registration permit only.</i></p> <p style="text-align: right;"><del>Aug. 10–Oct. 10</del> <b>July 15–Oct. 15</b></p> <p style="text-align: right;"><i>The season will be closed when up to 5 sheep are taken.</i></p> <p style="text-align: right;"><b>Jan. 1–Apr. 1</b></p> <p style="text-align: right;"><i>The season will be closed when up to 2 sheep are taken.</i></p> <p>Note: The Federal registration permit would also include the following conditions:</p> <p style="text-align: center;"><i>No sheep may be taken at an elevation above 1,000 feet between Jan. 1 and April 1.</i></p> <p style="text-align: center;"><i>You must report harvest and present horns for inspection to the NPS within 3 days of leaving the field.</i></p>
<b>Bristol Bay Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support with modification.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support.</b> <b>Support with modification.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATION  
WP06-23**

**BRISTOL BAY SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification.** The Bristol Bay Subsistence Regional Advisory Council supports the proposal with modification as follows:

**Unit 9B—Sheep**

***For Lake Clark National Park and Preserve lands in Unit 9B***

*Residents of Iliamna, Newhalen, Nondalton, Pedro Bay, Port Alsworth, and **qualified** residents of Lake Clark National Park and Preserve within Unit 9B—1 ram with  $\frac{3}{4}$  curl or larger horn by Federal registration permit only.*

~~*Aug. 10–Oct. 10*~~  
***July 15–Oct. 15***

***The season will be closed when up to 5 sheep are taken.***

***Jan. 1–Apr. 1***

***The season will be closed when up to 2 sheep are taken.***

***Note: The Federal registration permit would also include the following conditions:***

*No sheep may be taken above the 1,000 foot elevation line designated on the map accompanying the permit.*

*You must report harvest and make horns available for inspection to the NPS within 3 days of leaving the field.*

***If the allowable harvest levels are reached before the regular closing date, the superintendent of Lake Clark National Park and Preserve will announce an early closure to the sheep hunting season.***

***Sheep may only be harvested from National Park Service lands within Unit 9B.***

The Council stated that restricting the harvest of sheep below 1,000 feet elevation provides a hunting opportunity. This would also protect critical winter habitat and minimize stress on the animals as they are utilizing their winter fat reserves.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-23**

**Support with modification**, as recommended by the Bristol Bay Subsistence Regional Advisory Council, to amend the Federal registration permit condition requiring the hunter to make horns available for inspection by the National Park Service within 3 days of leaving the field.

The modified regulations should read:

**Unit 9B—Sheep**

*Residents of Iliamna, Newhalen, Nondalton, Pedro Bay, Port Alsworth, and **qualified** residents of Lake Clark National Park and Preserve within Unit 9B. **That portion within Lake Clark National Park and Preserve—1 ram with 7/8 3/4 curl or larger horn by Federal registration permit only.***

~~Aug. 10–Oct. 10~~  
**July 15–Oct. 15**

*The season will be closed when up to 5 sheep are taken.*

**Jan. 1–Apr. 1**

*The season will be closed when up to 2 sheep are taken.*

Note: The Federal registration permit would also include the following conditions:

***Between Jan. 1 and April 1, sheep may not be taken above the 1,000 foot elevation line designated on the map accompanying the permit.***

***You must report harvest and make horns available for inspection to the NPS within 3 days of leaving the field.***

***If the allowable harvest levels are reached before the regular closing date, the superintendent of Lake Clark National Park and Preserve will announce an early closure.***

***Sheep may only be harvested from National Park Service lands within Unit 9B.***

[Note: Regulation for Unit 9B remainder does not change.]

**Justification**

The suggested regulation change would allow subsistence hunters to harvest sheep in Lake Clark National Park and Preserve in a more traditional way than current regulations allow. The proposed regulation allows more flexibility by increasing hunting opportunities from two months to six months, and liberalizing the age category of rams legal for harvest. Despite the broadened season and harvest quotas, a maximum of seven rams are allocated under these proposed revisions, following guidelines for sound management practices.

Allowing wintertime harvest below 1,000 feet provides for an opportunistic take of sheep. Restriction of wintertime harvest in areas above 1,000 feet in elevation protects critical winter habitat and minimizes stress at a time when sheep utilize nearly all of their body fat reserves due to diminished food quality and quantity.

The modified proposal amends the condition which requires subsistence users to report harvest and present horns for inspection to the NPS within three days of leaving the field. The modified proposed regulation stipulates that subsistence users make horns available for inspection to the NPS within three days of leaving the field. If a subsistence user were not in the vicinity of Port Alsworth, the NPS stated that a staff person would go to the subsistence user.

The current survey information summarized by NPS biologists provides recent population and harvest information. Plans to continue monitoring sheep in the subsistence harvest area, in particular by tracking their movements during the winter months, ensures that the sheep population will be assessed to manage for a healthy population.

### **WRITTEN PUBLIC COMMENTS WP06-23**

**Support.** Ensuring a limited take of any wildlife species is best pursued through a numerical quota developed through sound science. Building on its success in using quotas for bears, Proposal #23 extends the use of quotas in the Lake Clark area to include sheep. This is a positive move that prevents over harvest but allows for a more traditional hunt.

*–Alaska Regional Office, Defenders of Wildlife*

**Support with modification.** The Lake Clark SRC supports the creation of a new Federal registration permit hunt for Dall sheep inside Lake Clark National Park and Preserve with the following amendments.

No sheep may be taken above the 1,000 feet elevation line designated on the map accompanying the permit.

If the allowable harvest levels are reached before the regular closing date, the superintendent of Lake Clark National Park and Preserve will announce an early closure.

*–Lake Clark National Park Subsistence Resource Commission*

## STAFF ANALYSIS WP06-23

### ISSUES

Proposal WP06-23, submitted by the Lake Clark Subsistence Resource Commission, requests that subsistence sheep hunting opportunities in Unit 9B be extended from two months to six months, by starting the season in July and adding a three month winter season from Jan. 1–Apr. 1. The proponent asks for an annual harvest quota of five rams during the summer/fall season and two rams during the winter season. The Commission is also asking for a change to a ¾ curl or larger horn size and an elevation limit where sheep can be harvested, as well as a requirement for successful hunters to present the horns to the National Park Service for inspection.

### DISCUSSION

The proponent states that subsistence hunting for Dall sheep was traditionally done throughout the year, as hunters would take animals opportunistically whenever they were encountered. Currently, the Federal subsistence hunting regulation for Dall sheep begins on the same date as the State general hunt, which provides a compressed season focused on the harvest of trophy rams. The proponent emphasizes that trophy hunting is not a subsistence value and that the current Federal regulation does not reflect a realistic subsistence hunting opportunity for residents interested in hunting sheep for sustenance.

The proponent states that adoption of this proposal would allow subsistence hunters to harvest sheep in a more traditional manner, by extending subsistence hunting opportunities from two months to six months, and by expanding the pool of legal sheep that may be harvested. The revisions proposed would provide subsistence hunters more flexibility to conduct sheep hunts during the year, enable them to take animals on a more opportunistic basis, and allow for a more traditional subsistence hunting experience that does not emphasize trophy horn size.

### Existing Federal Regulation

#### Unit 9B–Sheep

*Residents of Iliamna, Newhalen, Nondalton, Pedro Bay, Port Alsworth, and residents of Lake Clark National Park and Preserve within Unit 9B—1 ram with 7/8 curl or larger horn by Federal registration permit only.*

*Aug. 10–Oct. 10*

### Proposed Federal Regulation

#### Unit 9B–Sheep

*Residents of Iliamna, Newhalen, Nondalton, Pedro Bay, Port Alsworth, and **qualified** residents of Lake Clark National Park and Preserve within Unit 9B—1 ram with ~~7/8~~ 3/4 curl or larger horn by Federal registration permit only.*

*~~Aug. 10–Oct. 10~~  
**July 15–Oct. 15**  
**The season will be closed when up to 5 sheep are taken.***

Note: The Federal registration permit would also include the following conditions:

*No sheep may be taken at an elevation above 1,000 feet between Jan. 1 and Apr. 1.*

*You must report harvest and present horns for inspection to the NPS within 3 days of leaving the field.*

*Jan. 1–Apr. 1  
The season will be closed when up to 2 sheep are taken.*

## Existing State Regulation

### Unit 9–Sheep

*1 ram with full curl horn or larger.*

*Aug. 10–Sept. 20*

## Extent of Federal public lands

Federal public lands comprise approximately 27% of Unit 9B and consist of 14% Bureau of Land Management and 86% National Park Service lands (See **Unit 9 Map**).

## Customary and Traditional Use Determinations

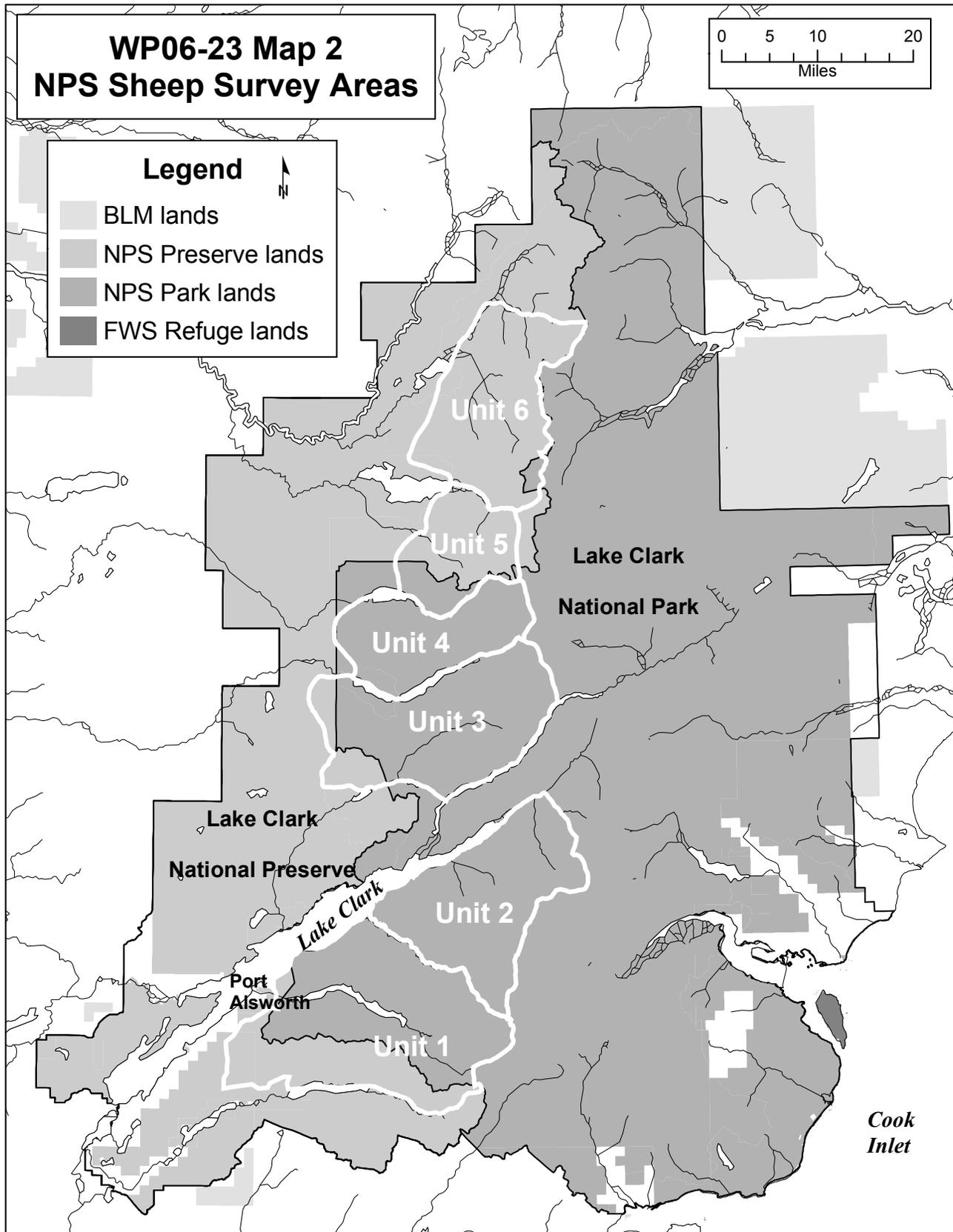
The current customary and traditional use determination for sheep in Unit 9B is for residents of Iliamna, Newhalen, Nondalton, Pedro Bay, and Port Alsworth, and Lake Clark National Park and Preserve within Unit 9B.

## Regulatory History

The Federal sheep hunting regulation for all of Unit 9 from 1990 until 1995 was for 1 ram with 7/8 curl horn during Aug. 10–Sept. 20. Beginning in the 1995/96 regulatory year, sheep hunting in Unit 9B was for residents of Iliamna, Newhalen, Nondalton, Pedro Bay, and Port Alsworth only, and allowed 1 ram with 7/8 curl horn by Federal registration permit only, with an extended season from Aug. 10–Oct. 10 [modifications of Proposals 33 and 34 (FWS 1995)]. The following year, the Federal regulation extended a positive customary and traditional use determination in Unit 9B for five resident zone communities (Iliamna, Newhalen, Nondalton, Pedro Bay, and Port Alsworth) of Lake Clark National Park and Preserve (FWS 1996). In 2001, the Federal Subsistence Board approved WP01-19, which requested a positive customary and traditional use determination for sheep in Unit 9B to also include other residents of Lake Clark National Park and Preserve who live within the boundaries of Unit 9B (FWS 2001).

## Biological Background

Dall sheep inhabit mountainous areas throughout Lake Clark National Park and Preserve. Unit 9B includes scattered tracts of BLM land, but sheep habitat in this Unit is primarily found on the Park and Preserve lands. Dall sheep in Unit 9B are at the southernmost extent of their Alaskan range. NPS aerial sheep survey areas, designated as Units 1 and 2 on the south side of Lake Clark (**Map 2**), total 44% of the sheep range and account for 60% of the reported harvest for Park and Preserve lands (Putera and Mangipane 2005). Units 1 and 2 have typically supported lower sheep densities compared to survey units on the north side of Lake Clark, which consistently support the highest sheep densities in the Park. Movement between the areas is unlikely given that Lake Clark and its major tributaries present significant barriers to migration.



Following the first comprehensive aerial sheep surveys conducted by the NPS in the Lake Clark area during 1978 and 1979, Park biologists established sheep survey units in 1981 to monitor population trends in the Park and Preserve portions of Unit 9B. Total population estimates from these surveys for the Park and Preserve have ranged from 1,088 sheep in 1987 to 520 sheep in 1992 (Putera and Mangipane 2005). Dall sheep population data for survey Units 1 and 2, where subsistence harvest is concentrated, were lacking, so the Park initiated systematic aerial surveys during 2003 and 2004 to obtain reliable information on the population within the area of concern. The intent was for these data to be used to set reasonable harvest goals for subsistence users.

The population within the primary subsistence harvest area (Units 1 and 2) averaged 277 sheep based on aerial surveys conducted in 2003 and 2004 (Putera and Mangipane 2005). Age composition for sheep observed in 1987 showed a high lamb to ewe ratio, and proportionately higher numbers of yearlings and young rams, indicating a smaller yet growing population at that time (**Table 1**). Incomplete data for Units 1 and 2 from 1991–2002 make it difficult to determine a trend in sheep abundance for this area. Based on the similarities of June counts of total sheep in Units 1 and 2 in 2003 and 2004, 295 and 273 respectively, the population currently appears to be stable at a relatively higher number than during the early 1980s when the total sheep counts were 144 in 1978 and 147 in 1985 (**Table 1**).

NPS biologists plan to continue to monitor sheep in the subsistence harvest area, with a capture and collaring project currently underway. Telemetry tracking will provide additional information about their rut areas and winter movements.

### **Harvest History**

Sheep are harvested under State and Federal regulations, with traditional and contemporary subsistence sheep hunting primarily concentrated in an area bordering the south side of Lake Clark, indicated by NPS Units 1 and 2 (**Map 2**). Lake Clark National Park and Preserve was established in 1980 by the Alaska National Interest Lands Conservation Act (ANILCA), providing hunting in the Preserve under both State and Federal regulations and subsistence only hunting in the Park. Unit 1 overlaps both Park and Preserve lands, and Unit 2 lies entirely within the Park boundary. Currently, State hunters may take one full curl or larger ram each year between Aug. 10 and Sept. 20. Subsistence regulations are more liberal, allowing harvest of one ram 7/8 curl or larger during a longer season between Aug. 10 and Oct. 10. In recent years, subsistence users have indicated that finding legal rams had become more difficult, which prompted this proposal requesting regulation changes allowing harvest of younger age rams during an extended season.

The Federal subsistence harvest between 1983 and 2001 totaled 32 sheep, averaging 1.7 sheep annually with a range between zero to four. During the same time period, those who hunted under State regulations harvested 12 sheep (zero to two per year). More recently, NPS records show the highest subsistence harvest occurred in 2004 when 5 sheep were taken (Putera and Mangipane 2005).

### **Effect of the Proposal**

This proposal recommends conservative harvest quotas, combined with closures during sensitive periods associated with breeding, lambing, and seasonal migrations, in order to minimize adverse affects on the Dall sheep population in Unit 9B. The average number of rams identified during surveys conducted between 1978 and 2004 was 67 (**Table 1**), with 56% classified as having  $\frac{3}{4}$  curl or greater horns (Putera and Mangipane 2005). A guideline for maximum sustainable harvest of mature sheep (those with  $\frac{3}{4}$  curl horns or greater) is 10% of total rams in a population. Based on the average ram population of 67 between 1978 and 2004, a maximum harvest of seven rams would be sustainable. The proposed Federal regulation change to a  $\frac{3}{4}$  curl minimum horn size, resulting in a limited harvest of a smaller horn class of

**Table 1.** Number of Dall sheep observed by sex and age category during aerial surveys conducted in Units 1 and 2, Lake Clark National Park & Preserve, Alaska, 1978-2004 (Putera and Mangipane 2005).

Year	Unit	Lamb	Ewe	Yearling	Ewe-like	Un-class	Ram							Total Sheep	Lamb:100 Ewe-Like	Ram:100 Ewe-Like
							<1/4	1/4	1/2	3/4	4/4	Unclassed Rams	Total Ram			
1978	1,2	40	0	0	74	0	0	0	7	18	5	0	30	144	54.1	40.5
1985	1,2	19	61	17	0	0	0	12	10	14	14	0	50	147	31.1	82.0
1987	1,2	83	100	25	0	8	15	11	15	16	29	0	86	302	83.0	86.0
1990	1,2	38	102	10	0	2	1	13	4	17	6	0	41	193	37.3	40.2
2003 <sub>June</sub>	1,2	53	156	10	4	0	1	6	20	24	21	0	72	295	33.1	45.0
2003 <sub>Aug.</sub>	1,2	31	87	10	45	0	1	8	14	22	24	22	91	264	23.5	68.9
2004	1,2	33	105	21	43	1	0	5	19	13	15	18	70	273	22.3	47.3

rams compared to the existing Federal regulation, should not affect reproductive behavior and population performance (Mangipane 2005). Subsistence hunters will benefit from the reduction to a  $\frac{3}{4}$  curl horn class minimum by having twice as many legal rams available for harvest.

If adopted, an annual harvest quota for Dall sheep would be initiated, set at seven rams with  $\frac{3}{4}$  curl horns or greater. This harvest quota is divided to allow five rams for the fall hunt, July 15–Oct. 15, and two rams for the winter hunt, Jan. 1–Apr. 1. This proposal requests the fall subsistence hunting season for Dall sheep open four weeks earlier than the current season and close five days later. The sheep are protected during the closed period, between Oct. 15 and Dec. 31, when they may be most vulnerable, particularly during the rutting period and as they migrate from their summer to winter ranges. Also, the closed period between April 1 and July 14 is intended to protect sheep moving from their winter to spring/summer ranges, and during the lambing season.

According to the proposed regulation, the Federal registration permit would include the condition that no sheep may be taken at an elevation above 1,000 feet between Jan. 1 and April 1. Protection of critical winter habitat minimizes stress at a time when sheep rely on their body fat reserves during a season with minimal food supply. If adopted, subsistence users would be able to harvest sheep opportunistically below 1,000 feet.

The other condition under the proposed regulation would require subsistence users to report their harvest and present horns for inspection to the NPS within three days of leaving the field. Once a sheep was harvested, if an individual was not going, or unable to go, to Port Alsworth where there is NPS staff, this condition would be very difficult for a subsistence user to carry out.

Subsistence users would have longer seasons for hunting sheep, and have access to a greater number of legal rams, which may increase the possibilities for a successful hunt. Most subsistence sheep hunting takes place within Lake Clark National Park, which is closed to hunting under State regulations, so this proposed regulatory change would have minimal bearing on nonsubsistence users.

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<i>WP06-24 Executive Summary</i>	
<b>General Description</b>	Eliminate the hunting of antlerless moose during the Unit 9C December season in that portion draining into the Naknek River from the south. Under current regulation, a quota of five antlerless moose is set for the December hunt. <i>Submitted by the Alaska Department of Fish and Game.</i>
<b>Proposed Regulation</b>	<p><b>Unit 9C Moose</b></p> <p><i>That portion draining into the Naknek River from the south—1 bull. However, during the period Aug. 20–Aug. 31, bull moose may be taken by Federal registration permit only. During the December hunt, antlerless moose may be taken by Federal registration permit only. The antlerless season will be closed when 5 antlerless moose have been taken. Public lands are closed during December for the hunting of moose, except by eligible rural Alaska residents hunting under these regulations.</i></p> <p style="text-align: right;"><i>Aug. 20–Sept. 15 Dec. 1–Dec. 31</i></p>
<b>Bristol Bay Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support with modification.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support.</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATION WP06-24

### BRISTOL BAY SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support with modification.** The Council voted to support the proposal with modification to retain the Federal registration permit requirement for the fall and December hunt. The Council supports the reporting requirements, as valuable moose data are collected from those permits. The Council supports eliminating the antlerless (cow) moose hunt for December 1–31. This may help calf recruitment and increase the moose population. Subsistence users would still have the opportunity to harvest a bull moose. The Council supports sustaining healthy moose populations to provide for subsistence opportunities. Anytime cow moose are being harvested the opportunity to help a moose population grow is hurt. Plus, the Council heard documentation over the last few years the moose population has been in decline.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-24**

**Support with modification**, as recommended by the Bristol Bay Subsistence Regional Advisory Council, to retain the Federal registration permit requirement for both the fall and December hunt. The modified regulation should read:

**Unit 9C–Moose**

*That portion draining into the Naknek River from the south—1 bull  
However, during the period Aug. 20–Aug. 31, bull moose may be taken  
by Federal registration permit. only. During the December hunt, antler-  
less moose may be taken by Federal registration permit only. The ant-  
lerless season will be closed when 5 antlerless moose have been taken.  
Public lands are closed during December for the hunting of moose,  
except by eligible rural Alaska residents hunting under these regula-  
tions.*

*Aug. 20–Sept. 15  
Dec. 1–Dec. 31*

**Justification**

Elimination of the December Federal subsistence antlerless hunt should offset the effects of low calf:cow ratios and increase recruitment. This approach is recommended as a conservation measure to help increase the moose population and to eventually provide improved hunting opportunity for subsistence users.

The Federal registration permit requirement for both the fall and December hunt will continue to provide resource managers important moose harvest information.

**WRITTEN PUBLIC COMMENTS  
WP06-24**

**Support.** The rationale outlined in this proposal makes sense. Calf production and survival is critical for insuring a healthy population and long-term future hunting opportunities. The last component of this population we should be harvesting is successful mothers and their calves.

On a limited scale, this may cause some inconvenience to some people by requiring them to hunt more selectively but it will pay dividends over the long run by insuring recruitment of animals into the population. I believe this proposal truly has a conservation benefit.

*–Joe Klutsch, King Salmon, Alaska*

**STAFF ANALYSIS  
WP06-24**

**ISSUES**

Proposal WP06-24, submitted by the Alaska Department of Fish and Game, would eliminate the hunting of antlerless moose during the December season in Unit 9C for that portion draining into the Naknek River from the south. Under current regulation, a quota of five antlerless moose is set for the December hunt.

**DISCUSSION**

The proponent states that the declining trend in the moose population in the Big Creek area presents a management concern, so harvesting cows is not sustainable in this area. Since calf recruitment is not sufficient to offset adult mortality, this proposal to discontinue the cow harvest is expected to alleviate some of this problem by reducing adult female mortality and by allowing more cows to produce calves. The proponent advocates that eliminating the cow hunt shall increase calf recruitment in the area, thus maintaining the moose population.

**Existing Federal Regulation****Unit 9C–Moose**

*That portion draining into the Naknek River from the south—1 bull. However, during the period Aug. 20–Aug. 31, bull moose may be taken by Federal registration permit only. During the December hunt, antlerless moose may be taken by Federal registration permit only. The antlerless season will be closed when 5 antlerless moose have been taken. Public lands are closed during December for the hunting of moose, except by eligible rural Alaska residents hunting under these regulations.*

*Aug. 20–Sept. 15  
Dec. 1–Dec. 31*

**Proposed Federal Regulation****Unit 9C–Moose**

*That portion draining into the Naknek River from the south—1 bull. However, during the period Aug. 20–Aug. 31, bull moose may be taken by Federal registration permit only. ~~During the December hunt, antlerless moose may be taken by Federal registration permit only.~~ The antlerless season will be closed when 5 antlerless moose have been taken. Public lands are closed during December for the hunting of moose, except by eligible rural Alaska residents hunting under these regulations.*

*Aug. 20–Sept. 15  
Dec. 1–Dec. 31*

## Existing State Regulation

### Unit 9C–Moose

*That portion draining into the Naknek River–1 bull.*

*Sept. 1–Sept. 15*

*Dec. 1–Dec.31*

## Extent of Federal Public Lands

Federal public lands in Unit 9C for that portion draining into the Naknek River from the south include the northern extent of Becharof National Wildlife Refuge (Refuge) and the Katmai National Park (Park) Federal public lands which are closed to hunting (See **Unit 9 Map 1**).

## Customary and Traditional Use Determinations

Residents of Units 9A, 9B, 9C, and 9E have a positive customary and traditional use determination for moose in Unit 9C.

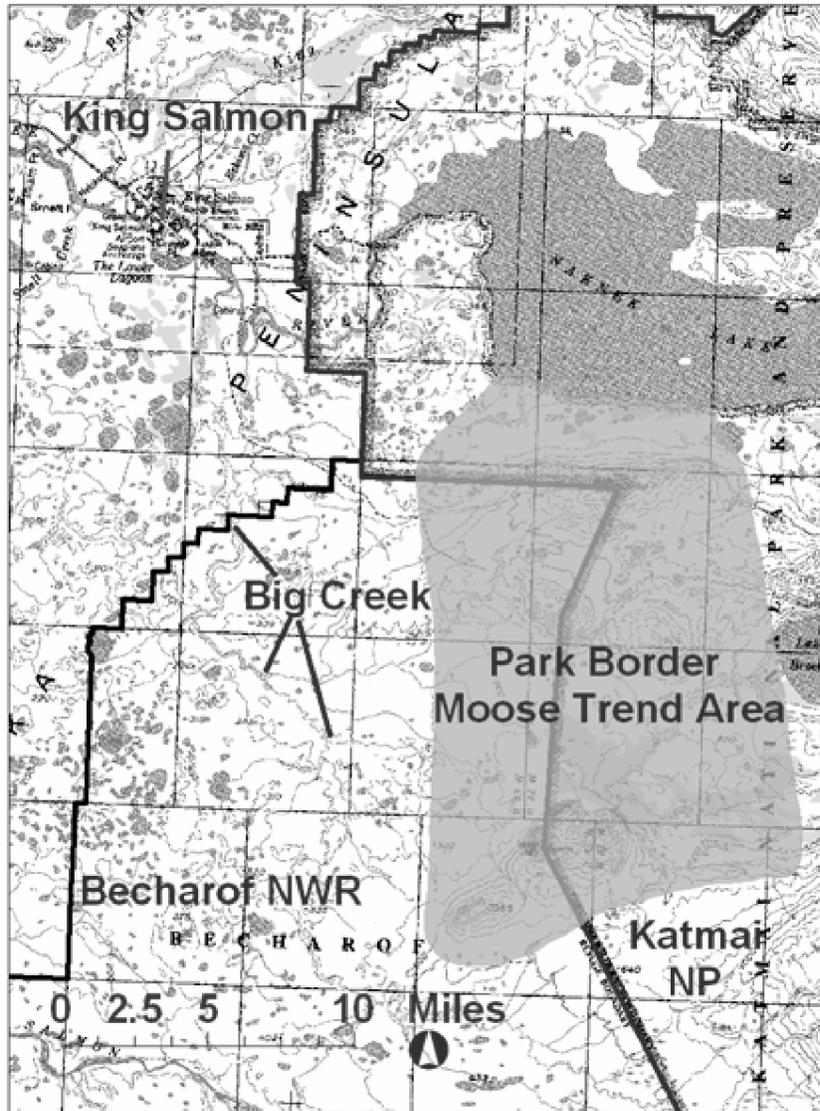
## Regulatory History

Federal subsistence moose harvest regulations for Unit 9C, that portion draining into the Naknek River, were adopted from State of Alaska regulations in 1990 as: Sept. 5–20 and Dec. 1–31, one moose; however antlerless moose may be taken by registration permit only from Dec. 1–31. Federal subsistence moose harvest regulations were changed in the 1991/92 regulatory year by moving the fall season ahead 5 days to Sept. 1–15 to accommodate local hunting practices. Effective July 1, 1992, for the December hunt Federal subsistence management regulations initiated a Federal registration permit, set a quota of 5 antlerless moose, and restricted the hunt to rural Alaska residents of Units 9A, 9B, 9C and 9E. Due to concerns regarding an antlerless moose season north of the Naknek River, for the 1992/93 regulatory year, a separate hunt area with its own regulations was established for that portion of Unit 9C draining into the Naknek River from the south. This was based on recognition that there was a separate population of moose to the south in the Big Creek drainage versus a different composition for the population of moose north of the Naknek River. Effective July 1, 1995, adoption of WP95-30 by the Federal Subsistence Board, established an earlier Federal subsistence season from Aug. 20–31 for this subunit south of the Naknek River (FWS 1995). Since that time, the existing regulation for this portion of Unit 9C has been in place.

## Biological Background

Twenty years ago, winter antlerless moose hunts were held throughout most of Unit 9. The December season was implemented to provide local residents additional harvest opportunities to take moose for food at a time of year that facilitated winter travel and when competition from recreational hunters would be minimal. Gradually as calf:cow ratios declined, moose hunting regulations have been restricted in all other subunits of Unit 9 eliminating antlerless moose hunting because of low calf:cow ratios.

The moose population in the Big Creek drainage on the Refuge fluctuates seasonally. Aerial surveys of the Big Creek drainage and Park boundary portion of the Refuge (**Map 2**) were initiated in Dec. 1991 to monitor moose movement in the area during the December hunting season. Based on surveys conducted by Refuge personnel, the movement of moose into the Refuge and more specifically the Big Creek area usually occurs around mid to late December depending on weather conditions. The moose move



**WP06-24 Map 2.** Park Border Trend Area - Big Creek study area (Gude 2004).

seasonally and migrate from the adjacent Katmai National Park into the Refuge. Heavy snows in the Park and possible better foraging conditions on the Refuge seem to prompt the movement.

The habitat in the area of the subsistence moose hunt, located approximately nine miles southeast of King Salmon, is primarily open tundra. There are deciduous willow (*Salix sp.*) and alder (*Alnus crispa*) thickets patchily distributed, particularly along the creek corridor. The eastern portion of the area contains open spruce (*Picea sp.*) woodlands. There is limited moose habitat in the surrounding areas to the west and south. Because Big Creek and the Park Border Trend Area are in close proximity, and there are contiguous and patchy distributions of moose habitat along Big Creek and in the Trend Area, these areas likely contain a contiguous moose population (Gude 2004).

Survey results from all trend areas in Unit 9C indicate a slow decline in the moose population (**Table 1**). Based on a recent analysis of the Park Border Trend Area (**Table 2**), which includes a portion of the antlerless moose hunt area, the moose population has declined by 5% annually since 1988 and the cause of the decline was related to poor calf recruitment (Gude 2004). The analysis also concluded that immigration was not sufficient to offset the population decline. Support for this is provided by the fact that all trend areas in Unit 9C have declined in recent years including the Takyoto Creek trend area in Katmai National Park (Olson 2005, pers. comm.). The declining trend in the moose population creates a concern that harvesting cows is not sustainable in this area. Population modeling supports the theory that the harvest of a few cows can contribute to a population decline. Bull harvest does not appear to be limiting the population because the bull:cow ratios have changed little over the past three decades and remain above management objectives in most areas.

**Table 1.** Average densities (moose per square mile) observed in Unit 9C trend areas over the past 3 decades (Butler 2005, pers. comm.).

Decade	Branch River	King Salmon Creek	Park Border	Takyoto Creek (Katmai NP)	Unit 9C Average
1980s	0.96	1.01	0.73	1.34	1.34
1990s	0.86	0.79	0.98	0.84	0.84
2000s	0.83	0.49	0.75	0.78	0.78

**Table 2.** Moose trend surveys in antlerless moose hunt area.

Date	Total Moose	Bulls per 100 Cows	Calves per 100 Cows	Moose per Hour	Moose per Square Mile
Big Creek (Naknek) Trend Area (Squibb 2005b)					
1993	103	30	42	–	0.27
1994	151	32	12	67	0.40
1996	92	25	28	31	0.24
1997	179	28	26	57	0.47
Park Border Trend Area (Butler 2005, pers. comm.)					
1994	211	54	15	86	1.14
1995	207	37	13	47	1.12
1996	212	41	33	47	1.14
1997	142	37	13	47	0.69
1999	140	28	18	42	0.68
2001	166	25	14	44	0.81
2003 <sup>a</sup>	96	21	6	25	0.47
2005 <sup>b</sup>	137	28	22	48	0.72

<sup>a</sup> Average of 3 surveys conducted on Oct. 27, Nov. 13, and Dec. 8, 2003.

<sup>b</sup> Average of 2 surveys conducted on Nov. 21 and Dec. 1, 2005.

## **Harvest History**

Since the cow harvest is concentrated on a relatively small area that is easily accessible from Big Creek, it is likely that moose movements to and from surrounding areas do not compensate for the local impacts of the hunt. Resident cow moose harvested from the Big Creek drainage strains the resident component of the moose population by reducing the reproductive lifespan of cow moose and lessens the possibility for population growth. In low moose density situations, harvesting five or fewer cows can easily have an impact on the reproductive potential of the local moose population in areas with low calf recruitment (Butler 2005, pers. comm.).

Federal subsistence registration permits are required for the early fall season (RM233) and the December antlerless moose hunt (RM232) within the Becharof National Wildlife Refuge in Unit 9C. A quota of 5 antlerless moose was set for RM232. From 1996–2004 a total of 36 permits were issued for RM233 and 2 bulls were reported harvested. From 1996–2004 a total of 68 permits were issued for RM232 and 25 moose were reported harvested (FWS 2005).

## **Effect of the Proposal**

This proposal would eliminate the antlerless moose hunt from Dec. 1–31 in Unit 9C for that portion draining into the Naknek River from the south. Federally qualified subsistence users would not be able to harvest antlerless moose in December, but would still have the opportunity to harvest bulls during the December hunt. Improving calf recruitment in the Big Creek area by increasing the survival and reproductive lifespan of cow moose through the elimination of the cow hunt would help maintain the moose population in this area.

For a subsistence user, this proposal does not change the number of moose a hunter can harvest during a year. During the December hunt, Federal public lands are closed to non-Federally qualified subsistence users, so this proposal does not affect resource opportunity for other users.

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<b>WP06-25 Executive Summary</b>	
<b>General Description</b>	Revise harvest requirements for bull moose in Unit 9E, and require one antler to be separated from the skull plate if hunters remove the antlers from the field, effective during Aug. 20–Sept. 9. <i>Submitted by Mr. Philip Shoemaker, King Salmon.</i>
<b>Proposed Regulation</b>	<p><b>Unit 9E Moose</b></p> <p><i>1 bull</i></p> <p><i>Bulls taken from Aug. 20–Sept. 9 must have one antler separated from skull plate if the hunter removes the antlers from the field.</i></p> <p><i>Aug. 20–Sept. 20</i> <i>Dec. 1–Jan. 20</i></p>
<b>Bristol Bay Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATION  
WP06-25**

**BRISTOL BAY SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose.** The Bristol Bay Subsistence Regional Advisory Council voted to oppose the proposal. The Council felt it would be a burden to subsistence users to separate one antler from the skull plate and bring it in from the field. Most subsistence users leave the antlers in the field anyway. Also, the subsistence hunt opens earlier than the State hunt. The Council also felt there is no biological concern for the moose population in Unit 9E.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-25**

**Oppose** the proposal as recommended by the Bristol Bay Subsistence Regional Advisory Council.

**Justification**

Requiring Federally qualified subsistence hunters to separate one antler from the skull plate, prior to removing the antlers from the field, places an unnecessary restriction on subsistence users. Most subsistence hunters leave the antlers in the field rather than bring them in.

Presently, there is no biological concern. Population and harvest information do not warrant an added restriction on the earlier subsistence-only hunt from Aug. 20–Sept. 9.

**STAFF ANALYSIS  
WP06-25**

**ISSUES**

Proposal WP06-25, submitted by Mr. Philip Shoemaker, King Salmon, Alaska would revise harvest requirements for bull moose in Unit 9E. Federally qualified subsistence hunters would be required to have one antler separated from the skull plate if hunters remove the antlers from the field in Unit 9E. This requirement would be in effect from Aug. 20–Sept. 9.

**DISCUSSION**

The proponent states that the purpose of his proposal is to discourage subsistence hunters from selectively harvesting large breeding bulls during the earlier subsistence-only hunting season. The proponent is concerned some subsistence hunters may be abusing the earlier subsistence hunt by harvesting trophy bull moose. The proponent wants hunting pressure reduced on larger breeding bull moose. Only subsistence hunters would be required to have one antler separated from the skull plate if the hunter removes the antlers from the field. This would make antlers ineligible for trophy records. The proponent wants the revision in this proposal to preserve and protect the Aug. 20–Sept. 9 period for its intended purpose as a hunt for Federally qualified subsistence users to acquire meat.

Current Federal regulations for moose hunting in Unit 9E provide for a subsistence priority as the Federal subsistence moose season opens on Aug. 20, 21 days prior to the State season, which opens on Sept. 10. In addition, Federal subsistence moose hunters can harvest any bull, while under the State regulations, resident hunters are restricted in the fall hunt to one bull with spike-fork or 50-inch antlers or antlers with 3 or more brow tines on at least one side. Both the Federal and State regulations provide for a winter hunt (Dec. 1–Jan. 20) for the harvest of any bull.

**Existing Federal Regulation****Unit 9E–Moose***1 bull*

*Aug. 20–Sept. 20  
Dec. 1–Jan. 20*

**Proposed Federal Regulation****Unit 9E–Moose***1 bull*

***Bulls taken from Aug. 20–Sept. 9 must have one antler separated from skull plate if the hunter removes the antlers from the field.***

*Aug. 20–Sept. 20  
Dec. 1–Jan. 20*

## Existing State Regulations

### Unit 9E–Moose

*Residents, one bull with spike-fork or 50-inch antlers or antlers with 3 or more brow tines on at least one side.* Sept. 10–20

*Or one bull* Dec. 1–Jan. 20

### Extent of Federal public lands

Federal public lands comprise 50% of Unit 9E and include the Becharof National Wildlife Refuge (Refuge), the Ugashik and Chignik units of the Alaska Peninsula National Wildlife Refuge (Refuge) and the Aniakchak National Monument and Preserve. Approximately 90% of Federal public lands in the Unit are Refuge public lands and approximately 10% are National Monument and Preserve public lands. Refer to **Unit 9 Map**.

### Customary and Traditional Use Determinations

The following have a positive customary and traditional use determination for moose in Unit 9E: Rural residents of Units 9A, 9B, 9C, and 9E.

### Regulatory History

Following is a summary of Federal subsistence moose hunting regulations for Unit 9E:

July 1, 1990–June 30, 1991–1 bull; Sept. 10–20 and Dec. 1–15; however, moose taken from Sept. 10–20 must have 50-inch antlers.

July 1, 1991–June 30, 1992–1 bull, Sept. 1–15 and Dec. 1–31.

July 1, 1992–June 30, 1994–1 bull, Sept. 1–20 and Dec. 1–31.

July 1, 1994–June 30, 1998–1 antlered bull, Sept. 1–20 and Dec. 1–31.

July 1, 1998–June 30, 1999–1 bull, Sept. 1–20 and Dec. 1–31.

July 1, 1999–June 30, 2000–1 bull, Sept. 1–20 and Dec. 1–Jan. 20.

July 1, 2000–June 30, 2005–1 bull, Aug. 20–Sept. 20 and Dec. 1–Jan. 20.

The Board has considered several other proposals and special actions, including WP99-36 and WP00-37, concerning moose harvest seasons in Unit 9E. Special Actions WSA97-09 and WSA98-12 both requested the closure of Federal public lands in Unit 9E to moose and caribou hunting, except by qualified rural Alaskan residents. In 1998, the Board deferred action on a special action request to close the area to non-Federally qualified subsistence users until a subcommittee could meet and discuss moose management recommendations. The meeting (workshop) was held Sept. 28–30, 1998 in Naknek, Alaska.

Workshop management recommendations for moose were forwarded to the Bristol Bay Subsistence Regional Advisory Council as Wildlife Proposal WP99-36. This proposal would have closed Federal public lands to moose hunting on the Pacific side of the Alaska Peninsula from Stepovak Bay to Cape

Igvak to non-Federally qualified hunters. The Board deferred this proposal until additional moose surveys could be conducted to determine the status of the moose population in the lower Chignik Unit in Unit 9E. Surveys conducted by the Refuge indicated a healthy moose population. The Board voted not to close the season to non-Federally qualified hunters, but did modify the proposal to extend the winter season to Jan. 20 to coincide with Alaska Board of Game action.

Wildlife Proposal WP00-37, submitted by the Port Heiden Village Council, requested that the fall moose hunt season in Unit 9E be changed from Sept. 1–20 to Aug. 20–Sept. 20. The Board adopted the proposal in May 2000.

The Federal Subsistence Board considered a similar proposal (WP05-10) in May 2005, which was comparable in its request to separate the skull plate before removing the antlers from the field, but would have required this be done by subsistence users during all open seasons from Aug. 20–Sept. 20, and Dec. 1–Jan. 20. The proposal was rejected, noting that this requirement would place an additional burden and an unnecessary restriction on subsistence users.

### **Biological Background**

Moose were scarce on the Alaska Peninsula until the 1940s, when they increased and expanded their range southwestward. Numbers peaked in the late 1960s, but began declining thereafter. By the early 1980s, moose numbers had declined 60% or more from their peak despite increasingly restrictive hunting regulations. Cows showed signs of nutritional stress; poor calf production and low recruitment were apparent results. Evidence indicates that their range may have recovered somewhat by the 1980s. However, brown bear predation on moose calves still remains a limiting factor.

Based on moose trend surveys conducted during the late 1990s in Unit 9E by ADF&G and the Refuge, there appears to be a stable moose population and adequate bull:cow ratios. Extrapolation from the 1983 density estimate and trend surveys conducted in 1998 indicated an estimated moose population of 2,500 animals in the unit (Sellers 1998). Based on surveys conducted during the winter of 1998 in the Pacific drainages (Nakaliok Bay to the Chignik River drainage including Black Lake), there were 69 bulls and 23 calves per 100 cows. Based on periodic surveys conducted in the Pacific trend area (Yantarni and Amber Bays) since 1972, these more recent data were similar to these earlier surveys.

Surveys were also conducted in 1998 on the Bristol Bay side of the peninsula in long established trend areas from the lower Dog Salmon River through the Meshik River. Results for each trend area were similar to results obtained over the last 15 years (Sellers 1998). Additional moose surveys were conducted in early May 1999, with 245 moose observed in the lower Chignik Unit. Based on a comparison of these survey data with data collected by ADF&G in 1982 and 1988, and observations reported to the Refuge by local air taxi operators, there was no population decline nor unusually low densities in the area (Squibb 1999).

Further cooperative trend surveys conducted in Dec. 1999, Dec. 2003, and Jan. 2004 support earlier population estimates. For the past 3 years in which trend data have been collected (2001, 2003, and 2005), the calf:cow ratio has averaged 17 calves per hundred cows (Butler 2005). Similarly there has been little change in the bull:cow ratio. During the past 3 years for which trend data are available (2001, 2003, and 2005), the bull:cow ratio has averaged 43 bull:100 cow. Currently, there is no biological concern and population size appears to be stable. Bull:cow ratios are above management goals for high and low density moose populations (20 and 40 bulls:100 cow, respectively).

## Harvest History

From 1979 to 2003, an average of 91 moose were reported harvested annually in Unit 9E, with a low harvest of 45 moose in 1982 and a high of 164 moose in 1979 (ADF&G 2004). The overall harvest level has remained relatively stable and within sustainable levels over the last 15 to 20 years.

Based on subsistence studies conducted for Alaska Peninsula communities from 1994–1997, there was a low reporting of moose harvests by local residents through the State harvest ticket program. Household surveys have indicated much higher harvest levels (Krieg et al. 1998). The number of moose harvested by local residents in Unit 9E varied from 21 to 48 animals during the 3 year period (1995–1997). Based on household surveys, Unit 9E Bristol Bay residents from Egegik, Pilot Point, and Port Heiden took 0%–25% of their moose from Federal public lands. Residents from the Chignik, Perryville, and Ivanof Bay took almost all of their moose from Federal public lands.

Based on reported moose harvest data for the 3 year period 2001–2003, approximately 65% of the harvest has been on Federal public lands in Unit 9E. Most of this reported harvest has been by guided hunters and hunters who used air taxis.

Based on ADF&G's preliminary harvest records, 69 moose were harvested from the most recent fall 2005 hunt conducted on both Federal and State lands from Aug. 20–Sept. 20. The annual moose harvest in Unit 9E over the last 3 years (2002–2004) has averaged 87 animals (Butler 2005, pers. comm.).

Most local subsistence hunters who harvest moose in Unit 9E leave the antlers in the field at the harvest site. However, a few hunters will bring the antlers back to their village and utilize them for native handicraft carvings and in most instances the antlers are separated at the skull plate for ease in transportation from the field (Lind 2005, pers. comm.).

The majority of moose antlers removed from the field by guided moose hunters and moose hunters using commercial transporters (air taxis) are transported intact. A few of these hunters do separate the skull plate prior to transporting antlers from the field (Lind 2005, pers. comm.).

## Effect of the Proposal

If adopted, this proposal would require hunters separate one antler from the skull plate if they remove the antlers from the field during the earlier subsistence-only hunt from Aug. 9–Sept. 9. The proposed regulation would affect Federally qualified subsistence hunters hunting in the Aniakchak National Monument and Preserve and in the Becharof and Alaska Peninsula National Wildlife Refuges.

Current Federal harvest regulations for Unit 9E do not include any antler restrictions. Therefore, there is no requirement for the hunter to have the antlers accompany the carcass when removed from the field.

Under this proposed regulation, there is no prohibition on taking large bulls. Hunting pressure on large bulls, if this were a problem, would not be eliminated, because the State season specifically targets large bulls with over 50-inch antlers.

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<i>WP06-26 Executive Summary</i>	
<b>General Description</b>	Close Federal public lands in Unit 9E to the taking of moose except by Federally qualified subsistence users. <i>Submitted by the Chignik Lake Village Council, Chignik Lake.</i>
<b>Proposed Regulation</b>	<p><b>Proposed Federal regulation–Unit 9E Moose</b></p> <p><i>1 bull</i> <span style="float: right;"><i>Aug. 20–Sept. 20</i></span>  <i>Federal public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations.</i> <span style="float: right;"><i>Dec. 1–Jan. 20</i></span></p>
<b>Bristol Bay Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Oppose.</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATION WP06-26

### BRISTOL BAY SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Oppose.** The Bristol Bay Subsistence Regional Advisory Council voted to oppose the proposal. The Council didn't feel they had sufficient justification to shut down all of Unit 9E to nonsubsistence users given the most recent census information for the moose population. The Council was concerned that there had been no aerial surveys flown near the Chigniks these last 3 years. The Council understood there were weather problems and aerial surveys could not be flown.

The Council would like the Alaska Department of Fish and Game to coordinate with the Alaska Peninsula/Becharof Wildlife Refuge to have moose surveys flown in the Chigniks as soon as possible. The Council would like the Alaska Department of Fish & Game, Alaska Peninsula Refuge staff and residents from Chignik Lake to meet and utilize topographic maps that show greater detail within the Chigniks area so that a wildlife proposal may be submitted to close Federal public lands to nonsubsistence users within the Chigniks area.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-26**

**Oppose** the proposal as recommended by the Bristol Bay Subsistence Regional Advisory Council.

**Justification**

Current Federal subsistence management regulations provide for a subsistence priority as the Federal moose season opens on Aug. 20, which is earlier than the State season that opens on Sept. 10. The proposed request to close Federal public lands to non-Federally qualified subsistence users does not meet the criteria established in Section 815 of ANILCA for the exclusion of non-Federally qualified subsistence users. Current harvest levels, and the current population estimates do not justify the proposed closure to non-Federally qualified subsistence users as allowed in Section 815 of ANILCA. Specifically, a closure for the taking of fish and wildlife on Federal public lands may be done only when necessary to assure the continued viability of a particular fish and wildlife species, to continue subsistence uses of a fish or wildlife population, or for reasons of public safety or administration. Estimated counts and composition ratios indicate the population in Unit 9E is relatively stable, meets ADF&G management objectives, and harvests are not reducing bull:cow ratios.

**WRITTEN PUBLIC COMMENTS  
WP06-26**

**Oppose.** The decline of the NAPCH has been of concern to all of us and has created additional concern for the moose populations. I share these concerns but do not believe a closure or restriction of “nonsubsistence” hunting is warranted. Title VIII stresses the “continuation of opportunity.” Whatever the Council recommends and the Board decides to do, “it must be consistent with management of fish and wildlife in accordance with recognized scientific principles.” Any closure proposal must be supported by “substantial evidence” and this evidence must show that:

1. The health of the population would be jeopardized by continuation of nonsubsistence hunting.
2. Continued opportunity to meet subsistence needs would be jeopardized by nonsubsistence hunting.
3. The proposed subsistence season and bag “violates recognized principles of fish and wildlife conservation.”

With respect to this closure proposal, these criteria cannot be met.

Recent trend surveys do not indicate that the health of the population is in jeopardy. Lower than desired calf survival is and almost always has been a factor of concern in GMU 9 primarily due to predation. This is not a recent development. Harvest levels by nonresident and non-area residents have not increased as a percentage of the total harvest. Most nonresident hunting is done far from the villages in areas that are logistically very difficult to access. Bull to cow ratios is well within acceptable levels. Nonresident hunting season is only 11 days and are restricted to only bulls with a 50 inch spread or 3 brow tines which constitute old age class animals that many locals say they do not prefer. Federally qualified residents may hunt from August 20–September 20 and December 1–January 20 without antler restriction. These seasons allow for 79 days of hunting opportunity much of which is in times of traveling to hunt is best. “Competition” with air taxis and guides should not be a factor during 68 days of hunting seasons.

Additionally, most guides, particularly those permitted to operate on Federal lands are keenly aware of the need to avoid conflicts with local users, care properly for meat and share it with people in the villages.

There may be a typographical error in the proposal where it states that 228 moose were taken in the Chignik area by nonresident hunters in 2002. Harvest data shows that nonresident/general Alaska residents average 86 moose annually throughout all of GMU 9E.

The proposal also suggests that air taxis and guides could go to State lands to hunt which might benefit residents of Chignik but if that were actually to happen it would definitely impact villages on the Bering Sea side which are surrounded primarily by State land.

All this evidence does not support a closure of nonsubsistence hunting. This does not mean that myself and all the responsible guides who access GMU9 do not share all concerns of people living in the area who rely on wildlife resources. We are genuine stakeholders too and not just because we get paid to take people hunting. We hunt as a way of life and have a deep felt love and respect for our wildlife resources.

The legislature passed a bill last session which re-establishes a Big Game Commercial Service Board. It was members of the guiding profession that pressed to have this done. This Board will have the regulatory authority to deal with many of the problems associated with guides and transporters. Additionally, we will be dealing with allocating access for commercial activities on State lands as we have successfully done on Federal lands. You have excellent opportunities to insure hunting and fishing will always be a mainstay for our lives.

*–Joe Klutsch, King Salmon, Alaska*

**STAFF ANALYSIS  
WP06-26**

**ISSUES**

Proposal WP06-26, submitted by the Chignik Lake Village Council, Chignik Lake, Alaska, would close Federal public lands in Unit 9E to the taking of moose except by Federally qualified subsistence users.

**DISCUSSION**

The proponent states that residents in Unit 9E, specifically in the Chignik Unit of the Alaska Peninsula National Wildlife Refuge, are not successful in harvesting subsistence moose. A representative of the Chignik Lake Village Council stated that local residents are not finding moose in places where they usually hunt. Subsistence hunters in the area primarily consume caribou, but the Northern Alaska Peninsula Caribou Herd (NAPCH) has declined drastically. With the current hunting closure of caribou in Unit 9E (FSB 2005), area residents have expressed that they do not want to see moose populations decline to where another subsistence resource is closed to harvest. The proponent points out that currently, local subsistence hunters must compete with nonsubsistence hunters and air taxis or guided hunters for the resource. The proponent emphasizes that residents have expressed their concerns about moose management, and that they are willing to work with State and Federal management officials for the conservation of the resource for subsistence needs.

Current Federal subsistence management regulations for moose hunting in Unit 9E provide for a subsistence priority as the Federal subsistence moose season opens on Aug. 20, 21 days prior to the State season which opens on Sept. 10. In addition, Federal subsistence moose hunters can harvest any bull, while under State regulations resident hunters are restricted in the fall hunt to one bull with spike-fork or 50-inch antlers or antlers with 3 or more brow tines on at least one side. Both the Federal and State regulations provide for a winter hunt (Dec. 1–Jan. 20) for the harvest of any bull.

**Existing Federal Regulation****Unit 9E–Moose***1 bull*

*Aug. 20–Sept. 20  
Dec. 1–Jan. 20*

**Proposed Federal Regulation****Unit 9E–Moose***1 bull*

***Federal public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations.***

*Aug. 20–Sept. 20  
Dec. 1–Jan. 20*

## Existing State Regulations

### Unit 9E–Moose

*Residents, one bull with spike-fork or 50-inch antlers or antlers with 3 or more brow tines on at least one side.* Sept. 10–20

*Or one bull* Dec. 1–Jan. 20

## Extent of Federal Public Lands

Federal public lands comprise 50% of Unit 9E and include the Becharof National Wildlife Refuge (Refuge), the Ugashik and Chignik units of the Alaska Peninsula National Wildlife Refuge (Refuge) and the Aniakchak National Monument and Preserve. Approximately 90% of Federal public lands in the Unit are Refuge public lands and approximately 10% are National Monument and Preserve public lands. Refer to **Unit 9 Map**.

## Customary and Traditional Use Determinations

The following have a positive customary and traditional use determination for moose in Unit 9E: Rural residents of Units 9A, 9B, 9C, and 9E.

## Regulatory History

Following is a summary of Federal subsistence moose hunting regulations for Unit 9E:

July 1, 1990–June 30, 1991–1 bull; Sept. 10–20 and Dec. 1–15; however, moose taken from Sept. 10–20 must have 50-inch antlers.

July 1, 1991–June 30, 1992–1 bull, Sept. 1–15 and Dec. 1–31.

July 1, 1992–June 30, 1994–1 bull, Sept. 1–20 and Dec. 1–31.

July 1, 1994–June 30, 1998–1 antlered bull, Sept. 1–20 and Dec. 1–31.

July 1, 1998–June 30, 1999–1 bull, Sept. 1–20 and Dec. 1–31.

July 1, 1999–June 30, 2000–1 bull, Sept. 1–20 and Dec. 1–Jan. 20.

July 1, 2000–June 30, 2005–1 bull, Aug. 20–Sept. 20 and Dec. 1–Jan. 20.

The Board has considered several other proposals and special actions, including WP99-36 and WP00-37, concerning moose harvest seasons in Unit 9E. Special Actions WSA97-09 and WSA98-12 all requested the closure of Federal public lands in Unit 9E to moose and caribou hunting, except by qualified rural Alaskan residents. In 1998, the Board deferred action on a special action request to close the area to non-Federally qualified subsistence users until a subcommittee could meet and discuss moose management recommendations. The meeting (workshop) was held Sept. 28–30, 1998 in Naknek, Alaska.

Workshop management recommendations for moose were forwarded to the Bristol Bay Subsistence Regional Advisory Council as Wildlife Proposal WP99-36. This proposal would have closed Federal public lands to moose hunting on the Pacific side of the Alaska Peninsula from Stepovak Bay to Cape

Igvak to non-Federally qualified hunters. The Board deferred this proposal until additional moose surveys could be conducted to determine the status of the moose population in the lower Chignik Unit in Unit 9E. Surveys conducted by the Refuge indicated a healthy moose population. The Board voted not to close the season to non-qualified hunters, but did modify the proposal to extend the winter season to Jan. 20 to coincide with Alaska Board of Game action.

Wildlife Proposal WP00-37, submitted by the Port Heiden Village Council, requested that the fall moose hunt season in Unit 9E be changed from Sept. 1–20 to Aug. 20–Sept. 20. The Board adopted the proposal in May 2000.

### **Biological Background**

Moose were scarce on the Alaska Peninsula until the 1940s, when they increased and expanded their range southwestward. Numbers peaked in the late 1960s, but began declining thereafter. By the early 1980s, moose numbers had declined 60% or more from their peak despite increasingly restrictive hunting regulations. Cows showed signs of nutritional stress; poor calf production and low recruitment were apparent results. Evidence indicates that their range may have recovered somewhat by the 1980s. However, brown bear predation on moose calves still remains a limiting factor.

Based on moose trend surveys conducted during the late 1990s in Unit 9E by ADF&G and the Refuge, there appears to be a stable moose population and adequate bull:cow ratios. Extrapolation from the 1983 density estimate and trend surveys conducted in 1998 indicated an estimated moose population of 2,500 animals in the unit (Sellers 1998). Based on surveys conducted during the winter of 1998 in the Pacific drainages (Nakaliok Bay to the Chignik River drainage including Black Lake), there were 69 bulls and 23 calves per 100 cows. Based on periodic surveys conducted in the Pacific trend area (Yantarni and Amber Bays) since 1972, these more recent data were similar to these earlier surveys.

Surveys were also conducted in 1998 on the Bristol Bay side of the peninsula in long established trend areas from the lower Dog Salmon River through the Meshik River. Results for each trend area were similar to results obtained over the last 15 years (Sellers 1998). Additional moose surveys were conducted in early May 1999, with 245 moose observed in the lower Chignik Unit. Based on a comparison of these survey data with data collected by ADF&G in 1982 and 1988, and observations reported to the Refuge by local air taxi operators, there was no population decline nor unusually low densities in the area (Squibb 1999).

Further cooperative trend surveys conducted in Dec. 1999, Dec. 2003, and Jan. 2004 support earlier population estimates. For the past 3 years in which trend data have been collected (2001, 2003, and 2005), the calf:cow ratio has averaged 17 calves per hundred cows (Butler 2005). Similarly there has been little change in the bull:cow ratio. During the past 3 years for which trend data are available (2001, 2003, and 2005), the bull:cow ratio has averaged 43 bull:100 cow. Currently, there is no biological concern and estimated counts and composition ratios indicate the population in Unit 9E is relatively stable and meets ADF&G management objectives. Bull:cow ratios are above management goals for high and low density moose populations (20 and 40 bulls:100 cow, respectively).

### **Harvest History**

From 1979 to 2003, an average of 91 moose were reported harvested annually in Unit 9E, with a low harvest of 45 moose in 1982 and a high of 164 moose in 1979 (ADF&G 2004). The overall harvest level has remained relatively stable, within sustainable levels over the last 15–20 years, and harvests are not reducing bull:cow ratios.

Based on subsistence studies conducted for Alaska Peninsula communities from 1994–1997, there was a low reporting of moose harvests by local residents through the State harvest ticket program. Household surveys have indicated much higher harvest levels (Krieg et al. 1998). The number of moose harvested by local residents in Unit 9E varied from 21 to 48 animals during the 3 year period (1995–1997). Based on household surveys, Unit 9E Bristol Bay residents from Egegik, Pilot Point, and Port Heiden took 0%–25% of their moose from Federal public lands. Residents from the Chigniks, Perryville, and Ivanof Bay took almost all of their moose from Federal public lands.

Based on reported moose harvest data for the 3 year period 2001–2003, approximately 65% of the harvest has been on Federal public lands in Unit 9E. Most of this reported harvest has been by guided hunters and hunters who used air taxis. From 2001–2004, reported harvest by clients of big game guides and air taxi operators on refuge lands, has averaged about 41 moose per year (Squibb 2005). Most of these moose are taken far from the local communities. Several big game guides whose permit areas are near communities are not allowed to guide moose hunters.

Based on ADF&G's preliminary harvest records, 69 moose were harvested from the most recent fall 2005 hunt conducted on both Federal and State lands from Aug. 20–Sept. 20. The annual moose harvest in Unit 9E over the last 3 years (2002–2004) has averaged 87 animals (Butler 2005, pers. comm.).

### **Effect of the Proposal**

This proposed regulation would allow only Federally qualified subsistence users to hunt in the Aniakchak National Preserve and in the Becharof and Alaska Peninsula National Wildlife Refuges. The proposed closure of Federal public lands in Unit 9E to non-Federally qualified subsistence users may not resolve local resident concerns about non-local hunting effort because of the mixed land status.

Eliminating the harvest of bulls by non-Federally qualified hunters would not result in a significant change in the moose population that would benefit local subsistence users, particularly when the harvest is structured to prevent the over harvest of bulls (antler restrictions and 10 day fall season). Roughly 85% of the harvest occurs during the September season when State regulations limit the harvest to spike/fork/50 antler restrictions for residents and 50 inch or greater restriction for nonresidents. With such a large percentage of the harvest occurring during the portion of the season with antler restrictions, it is unlikely that current harvest levels would have an effect on the bull:cow ratio or on the population size. Moose harvest over the past 3 years has not declined.

According to ANILCA, closing Federal public lands to non-Federally qualified subsistence users for the taking of wildlife can occur when it is deemed necessary for the conservation of the population of that species. There would need to be biological evidence of such circumstances if this proposal were adopted.

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**WP06-27 Executive Summary**

<b>General Description</b>	Establish a Federal Controlled Use Area (CUA) for all moose seasons in the lower Yukon River drainage within Unit 18. This proposal was originally deferred by the Federal Subsistence Board as WP05-11 at its May 2005 meeting and was resubmitted by the proponent as WP06-27. <i>Submitted by the Yukon-Kuskowim Delta Subsistence Regional Advisory Council.</i>
<b>Proposed Regulation</b>	<p><b>Unit 18—Moose</b></p> <p><i>Federal public lands in Unit 18 are closed to the hunting of moose, except by Federally qualified subsistence users hunting under these regulations.</i></p> <p><i>The Lower Yukon Controlled Use Area, consisting of that portion of Unit 18 with a straight line beginning at the confluence of the Pastolik River to Mountain Village, from Mountain Village to the easterly point of Askinuk Mountain approximately ¾ mile west of Kingokakhlik Lake, continuing to Cape Romanzof, then north along the coastline back to the confluence of the Pastolik River, is closed during moose hunting seasons to the use of aircraft for moose hunting, including transportation of any moose hunter or moose part. However, this does not apply to transportation of a moose or moose part by aircraft between publicly-owned airports within the Lower Yukon Controlled Use Area and points outside of the area.</i></p>
<b>Yukon-Kuskokwim Delta Subsistence Regional Advisory Council</b>	<b>Support.</b>
<b>Western Interior Alaska Subsistence Regional Advisory Council</b>	<b>No action taken.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-27**

**YUKON-KUSKOKWIM DELTA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support WP06-27.** The Yukon-Kuskokwim Delta Subsistence Regional Advisory Council voted to support this proposal. There are local concerns about aerial moose spotting in lower Unit 18. Residents within the proposal area feel that spotting moose from an aircraft creates an unfair advantage over rural users who do not practice this method for locating moose during the moose season. Subsistence users in this area travel by land and by water; spotting by aircraft will not be fair for those harvesting by land and water. We need to maintain the abundance of moose in this area by restricting access.

**WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**No action taken.** The Western Interior Alaska Subsistence Regional Advisory Council took no action on this proposal, after a motion to support the proposal died for lack of a second.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-27**

**Oppose** the proposal, contrary to the recommendation of the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council.

**Justification**

The Federal Subsistence Board does not have jurisdiction to restrict access methods on State and private lands, or to restrict spotting moose from aircraft. Because of the mixed land ownership and State jurisdiction on navigable waters within the affected area, the establishment of a Federal-only controlled use area would not effectively restrict aircraft access as requested by the proponent. Both Federal and State regulations currently prohibit taking moose the same day the hunter is airborne. If illegal use of aircraft for hunting moose in the area is occurring, such incidents should be called to the attention of State and Federal law enforcement personnel. Conservation of a healthy moose population is not an issue in this proposal. The affected moose population is healthy and has grown substantially in recent years.

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

## STAFF ANALYSIS WP06-27

### ISSUES

Proposal WP06-27, submitted by the Yukon-Kuskowim Delta Subsistence Regional Advisory Council (Council), requests the establishment of a Federal Controlled Use Area (CUA) for all moose seasons in the lower Yukon River drainage within Unit 18. This proposal was originally deferred by the Board as WP05-11 at its May 2005 meeting and was resubmitted by the proponent as WP06-27.

### DISCUSSION

The Board's decision to defer action on WP05-11 was based on its limited jurisdiction to implement effective CUAs. The Board has not established any Federal CUAs during the existence of the Federal Subsistence Management Program; however, Federal subsistence management regulations parallel CUA restrictions established by the Alaska Board of Game. The Council recently submitted State Proposal 9, a companion proposal to WP06-27, to the Alaska Board of Game that addresses the issue of complex land ownership within the affected area. The Alaska Board of Game rejected Proposal 9 at its Nov. 2005 meeting based on their conclusion that the current level of impacts, from fly-in hunters, on the resource and on affected users are insignificant.

Local concerns of aerial moose spotting by lower Unit 18 moose hunters, who fly from the areas south of the Yukon River drainage, to the lower portion of the Yukon River, originally prompted the Council to request the establishment of a Federal CUA. Local residents have reported observations of lower unit residents spotting moose from privately-owned aircraft in the lower Yukon River, with the intent to locate moose for harvest. Local residents favor additional access restrictions for Federally qualified subsistence users who access the lower Yukon River via privately-owned aircraft during the Federal moose seasons. Residents within the proposal area feel that spotting moose from an aircraft creates an unfair advantage over rural users who do not practice this method of locating moose during the moose seasons.

### Existing Federal Regulations

#### **Unit 18—Moose**

*Federal public lands in Unit 18 are closed to the hunting of moose, except by Federally qualified subsistence users hunting under these regulations.*

### Proposed Federal Regulations

#### **Unit 18—Moose**

*Federal public lands in Unit 18 are closed to the hunting of moose, except by Federally qualified subsistence users hunting under these regulations.*

*The Lower Yukon Controlled Use Area, consisting of that portion of Unit 18 with a straight line beginning at the confluence of the Pastolik River to Mountain Village, from Mountain Village to the easterly point of Askinuk Mountain approximately  $\frac{3}{4}$  mile west of Kingokakthlik Lake, continuing to Cape Romanzof, then north along the coastline back to the confluence of the Pastolik River, is closed during moose hunting seasons to the use of aircraft for moose hunting, including transportation of any moose hunter or moose part. However, this does not apply to transportation of a moose or moose part by aircraft between publicly-owned airports within the Lower Yukon Controlled Use Area and points outside of the area.*

### **Extent of Federal public lands**

Federal public lands account for 63.9% of Unit 18 (61.5% FWS and 2.4% BLM) (see **Unit 18 map**).

### **Customary and Traditional Use Determination**

Unit 18, that portion of the Yukon River drainage upstream of Russian Mission and that portion of the Kuskokwim River drainage upstream of, but not including the Tuluksak River Drainage—Rural residents of Unit 18, Upper Kaskag, Aniak and Chuathbaluk.

Unit 18 remainder—Rural residents of Unit 18 and Upper Kalskag.

### **Current Events Involving Species**

The moose population along the Yukon River from Paimiut to the coast has grown substantially since 2002. The moose population in the area continues to grow rapidly with high production and survival rates of calves (Rearden 2005).

### **Regulatory History**

Season dates along the Yukon River have varied among years, but bag limits have been constant at one bull generally in the fall. From 1988–94 a moratorium was instituted on the Yukon Delta below Mountain Village. This area was defined as: “that portion of Unit 18 north & west of a line from Cape Romanzof to Kusilvak Mountain, to Mountain Village, and excluding all Yukon River drainages upriver from Mountain Village”. A closure was established by the Federal Subsistence Board in the 1991/92 Federal subsistence management regulations (56 FR 28334, June 26, 1991) to insure that subsistence uses received first priority. This was especially important given the low moose numbers at the time. The closure has been in the regulations since that time. In general, winter seasons have been available only under special announcement.

A five-year moratorium was established on the lower Kuskokwim drainage in 2004 to promote colonization of this area which contains excellent, yet largely unoccupied, moose habitat. All moose hunting is restricted within this area. This area is defined as: “easterly of a line from the mouth of the Ishkowiik River to the closest point of Dall Lake then to easternmost point of Takslesuk Lake then along the Kuskokwim River drainage boundary to the Unit 18 border, and north of and including the Eek River drainage.” This area remains closed.

### *State Management Objectives for Unit 18—Moose*

1. Allow the lower Yukon River moose population to continue to increase above its estimated size.
2. Maintain the current age and sex structure for the lower Yukon River population, with a minimum of 30 bulls:100 cows.
3. Conduct fall sex and age composition surveys as weather and funding allow.
4. Conduct winter censuses and recruitment surveys in the established survey areas on a rotating basis.
5. Allow a harvest of bulls without hindering a high rate of population increase.
6. Improve harvest reporting and compliance with hunting regulations.
7. Minimize conflicts among user groups interested in moose within and adjacent to Unit 18.

## Population Status

Currently there are four moose census blocks within Unit 18: (1) Paimiut, (2) Andraefsky, and (3) the Lowest Yukon along the lower Yukon River and (4) the Lower Kuskokwim along the Kuskokwim River (unaffected by this proposal). The Lowest Yukon census area, which corresponds to the moratorium area during 1988–94, has seen the most dramatic population increases within Unit 18 in recent years. Since 2002 the population has increased at an annual rate of 27%. The winter population estimate in 1992 was 28 animals. This rose to 65 in 1994, to 674 in 2002, and to the Feb. 2005 estimate of 1,341 with a calf:cow ratio of 64:100 (ADF&G, 2002*a* & 2005). The late fall 2005 population estimate was 1,700 (Perry 2005, pers. comm.).

Although sample sizes were small the following composition data further indicates a healthy and highly productive moose population. The spring 2001 calf:cow ratio was 50 calves per 100 cows (2 years and older) and the twinning rate for cows older than two years was 80%. In 2003 the figures were 86 calves:100 cows ( $\geq 2$  years) and a twinning rate of 85% for cows ( $> 2$  years). The spring composition survey in 2004 was conducted 9–10 days earlier than previous years and therefore not all cows may have yet dropped their calves. Nevertheless, the 2004 survey found 49 calves:100 cows ( $\geq 2$  years) and a twinning rate of 23%. The calf:cow ratio as of Nov. 23, 2005 stood at 92 calves per 100 cows. The proportion of cows with surviving twins as of Nov. 23 was 26%. It should be noted that both of these 2005 figures represent proportions after summer and fall calf mortality. This impressive trend can largely be attributed to the success of the five year moratorium and the excellent habitat conditions below Mountain Village.

The population in the Andraefsky Census Block, which roughly covers the area along the Yukon River from Pilot Village to Mountain Village and the Andraefsky River drainage, had an estimated population of 52 moose in 1995. The most recent comparable census was carried out in 2002. It provided an estimate of 418 moose or a density of 0.36 moose/mi<sup>2</sup> which is up from 0.04 moose/mi<sup>2</sup> in 1995 and 0.23 moose/mi<sup>2</sup> in 1999 (ADF&G 2002*b*). There were an estimated 22 calves:100 adults. A trend count conducted by ADF&G in Mar. 2005 provided an estimate of 42 calves:100 adults.

The area included in the Paimiut Census Block (roughly an area along the Yukon River from Paimiut to Pilot Village) also showed remarkable increases. In 1992 there were an estimated 994 moose. This increased from 2,024 in 1998 to 2,382 in 2002. Moose composition counts conducted by the ADF&G also confirm a healthy population. The 2001 composition count estimated a calf:adult ratio of 32 per 100, a calf:cow ratio of 46 per 100, and a bull:cow ratio of 58 per 100. The fall 2003 composition count found 47 calves per 100 cows and 35 bulls per 100 cows.

Through mutual agreement with Lower Kuskokwim River communities, a five-year moratorium was established on the lower Kuskokwim drainage in 2004 to promote colonization of this area which contains excellent, yet largely unoccupied, moose habitat. All moose hunting is restricted within this area and will not change with this proposal. Cooperative management strategies and objectives for this area include: (1) a five-year closure to all moose hunting to facilitate colonization, population growth, and to produce a harvestable surplus; (2) reach a population of 1,000–2,000 moose; (3) consider opening a bull-only harvest after the five-year moratorium if minimum population goals are reached; (4) maintain the moose population within the carrying capacity of the land; and (5) strict enforcement of regulations.

In summary, analysis of results from these data strongly suggest that the lower Yukon River moose population is highly productive, continues to grow, and is capable of supporting an increased harvest.

## Harvest

Local residents affected by the proposed regulatory change attempt to meet their large animal subsistence needs through moose harvests and caribou when the Mulchatna and Western Arctic caribou herds are accessible during winter. While harvest reporting compliance for Unit 18 has not been consistent, harvest appears to have significantly increased in the Yukon River portion of Unit 18 and appears to have been stable at just over 200 bulls per year since 2002. Current harvest rates for the affected area do not reflect a need for additional regulatory restrictions. Total moose taken by Unit 18, fly-in hunters will not adversely affect the viability of the moose population or local opportunity to harvest moose (Rearden 2004, pers. comm.). The reported total harvest of moose taken by lower Unit 18, fly-in hunters during the period of 1998–99 through 2003–04 was one moose (Seavoy 2004, pers. comm.). The Refuge manager of the Yukon Delta National Wildlife Refuge and the Unit 18 State Area Wildlife Biologist announced that the 2005–06 lower Yukon River, winter moose season would take place during Dec. 20–Jan. 10. All rural residents of Unit 18, residents of upper Kalskag, and all State residents outside of Unit 18 are eligible to participate in the winter hunt, however only Federally qualified users allowed under the customary and traditional use determination are eligible to hunt on Federal public lands in Unit 18. The principle mode of travel during the winter season is snowmachine.

## Effects of the Proposal

Adoption of the proposed change would restrict access for Federally qualified subsistence users, who utilize privately-owned aircraft to access the proposal area for the purpose of hunting moose during the Federal seasons. The proposed regulation change would prevent qualified users from accessing traditional hunt areas in the lower Yukon River drainage of Unit 18 via privately-owned aircraft. No adverse biological affects are anticipated from lower Unit 18 residents, who utilize privately-owned aircraft to travel to the Yukon River drainage to hunt moose. Impacts from lower Unit 18 fly-in hunters are not adversely affecting the sustainability of the moose population. The affected area lacks the moose population concerns that would warrant the need for additional access restrictions. The current harvest levels reflect that local residents are meeting their subsistence needs; therefore, additional access restrictions would not address their stated concerns. The Federal Subsistence Board's jurisdiction does not include flight rules for pilots and their passengers who spot moose over Federal jurisdictions and those who spot moose and access State jurisdictions via privately-owned aircraft. The Board has not established any Federal CUAs during the existence of the Federal Subsistence Management Program; however, Federal subsistence management regulations parallel CUA restrictions established by the Alaska Board of Game. The establishment of a Federal-only CUA would not effectively control access, because of the complex land ownership within the affected area. Because of this, the proposed CUA would fail to adequately address the proponent's concerns. Local concerns about aerial moose spotting should be directed toward the local State and Federal land managers who can address these issues through law enforcement channels.

At its Feb. and Oct. 2005 meetings, the Council adamantly expressed the importance of the establishment of a CUA for the lower Yukon River drainage. Because of limited Federal jurisdiction within the affected area, the Council was informed by staff that the proposed action would not prevent access to the lower Yukon River drainage via privately-owned aircraft for those intending to hunt moose. It was at this meeting that the Council stated its intent to submit a similar request to the Alaska Board of Game, as the proposed Federal CUA lacks the ability to fully address its concerns. The Council supports its proposal as written with the hope that an established CUA supported by State and Federal access restrictions would meet its intent. The Alaska Board of Game rejected the companion proposal (State Proposal 9) at its Nov. 2005 meeting.

## LITERATURE CITED

ADF&G. 2002*a*. Memorandum: 2002 winter moose censuses. Bethel, AK

ADF&G. 2002*b*. Memorandum: Lowest Yukon spring moose comp count. Bethel, AK.

ADF&G. 2005. Memorandum: Winter moose comp count. Bethel, AK.

Perry, P. 2005. Assistant area wildlife biologist. Personal communication. ADF&G, Bethel, AK.

Rearden, M. 2004. Refuge manager. Personal communication. USFWS, Yukon Delta National Wildlife Refuge, Bethel, AK.

Seavoy, R. 2004. Area wildlife biologist. Personal communication. ADF&G, Bethel, AK.

<b>WP06-28 Executive Summary</b>	
<b>General Description</b>	Change the existing 10-day “to be announced” winter moose season to Dec. 20–Jan. 10 for the remainder of Unit 18. <i>Submitted by the Yukon Delta National Wildlife Refuge.</i>
<b>Proposed Regulation</b>	<p><b>Unit 18—Moose</b></p> <p><i>That portion easterly of a line running from the mouth of the Ishkowiik River to the closest point of Dall Lake, then to the easternmost point of Takslesluk Lake, then along the Kuskokwim River drainage boundary to the Unit 18 border, and north of (and including) the Eek River drainage.</i> <span style="float: right;"><i>No Federal open season.</i></span></p> <p><i>South of and including the Kanektok River drainage.</i> <span style="float: right;"><i>No Federal open season.</i></span></p> <p><b><i>That portion north and west of a line from Cape. Romanzof to Kusilvak Mountain to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village—1 antlered bull</i></b> <span style="float: right;"><i>Sept. 1–Sept. 30</i></span></p> <p><i>or</i></p> <p><b><i>1 antlered bull</i></b> <span style="float: right;"><b><i>Dec. 20–Jan. 10</i></b></span></p> <p><i>Remainder—1 antlered bull</i> <span style="float: right;"><i>Sept. 1–Sept. 30</i></span></p> <p><i>A 10-day hunt to occur between Dec. 1 and Feb. 28 (1 bull, evidence of sex required) will be opened by announcement.</i> <span style="float: right;"><i>Winter season to be announced.</i></span></p> <p><i>or</i></p> <p><b><i>1 antlered bull</i></b> <span style="float: right;"><b><i>Dec. 20–Jan. 10</i></b></span></p>
<b>Yukon-Kuskokwim Delta Subsistence Regional Advisory Council</b>	<b>Support.</b>
<b>Western Interior Alaska Subsistence Regional Advisory Council</b>	<b>No action taken.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

<i>WP06-29 Executive Summary</i>	
<b>General Description</b>	Allow the harvest of moose calves during the winter season in the lower Yukon area. <i>Submitted by the Yukon Delta National Wildlife Refuge.</i>
<b>Proposed Regulation</b>	<p><b>Unit 18—Moose</b></p> <p><i>That portion easterly of a line running from the mouth of the Ishkowitz River to the closest point of Dall Lake, then to the easternmost point of Takslesluk Lake, then along the Kuskokwim River drainage boundary to the Unit 18 border; and north of (and including) the Eek River drainage.</i>      <i>No Federal open season.</i></p> <p><i>South of and including the Kanektok River drainage.</i>      <i>No Federal open season.</i></p> <p><i>That portion north and west of a line from Cape. Romanzof to Kusilvak Mountain to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village—1 antlered bull</i>      <i>Sept. 1–Sept. 30</i></p> <p><i>or</i></p> <p><i>1 antlered bull or 1 calf</i>      <i>Dec. 20–Jan. 10</i></p> <p><i>Remainder—1 antlered bull</i>      <i>Sept. 1–Sept. 30</i></p> <p><i>A 10-day hunt to occur between Dec. 1 and Feb. 28 (1 bull, evidence of sex required) will be opened by announcement.</i>      <i>Winter season to be announced.</i></p> <p><i>or</i></p> <p><i>1 antlered bull or 1 calf</i>      <i>Dec. 20–Jan. 10</i></p>
<b>Yukon-Kuskokwim Delta Subsistence Regional Advisory Council</b>	<b>Support with modification.</b>
<b>Western Interior Alaska Subsistence Regional Advisory Council</b>	<b>No action taken.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support with modification.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-28/29**

**YUKON-KUSKOKWIM DELTA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

WP06-28

**Support** the proposal.

WP06-29

**Support with modification.** The Yukon-Kuskokwim Delta Subsistence Regional Advisory Council voted to support the motion with modification to delegate the authority to close the calf season to the National Wildlife Refuge Manager and add “with its mother” after the word “calf.” Calf is described as an ungulate still with its mother. Regulatory wording should add “with its mother” after the word calf.

Calf harvest is not customary and traditional. There are concerns about the definition of a calf. It is good to provide additional opportunity for lower Yukon subsistence hunters to feed their families.

**WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

WP06-28

**No action taken.** The Western Interior Alaska Subsistence Regional Advisory Council took no action on this proposal after a motion to support the proposal died for the lack of a second.

WP06-29

**No action taken.** The Western Interior Alaska Subsistence Regional Advisory Council took no action on this proposal after a motion to support the proposal died for the lack of a second.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-28/29**

WP06-28

**Support** the proposal as recommended by the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council.

WP06-29

**Support with modification,** as recommended by the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council, except in regards to the Council’s recommendation to specify that a calf must be with its mother to be legally harvested.

The modified regulation should read:

**Unit 18—Moose**

*That portion north and west of a line from Cape Romanzof to Kusilvak Mountain to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village—1 antlered bull.* Sept. 1–Sept. 30

*1 antlered bull or 1 calf. The Yukon Delta NWR Manager may restrict the harvest to only antlered bulls after consultation with the ADF&G.* Dec. 20–Jan. 10

*§\_\_.25(a) Calf means a moose, caribou, elk, muskox, or bison less than 12 months old.*

**Justification**

The moose population in the affected portion of the lower Yukon River drainage is healthy and continues to grow rapidly with high production and survival of calves. The population can support harvest of calf moose during the winter season without adverse effects at current production and survival rates. Adoption of a regulation to allow the harvest of calves with a provision delegating the authority to the refuge manager to restrict the harvest of calves if necessary (to ensure continued growth of the population) would align Federal and State regulatory provisions. Regulatory alignment will avoid public confusion and consequent inadvertent violations related to the mixed jurisdictions in the area.

Adoption of WP06-29 should include a collateral definition of “calf” similar to the State definition of calf. The Interagency Staff Committee believes that adding the requirement that a calf must be with its mother as recommended by the Yukon-Kuskokwim Delta Regional Council would be unnecessarily restrictive and confusing to subsistence users and would be unenforceable. Imposing this requirement could be considered detrimental to the satisfaction of subsistence needs. It is not clear what being “with its mother” means. In the winter calves may be encountered in groups of moose where it may be difficult to determine which if any is the mother unless the calf is in close attendance. In some situations it is also possible that a small yearling moose in the company of a cow or other large moose could be mistaken for a calf. Although taking a calf in close association with a cow may reduce the risk of mistakenly taking an older moose, hunters can be selective without a regulatory restriction.

**STAFF ANALYSIS  
WP06-28/29**

**ISSUES**

Proposal WP06-28, submitted by the Yukon Delta National Wildlife Refuge (NWR), would change the existing 10-day “to be announced” winter moose season to Dec. 20–Jan. 10 for the remainder of Unit 18. Proposal WP06-29, also submitted by the Yukon Delta NWR, requests the additional opportunity to harvest moose calves during the winter season for the lower Yukon River drainage.

**DISCUSSION**

The proposed 22-day winter moose season and calf harvest were put into effect under State regulations for the 2005/06 regulatory year under Emergency Order 05-09-05. At its Nov. 2005 meeting, the Alaska Board of Game also adopted the 22-day winter moose season and the expanded harvest limit for the portion of Unit 18, that is essentially downstream from Mountain Village and for that portion north and west of the lower Kuskokwim River drainage moratorium area and south and east of Mountain Village (remainder of Unit 18). This State regulatory change will go into effect in July 2006 and will establish the State’s Unit 18 winter moose seasons for the 2006/07 regulatory year. The State winter seasons were established to provide additional opportunity for residents to harvest the growing moose population in the affected portions of Unit 18. Special Action WSA05-14, also submitted by the Yukon Delta NWR, established the same winter moose season in Unit 18 for the lower Yukon River drainage and for the remainder of Unit 18 for the 2005/06 regulatory year. The intent of Proposal WP06-28 is to provide Federally qualified subsistence users the same additional opportunity to harvest winter moose that will be provided under State regulations during the winter seasons. Adoption of the State winter moose season dates and harvest limits would also avoid public confusion and prevent inadvertent regulatory violations due to the mixed land jurisdictions within the affected areas of Unit 18.

**Existing Federal Regulations****Unit 18—Moose**

<i>That portion easterly of a line running from the mouth of the Ishkowitz River to the closest point of Dall Lake, then to the easternmost point of Takslesluk Lake, then along the Kuskokwim River drainage boundary to the Unit 18 border, and north of (and including) the Eek River drainage.</i>	<i>No Federal open season</i>
<i>South of and including the Kanektok River</i>	<i>No Federal open season.</i>
<i>Remainder—1 antlered bull. A 10-day hunt (1 bull, evidence of sex required) will be opened sometime between Dec. 1 and Feb. 28.</i>	<i>Sept. 1–Sept. 30 Winter season to be announced.</i>

**Proposed Federal Regulations**

**Unit 18—Moose**

*That portion easterly of a line running from the mouth of the Ishkowiik River to the closest point of Dall Lake, then to the easternmost point of Takslesluk Lake, then along the Kuskokwim River drainage boundary to the Unit 18 border, and north of (and including) the Eek River drainage.* *No Federal open season*

*South of and including the Kanektok River drainage.* *No Federal open season*

***That portion north and west of a line from Cape Romanzof to Kusilvak Mountain to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village—1 antlered bull*** *Sept. 1–Sept. 30*

*or*  
***1 antlered bull or 1 calf\**** ***Dec. 20–Jan. 10\****

*Remainder—1 antlered bull.* *Sept. 1–Sept. 30*  
*A 10-day hunt to occur between Dec. 1 and Feb. 28 (1 bull, evidence of sex required) will be opened by announcement.* *Winter season to be announced.*

*or*  
***1 antlered bull or 1 calf\**** ***Dec. 20–Jan. 10\****

*Federal public lands in Unit 18 are closed to the hunting of moose, except by Federally qualified residents during Federal open seasons.*

**\*Note:** WP06-28 requests the Dec. 20–Jan. 10 season for Unit 18 remainder and WP06-29 requests the calf harvest for the lower Yukon River drainage.

**Existing State Regulations: Adopted in Nov. 2005**

**Unit 18—Moose**

*That portion north and west of a line from Cape Romanzof to Kusilvak Mtn. to Mtn. Village and excluding all Yukon River drainages upriver from Mtn. Village (however, portions of this area may be closed to the taking of calves by emergency order).*

*Residents: 1 antlered bull or 1 calf* ***Dec. 20–Jan. 10***

*Remainder of Unit 18* ***Dec. 20–Jan. 10***

*Residents: 1 antlered bull per regulatory year*

**Extent of Federal public lands**

Federal public lands account for 63.9% of Unit 18 (61.5% FWS and 2.4% BLM lands) (see **Unit 18 map**).

### **Customary and Traditional Use Determination**

Unit 18, that portion of the Yukon River drainage upstream of Russian Mission and that portion of the Kuskokwim River drainage upstream of, but not including the Tuluksak River Drainage—Rural residents of Unit 18, Upper Kaskag, Aniak and Chuathbaluk.

Unit 18 remainder—Rural residents of Unit 18 and Upper Kaskag.

### **Regulatory History**

Season dates along the Yukon River have varied among years, but bag limits have been constant at one bull generally in the fall. From 1988–94 a moratorium was instituted on the Yukon Delta below Mountain Village. This area was defined as: “that portion of Unit 18 north & west of a line from Cape Romanzof to Kusilvak Mountain, to Mountain Village, and excluding all Yukon River drainages upriver from Mountain Village”. A closure restricting access to non-Federally qualified subsistence users was established by the Federal Subsistence Board in the 1991/92 Federal subsistence management regulations (56 FR 28334, June 26, 1991) to insure that subsistence uses received first priority. This was especially important given the low moose numbers at the time. The closure has been in the regulations since that time. In general, winter seasons have been available only under special announcement.

A five year moratorium was established on the lower Kuskokwim drainage in 2004 to promote colonization of this area which contains excellent, yet largely unoccupied, moose habitat. All moose hunting is restricted within this area. This area is defined as: “easterly of a line from the mouth of the Ishkowiik River to the closest point of Dall Lake then to easternmost point of Takslesuk Lake then along the Kuskokwim River drainage boundary to the Unit 18 border, and north of and including the Eek River drainage.” This area remains closed.

### **Current Events Involving Species**

The moose population along the Yukon River from Paimiut to the coast has grown substantially in the recent past. The moose population in the area continues to grow rapidly with high production and survival rates of calves (Rearden 2005, pers. comm.). Additional harvests that could occur from the proposed action may slow the rate of population growth somewhat; however, no detrimental impacts to the population are anticipated. The Alaska Board of Game adopted the 22-day winter season and the expanded harvest limit for the 2006/07 regulatory year at its Nov. 2005 meeting.

### **State Management Objectives for Unit 18—Moose:**

1. Allow the lower Yukon River moose population to continue to increase above its estimated size.
2. Maintain the current age and sex structure for the lower Yukon River population, with a minimum sex ratio of 30 bulls:100 cows.
3. Conduct fall sex and age composition surveys as weather and funding allow.
4. Conduct winter censuses and recruitment surveys in the established survey areas on a rotating basis.
5. Allow a harvest of bulls without hindering a high rate of population increase.
6. Improve harvest reporting and compliance with hunting regulations.
7. Minimize conflicts among user groups interested in moose within and adjacent to Unit 18.

## Population Status

Currently there are four moose census blocks within Unit 18: (1) Paimiut, (2) Andreafsky, and (3) the Lowest Yukon along the lower Yukon River and (4) the Lower Kuskokwim along the Kuskokwim River (unaffected by this proposal). The Lowest Yukon census area, which corresponds to the moratorium area during 1988-1994, has seen the most dramatic population increases within Unit 18 in recent years. Since 2002 the population has increased at an annual rate of 27%. The winter population estimate in 1992 was 28 animals. This rose to 65 in 1994, to 674 in 2002, and to the Feb. 2005 estimate of 1,341 with a calf:cow ratio of 64:100 (ADF&G, 2002*a* & 2005). The late fall 2005 population estimate was 1,700 (Perry 2005, pers. comm.). Although sample sizes were small the following composition data further indicates a healthy and highly productive moose population. The spring 2001 calf:cow ratio was 50 calves per 100 cows (2 years and older) and the twinning rate for cows older than two years was 80%. In 2003 the figures were 86 calves:100 cows ( $\geq 2$  years) and a twinning rate of 85% for cows ( $> 2$  years). The spring composition survey in 2004 was conducted 9 to 10 days earlier than previous years and therefore not all cows may have yet dropped their calves. Nevertheless, the 2004 survey found 49 calves:100 cows ( $\geq 2$  years) and a twinning rate of 23%. The calf:cow ratio as of Nov. 23, 2005 stood at 92 calves per 100 cows. The proportion of cows with surviving twins as of Nov. 23 was 26%. It should be noted that both of these 2005 figures represent proportions after summer and fall calf mortality. This impressive trend can largely be attributed to the success of the five year moratorium and the excellent habitat conditions below Mountain Village.

The population in the Andreafsky Census Block, which roughly covers the area along the Yukon River from Pilot Station to Mountain Village and the Andreafsky River drainage, had an estimated population of 52 moose in 1995. The most recent comparable census was carried out in 2002. It provided an estimate of 418 moose or a density of 0.36 moose/mi<sup>2</sup> which is up from 0.04 moose/mi<sup>2</sup> in 1995 and 0.23 moose/mi<sup>2</sup> in 1999 (ADF&G 2002*b*). There were an estimated 22 calves:100 adults. A trend count conducted by ADF&G in Mar. 2005 provided an estimate of 42 calves:100 adults.

The area included in the Paimiut Census Block (roughly an area along the Yukon River from Paimiut to Pilot Station) also showed remarkable increases. In 1992 there were an estimated 994 moose. This increased to 2,024 in 1998 and 2,382 in 2002. Moose composition counts carried out by ADF&G also confirm a healthy population. The 2001 composition count estimated a calf:adult ratio of 32 per 100, a calf:cow ratio of 46 per 100, and a bull:cow ratio of 58 per 100. The fall 2003 composition count found 47 calves per 100 cows and 35 bulls per 100 cows.

Through mutual agreement with Lower Kuskokwim River communities, a five-year moratorium was established on the lower Kuskokwim drainage in 2004 to promote colonization of this area which contains excellent, yet largely unoccupied, moose habitat. All moose hunting is restricted within this area and will not change with this proposal. Cooperative management strategies and objectives for this area include: (1) a five-year closure to all moose hunting to facilitate colonization, population growth, and to produce a harvestable surplus; (2) reach a population of 1,000–2,000 moose; (3) consider opening a bull only harvest after the five-year moratorium if minimum population goals are reached; (4) maintain the moose population within the carrying capacity of the land; and (5) strict enforcement of regulations.

In summary, these data strongly suggest that the lower Yukon moose population is highly productive, continues to grow, and is capable of supporting an increased harvest.

## Harvest

Local residents affected by the proposed regulatory change attempt to meet their large animal subsistence needs through moose harvests and caribou when the Mulchatna and Western Arctic herds are accessible during winter. While harvest reporting compliance for Unit 18 has not been consistent, harvest appears to have significantly increased in the Yukon River portion of Unit 18 and appears to have been stable at just over 200 bulls per year since 2002.

## Effects of the Proposal

Adoption of the proposed regulations would provide for additional opportunity for Federally qualified subsistence users to harvest moose and would align the Federal and State winter seasons and harvest limits for the affected areas. Because the majority of bull moose will have shed their antlers by Dec. 20, the proposed antlered-bull requirement should help to assure adequate survival of bulls during years when winter travel conditions are good and hunting pressure is high. Adoption of the proposed regulation also should help to reduce the larger than average calf component of the population, which may help prevent potential future overbrowsing and subsequent adverse impacts on the moose population. The proposed regulatory changes would also benefit those Federally qualified subsistence users who need to harvest moose in order to provide meat for their families. Current Federal subsistence management regulations do not include a definition of calves.

The proposed winter season would benefit those Federally qualified subsistence users who need to harvest moose in order to provide meat for their families.

At the February 2006 meeting of the Yukon-Kuskokwim Subsistence Regional Advisory Council (Council), staff advised the Council that it has the option to recommend that the Board adopt the State's definition of "calf", as this term is lacking from the current Federal Subsistence Wildlife Regulations. The State definition is, "Calf—a moose, caribou, elk, muskox, or bison less than 12 months old." The Council stated that it is not always possible for hunters to distinguish between a calf and a sub adult by age. The Council stated that it would favor a definition that describes a calf as "a calf with a cow moose."

## LITERATURE CITED

- ADF&G. 2002a. Memorandum: 2002 winter moose censuses. Bethel, AK
- ADF&G. 2002b. Memorandum: Lowest Yukon spring moose comp count. Bethel, AK.
- ADF&G. 2005. Memorandum: Winter moose comp count. Bethel, AK.
- Perry, P. 2005. Assistant area wildlife biologist. Personal communication. ADF&G, Bethel, AK.
- Rearden, M. 2005. Refuge manager. Personal communication. FWS Yukon Delta National Wildlife Refuge, Bethel, AK.

<b>WP06-30 Executive Summary</b>	
<b>General Description</b>	Eliminate the Federal regulatory closure restriction for the Sept. 1–30 moose season in the remainder of Unit 18. <i>Submitted by Henry S. Powers III.</i>
<b>Proposed Regulation</b>	<p><b>Unit 18—Moose</b></p> <p><i>Unit 18 remainder—1 antlered bull. Sept. 1–Sept. 30</i></p> <p><i>A 10-day hunt (1 bull, evidence of sex required) will be opened sometime between Dec. 1 and Feb. 28. Winter season to be announced.</i></p> <p><i>Federal public lands in Unit 18 are closed to the hunting of moose, except by Federally qualified rural Alaska residents hunting under these regulations. by non-Federally qualified users, except in the remainder of Unit 18 during the fall season.</i></p>
<b>Yukon-Kuskokwim Delta Subsistence Regional Advisory Council</b>	<b>Oppose.</b>
<b>Western Interior Alaska Subsistence Regional Advisory Council</b>	<b>No action.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Defer.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Oppose-2</b> (and 18 signatories opposing this proposal on a resolution)

## REGIONAL ADVISORY COUNCIL RECOMMENDATIONS WP06-30

### YUKON-KUSKOKWIM DELTA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Oppose** WP06-30. The Yukon-Kuskokwim Delta Subsistence Regional Advisory Council opposes this proposal because we need to listen to our Elders. Many people from the Yukon-Kuskokwim Delta's Yukon area have expressed concerns about this proposal. People of the lower Yukon share. There is concern that the needs of the lower Yukon villages are not being met. There are concerns about changing environment and the stability of the moose population. There are concerns about the people of the lower Yukon being able to get enough moose to feed their families into future generations.

### WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**No action.** The Western Interior Alaska Subsistence Regional Advisory Council took no action on this proposal. A motion to support the proposal died for the lack of a second.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-30**

**Defer** the proposal.

**Justification**

Based on analysis of the available biological data, restricting access to this moose herd to only Unit 18 and lower Kalskag residents may no longer be warranted. In fact, managers are pursuing opportunities through the regulatory process to increase harvest in an attempt to slow population growth (WP06-28 and WP06-29). The 2005/06 winter season was extended to 22 days, by special action request, and a calf harvest was allowed for the lowest Yukon River area. It appears based on these data, which the current harvest is well below the harvestable surplus. Therefore, based on just the biological data the recommendation would be to support the proposal; however, a deferred action on this proposal would yield to full cooperative management of this resource as an ongoing process.

Deferral is recommended for continuing the ongoing cooperative management necessary to effectively manage the resources of Unit 18. A history of public consensus-based cooperation, that established three moose hunting moratoria and the success of the Yukon-Kuksokwim Delta Goose Management Plan in Unit 18, was achieved through broad public involvement of local residents. A deferral of the proposed action would allow for public involvement and discussions between diverse user groups such as subsistence hunters and transporters. It is unlikely that the lower Yukon River moose population would even exist if it were not for the voluntary actions taken by lower Yukon residents. They proposed to establish the original moratorium and actively maintained the moratorium until the moose population was large enough to allow limited hunting (Rearden 2006, pers. comm.). There is a need to provide for adequate public participation and involvement in the decision-making process to insure an orderly, conservative approach is taken to liberalizing participation in this hunt.

As a result of this public process, the Federal Subsistence Board should expect, in the near future, proposals that will address the need to liberalize the harvest on this moose population and insure conservation measures are in place to maintain a population that will insure future subsistence needs will continue to be met (Rearden 2006, pers. comm.). To implement this proposal without adequate opportunity for public participation could put the conservation of this moose population at risk. Compliance with regulations and other conservation measures is much greater when local residents are actively involved in the decision-making process.(Rearden 2006, pers. comm.).

The implications of allowing unlimited access by all hunters to this population raises great concern with many of the residents of the affected region. They are concerned that they will have to directly compete with transporters flying hunters into this region and that a large influx of nonsubsistence hunters will cause decline of the moose population that they worked hard to build. The land status in the region is complicated and boundaries between Federal public lands and private lands are difficult to determine. Trespass on private lands is inevitable. Some residents have stated that if this restriction is lifted, as proposed, that the village corporations will close their lands to all but shareholders.

This is an area of the state where local residents have never dealt with the commercial aspects of big game hunting for the simple reason that there were very few big game species to hunt in that region. The Yukon Delta NWR did not establish a permitted guide use area for the Yukon area because of the lack of game species diversity.

The perception by many lower Yukon residents is that this restriction is there to only keep “sport hunters” from harvesting moose in the region. However, the current restriction poses a hardship on adjacent villages such as St. Michaels, Stebbins and to some extent Holy Cross, as they are not qualified users either.

Biologically, it appears that the restrictions should be removed. However, this issue is fraught with social complexities and land ownership issues. This is a complex issue with a long history that involves much more than just biology. In addition, it is important to retain the strength of the long-term partnership and trust that has developed between agencies and user groups in building this moose population. A unilateral decision to remove this restriction would bypass that close working relationship with those communities.

Continued public involvement is necessary for a smooth transition from the existing regulations to the proposed regulatory change to minimize user conflicts and insure that adequate conservation measures are in place to protect this important resource.

Competition, in and of itself should not be a justification for closure of Federal public lands to non-Federally qualified users. However, where significant levels of displacement are anticipated, and usual subsistence harvest will likely not occur through reasonable efforts, closures to non-Federally qualified users may be justified. Deferral in this specific case is *necessary for the conservation of a healthy moose population* and so that *subsistence uses* of this moose population can continue [ANILCA sec. 815(3)].

## WRITTEN PUBLIC COMMENTS WP06-30

**Oppose.** ....I’ll compare the proposal to a potluck type dinner. As residents of [Unit] 18, we have just gotten in line for dinner and someone knocks heavily at the door demanding to get in and be served. The new guys will not go to the end of the line, but demand to go to the front of the line and be served before others that have been there longer. Is there enough to go around? Why did they demand that they be invited without invitation? The success rate of our subsistence hunters is very low; more than half of the hunters go all season long without a harvest even [if] they go every day. Soaring fuel prices also hurt the subsistence hunters, we cannot hunt as much as we like. Our hunters found out that if they put their money together, more fuel could be bought, but more hunters are in the boat and this turns counter productive; more hunters together—more noise generated equals less harvest ability. In GMU 18 the hunting opportunities are not equal. If you have money you can fly, spot a moose and hunt same day. This is not a level-hunting field. We need a few more years to get ready for people from outside GMU 18 who want to hunt and possibly harvest a moose in GMU 18. Why did the guide outfitter not contact Tribes or Corporations in our area to see if we would object to extra hunting pressure? . . . The proposal mentioned that there would be no extra hunting pressure. How can that be when our hunters (GMU 18) will be going out in strong numbers? . . . Right now there is not enough moose in GMU 18 to even fill half of the freezers in villages in GMU 18 and still be under the guidelines of the State of Alaska’s Sustainable Harvest Regulations. If there should happen to be a big flood on the Lower Yukon Delta, we stand a chance to [lose] up to half our Moose population, because we are in the flood plain. Another thing to mention is that upriver the moose population is going down, this means that upriver subsistence hunters may come down river to GMU 18 and hunt in an already crowded area.

–Ted Hamilton, Emmonak Tribal Council

**Oppose.** Following this letter you will receive a Resolution of the Native Village of Georgetown requesting the Federal Subsistence Board reject the proposal WP06-30, submitted by Henry Powers of Bethel, to allow nonresident hunting to occur on Federal public lands in the Yukon-Kuskokwim Delta. The self-imposed moratorium on moose hunting has meant that some of our members have had to go without moose meat to help feed their families, as the high cost of gas prices [has] made it impossible to travel far enough to hunt. Our members understand that this sacrifice is necessary to provide for a sustainable moose population for the future. We do not support any sport hunting activity, which may further jeopardize the goal of this sacrifice.

*–Glenn Fredericks, President, Georgetown Tribal Council*

**Oppose.** Eighteen (18) individuals and organizations located in the Yukon Kuskokwim Delta Region oppose the proposal for several reasons, with the main one “to protect the subsistence way of life.”

- Edward Mark, Quinhagak, Alaska
- Yupiit of Andreafski
- Mike Moses, Asa’carsarmiut Tribes of Alaska
- Asa’carsarmiut Tribal Council
- Algaaciq Tribal Government
- Native Village of Eek Traditional Council
- Village of Bill Moore’s Slough
- Emmonak Tribal Council
- Glenn Fredericks, President, Georgetown Tribal Council
- Georgetown Tribal Council
- Ted Hamilton, Natural Resource Dept., Emmonak Tribal Council
- Hamilton Tribal Council
- Newtok Traditional Council
- Bavill Merritt, Sr., Pres., Native Village of Goodnews Bay Traditional Council
- Native Village of Kongiganak Traditional Council
- Native Village of Kwinhagak Council
- Ohogamiut Tribal Council
- Village of Lower Kalskag

**STAFF ANALYSIS  
WP06-30**

**ISSUES**

Proposal WP06-30, submitted by Henry S. Powers III of Bethel, would eliminate the Federal regulatory closure restriction for the Sept. 1–30 moose season in the remainder of Unit 18.

**DISCUSSION**

The rapid growth and current levels of the lower Yukon River moose population have created disagreement over the appropriateness of Federal access restrictions that have kept this area closed to non-Federally qualified users since the 1991/92 regulatory year. The proponent feels that the Federal closure regulations for this area should be changed to allow sport/recreational hunters from outside Unit 18 the opportunity to utilize Federal public lands to hunt moose. The proponent stated that the closure regulations for Unit 18 are no longer justifiable from a biological standpoint.

**Existing Federal Regulations**

**Unit 18—Moose**

<i>Unit 18 remainder—1 antlered bull.</i>	<i>Sept. 1–Sept. 30</i>
<i>A 10-day hunt (1 bull, evidence of sex required) will be opened sometime between Dec. 1 and Feb. 28.</i>	<i>Winter season to be announced.</i>
<i>Federal public lands in Unit 18 are closed to the hunting of moose, except by Federally qualified rural Alaska residents hunting under these regulations.</i>	

**Proposed Federal Regulations**

**Unit 18—Moose**

<i>Unit 18 remainder—1 antlered bull.</i>	<i>Sept. 1–Sept. 30</i>
<i>A 10-day hunt (1 bull, evidence of sex required) will be opened sometime between Dec. 1 and Feb. 28.</i>	<i>Winter season to be announced.</i>
<i>Federal public lands in Unit 18 are closed to the hunting of moose, <del>except by Federally qualified rural Alaska residents hunting under these regulations.</del> <b>by non-Federally qualified users, except in the remainder of Unit 18 during the fall season.</b></i>	

**Existing State Regulations: Adopted in Nov. 2005**

**Unit 18—Moose**

<i>Unit 18 remainder</i>		
<i>Residents: 1 bull</i>	<i>Harvest</i>	<i>Sept. 1–Sept. 30</i>
<i>Residents: 1 <b>antlered</b> bull per regulatory year</i>		<i><b>Dec. 20–Jan. 10</b></i>

**Unit 18—Moose**

*Unit 18, that portion north and west of a line from Cape Romanzof to Kusilvak Mountain to Mountain Village and excluding all Yukon River drainages upriver from Mountain Village (however, portions of this area may be closed to the taking of calves by emergency order).*

*Residents: 1 antlered bull or calf*

***Dec. 20–Jan. 10***

**Extent of Federal public lands**

Federal public lands account for 63.9% of Unit 18 (61.5% FWS and 2.4% BLM lands) (see **Unit 18 map**).

**Customary and Traditional Use Determinations**

All rural residents of Unit 18 and Upper Kalskag have a customary and traditional use determination for moose in the remainder of Unit 18.

**Regulatory History**

Hunting regulations along the lower Yukon River within Unit 18 were identical for residents and nonresidents alike from 1961 to 1991. Season dates along the Yukon River varied among years, but bag limits were constant at one bull with the exception of the period 1988–94. From 1988–94 a moratorium was instituted on the Yukon Delta below Mountain Village. This area was defined as: “that portion of Unit 18 north & west of a line from Cape Romanzof to Kusilvak Mountain, to Mountain Village, and excluding all Yukon River drainages upriver from Mountain Village”. The nonresident closure was originally established by the Federal Subsistence Board in the 1991/92 Federal subsistence management regulations (56 FR 28334, June 26, 1991) to insure that subsistence needs and rights received first priority. This was especially important given the low moose numbers at the time. The closure has been in the regulations since that time. Since the 1991/92, season dates continued to vary among years along the lower Yukon River in Unit 18, but bag limits were constant at one bull. A five-year moratorium was established on the lower Kuskokwim drainage in 2004 to promote colonization of this area which contains excellent, yet largely unoccupied, moose habitat. All moose hunting is restricted within this area. This area is defined as: “easterly of a line from the mouth of the Ishkowitz River to the closest point of Dall Lake then to easternmost point of Takslesuk Lake then along the Kuskokwim River drainage boundary to the Unit 18 border, and north of and including the Eek River drainage.”

**State Management Objectives for Unit 18—Moose:**

1. Allow the lower Yukon River moose population to continue to increase above its estimated size.
2. Maintain the current age and sex structure for the lower Yukon River population, with a minimum sex ratio of 30 bulls:100 cows.
3. Conduct fall sex and age composition surveys as weather and funding allow.
4. Conduct winter censuses and recruitment surveys in the established survey areas on a rotating basis.
5. Allow a harvest of bulls without hindering a high rate of population increase.
6. Improve harvest reporting and compliance with hunting regulations.
7. Minimize conflicts among user groups interested in moose within and adjacent to Unit 18.

## Biological Background

Currently there are four moose census blocks within Unit 18: (1) Paimiut, (2) Andraefsky, (3) the Lowest Yukon along the lower Yukon River, and (4) the Lower Kuskokwim along the Kuskokwim River (unaffected by this proposal). The Lowest Yukon census area, which corresponds to the moratorium area during 1988–94, has seen the most dramatic population increases within Unit 18 in recent years. Since 2002 the population has increased at an annual rate of 27%. The winter population estimate in 1992 was 28 animals. This rose to 65 in 1994, to 674 in 2002, and to the Feb. 2005 estimate of 1,341 (ADF&G, 2002a & 2005). The late fall 2005 estimate was 1,700 (Perry 2005, pers. comm.). Although sample sizes were small the following composition data further indicates a healthy and highly productive moose population. The spring 2001 calf:cow ratio was 50 calves per 100 cows (2 years and older) and the twinning rate for cows older than two years was 80%. In 2003 the figures were 86 calves:100 cows ( $\geq 2$  years) and a twinning rate of 85% for cows ( $> 2$  years). The spring composition survey in 2004 was conducted 9–10 days earlier than previous years and therefore not all cows may have yet dropped their calves. Nevertheless, the 2004 survey found 49 calves:100 cows ( $\geq 2$  years) and a twinning rate of 23%. The calf:cow ratio as of Nov. 23, 2005 stood at 92 calves per 100 cows. The proportion of cows with surviving twins as of Nov. 23 was 26%. It should be noted that both of these figures represent proportions after summer and fall calf mortality. This impressive trend can largely be attributed to the effect of the five-year moratorium and the excellent habitat conditions below Mountain Village.

The population in the Andraefsky Census Block, which roughly covers the area along the Yukon River from Pilot Village to Mountain Village and the Andraefsky River drainage, had an estimated population of 52 moose in 1995. The most recent comparable census was carried out in 2002. It provided an estimate of 418 moose or a density of 0.36 moose/mi<sup>2</sup> which is up from 0.04 moose/mi<sup>2</sup> in 1995 and 0.23 moose/mi<sup>2</sup> in 1999 (ADF&G 2002b). There were an estimated 22 calves:100 adults. A trend count conducted by ADF&G in Mar. 2005 provided an estimate of 42 calves:100 adults.

The area included in the Paimiut Census Block (roughly an area along the Yukon River from Paimiut to Pilot Station) also showed remarkable increases. In 1992 there were an estimated 994 moose. This increased to 2,024 in 1998 and 2,382 in 2002. Moose composition counts carried out by the ADF&G also confirm a healthy population. The 2001 composition count estimated a calf:adult ratio of 32 per 100, a calf:cow ratio of 46 per 100, and a bull:cow ratio of 58 per 100. The fall 2003 composition count found 47 calves per 100 cows and 35 bulls per 100 cows.

Through mutual agreement with Lower Kuskokwim River communities, a five-year moratorium was established on the lower Kuskokwim drainage in 2004 to promote colonization of this area which contains excellent, yet largely unoccupied, moose habitat. All moose hunting is restricted within this area and will not change with this proposal. Cooperative management strategies and objectives for this area include: (1) a five-year closure to all moose hunting to facilitate colonization, population growth, and to produce a harvestable surplus; (2) reach a population of 1,000–2,000 moose; (3) consider opening a bull only harvest after the five-year moratorium if minimum population goals are reached; (4) maintain the moose population within the carrying capacity of the land; and (5) strict enforcement of regulations.

In summary, based on analysis of these data, the lower Yukon moose population is highly productive, continues to grow, and is capable of supporting an increased harvest.

## **Harvest History**

While harvest reporting compliance for Unit 18 has not been consistent, harvest appears to have significantly increased in the Yukon River portion of Unit 18. However, the harvest since 2002 appears to be stable at just over 200 bulls per year (FWS 2006).

Local residents affected by the proposed regulatory change are meeting their large animal subsistence needs through moose harvests and to some extent, caribou when the Mulchatna herd or the Western Arctic herd are accessible during winter. Analysis of results from State 1996–2002 harvest data for the affected area, reflect the highest levels of moose hunter success occur during the month of September (ADF&G 2002c).

## **Effects of the Proposal**

If implemented, this proposal is expected to have little biological effect on the lower Yukon moose population and minimal effect on subsistence opportunities. The increased harvest allowed by this proposal is expected to be minor—on the order of 18–35 bull moose per year initially. However, as described below, the sociological and political effects of immediately removing this restriction could be detrimental to the success of future management actions and cooperative efforts with the Yukon River villages.

This is a complex issue that involves much more than just biology. It is unlikely that the lower Yukon moose population would even exist if it were not for the actions taken by lower Yukon residents to establish a moratorium and their active efforts to maintain the moratorium until the moose population was large enough to allow limited hunting. Therefore, the recommendation is to defer this proposal until there has been adequate public participation and involvement in the decision making to insure an orderly, conservative approach is taken to liberalizing the participation in this hunt.

## **LITERATURE CITED**

- ADF&G. 2002a. Memorandum: 2002 winter moose censuses. Bethel, AK.
- ADF&G. 2002b. Memorandum: Lowest Yukon spring moose comp count. Bethel, AK.
- ADF&G. 2002c. Harvest ticket database. Microcomputer database, updated July 2003.
- ADF&G. 2005. Memorandum: Winter moose comp count. Bethel, AK.
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- Rearden, M. 2006. Refuge manager. Personal communication. Yukon Delta National Wildlife Refuge, USFWS, Bethel, AK.

*WP06-33 Executive Summary*

<p><b>General Description</b></p>	<p>Revise the boundary and description for the Upper Kuskokwim Control Use Area (UKCUA) for moose in a portion of Unit 19D to align with State regulations. <i>Submitted by: Innoko National Wildlife Refuge</i></p>
<p><b>Proposed Regulation</b></p>	<p><b>Unit 19D—Upper Kuskokwim Controlled Use Area</b>  <i>§ __.26(n)(19)(ii)(B) In the Upper Kuskokwim Controlled Use Area, which consists of that portion of Unit 19D upstream from the mouth of Big River including the drainages of the Big River, Middle Fork, South Fork, East Fork, and Tonzona River, and bounded by a line following the west bank of the Swift Fork (McKinley Fork) of the Kuskokwim River to 152° 50' W. long., then north to the boundary of Denali National Preserve, then following the western boundary of Denali National Preserve north to its intersection with the Minchumina-Telida winter trail, then west to the crest of Telida Mountain, then north along the crest of Munsatli Ridge to elevation 1,610, then northwest to Dyckman Mountain and following the crest of the divide between the Kuskokwim River and the Nowitna drainage, and the divide between the Kuskokwim River and the Nixon Fork River to Loaf benchmark on Halfway Mountain, then south to the west side of Big River drainage, the point of beginning the Selatna River, but excluding the Selatna and Black River drainages, to a line extending from Dyckman Mountain on the norther Unit 19D boundary southeast to the 1,610 foot crest of Munsatli Ridge, then south along the Munsatli Ridge to the 2,981 foot peak of Telida Mountain, then northeast to the intersection of the western boundary of Denali National Preserve with the Minchumina-Telida winter trail, then south along the western boundary of Denali National Preserve to the southern boundary of Unit 19D, you may not use aircraft for hunting moose, including transportation of any moose hunter or moose part; however, this does not apply to transportation of a moose hunter or moose part by aircraft between publicly owned airports in the Controlled Use Area, or between a publicly owned airport within the area and points outside the area.</i></p> <p><i>That portion of the Upper Kuskokwim Controlled Use Area within the North Fork drainage upstream from the confluence of the South Fork to the mouth of the Swift Fork—1 antlered bull</i>      <i>Sept. 1–Sept. 30</i></p> <p><i>Remainder of the Upper Kuskokwim Controlled Use Area—1 bull</i>      <i>Sept. 1–Sept. 30</i>  <i>Dec. 1–Feb. 28</i></p> <p><i>Remainder—1 antlered bull</i>      <i>Sept. 1–Sept. 30</i>  <i>Dec. 1–Dec. 15.</i></p>
<p><b>Western Interior Alaska Subsistence Regional Advisory Council</b></p>	<p><b>Support.</b></p>

**Western Interior Region Proposals**

<i>WP06-33 Executive Summary</i>	
<b>Eastern Interior Alaska Subsistence Regional Advisory Council</b>	<b>Defer</b> to the home region.
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-33**

**WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support** the proposal. The Western Interior Alaska Subsistence Regional Advisory Council supports adoption of this proposal because it would align the Federal boundary of this controlled use area with State boundary description. It would benefit moose hunters by reducing confusion over differing boundaries.

**EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Defer** to the home region.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-33**

**Support** the proposal as recommended by the Western Interior Subsistence Regional Advisory Council.

**Justification**

Adopting this proposal would align with State regulations for the UKCUA boundary. It would benefit moose hunters by reducing confusion over differing boundaries of a State UKCUA and a Federal UKCUA.

**STAFF ANALYSIS  
WP06-33**

**ISSUES**

Proposal WP06-33, submitted by the Innoko National Wildlife Refuge, requests to revise the boundary and description for the Upper Kuskokwim Control Use Area (UKCUA) for moose in a portion of Unit 19D to align with State regulations.

**DISCUSSION**

The UKCUA boundary description in the Federal subsistence wildlife proposal book is not the same as the revised description in State regulations. The UKCUA was modified in State regulations, but was never modified in Federal Subsistence Management Regulations.

**Existing Federal regulation**

**Unit 19D—Upper Kuskokwim Controlled Use Area**

§ \_\_\_\_ .26(n)(19)(ii)(B) *In the Upper Kuskokwim Controlled Use Area, which consists of that portion of Unit 19D upstream from the mouth of Big River including the drainages of the Big River, Middle Fork, South Fork, East Fork, and Tonzona River, and bounded by a line following the west bank of the Swift Fork (McKinley Fork) of the Kuskokwim River to 152° 50' W. long., then north to the boundary of Denali National Preserve, then following the western boundary of Denali National Preserve north to its intersection with the Minchumina Telida winter trail, then west to the crest of Telida Mountain, then north along the crest of Munsatli Ridge to elevation 1,610, then northwest to Dyckman Mountain and following the crest of the divide between the Kuskokwim River and the Nowitna drainage, and the divide between the Kuskokwim River and the Nixon Fork River to Loaf benchmark on Halfway Mountain, then south to the west side of Big River drainage, the point of beginning, you may not use aircraft for hunting moose, including transportation of any moose hunter or moose part; however, this does not apply to transportation of a moose hunter or moose part by aircraft between publicly owned airports in the Controlled Use Area, or between a publicly owned airport within the area and points outside the area.*

<i>That portion of the Upper Kuskokwim Controlled Use Area within the North Fork drainage upstream from the confluence of the South Fork to the mouth of the Swift Fork—1 antlered bull</i>	<i>Sept. 1–Sept. 30</i>
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<i>Remainder of the Upper Kuskokwim Controlled Use Area—1 bull</i>	<i>Sept. 1–Sept. 30</i>
	<i>Dec. 1–Feb. 28</i>

<i>Remainder—1 antlered bull</i>	<i>Sept. 1–Sept. 30</i>
	<i>Dec. 1–Dec. 15</i>

**Proposed Federal regulation**

**Unit 19D—Upper Kuskokwim Controlled Use Area**

§ \_\_.26(n)(19)(ii)(B) *In the Upper Kuskokwim Controlled Use Area, which consists of that portion of Unit 19D upstream from the mouth of Big River including the drainages of the Big River, Middle Fork, South Fork, East Fork, and Tonzona River, and bounded by a line following the west bank of the Swift Fork (McKinley Fork) of the Kuskokwim River to 152° 50' W. long., then north to the boundary of Denali National Preserve, then following the western boundary of Denali National Preserve north to its intersection with the Minchumina Telida winter trail, then west to the crest of Telida Mountain, then north along the crest of Munsatli Ridge to elevation 1,610, then northwest to Dyckman Mountain and following the crest of the divide between the Kuskokwim River and the Nowitna drainage, and the divide between the Kuskokwim River and the Nixon Fork River to Loaf benchmark on Halfway Mountain, then south to the west side of Big River drainage, the point of beginning the Selatna River, but excluding the Selatna and Black River drainages, to a line extending from Dyckman Mountain on the norther Unit 19D boundary southeast to the 1,610 foot crest of Munsatli Ridge, then south along the Munsatli Ridge to the 2,981 foot peak of Telida Mountain, then northeast to the intersection of the western boundary of Denali National Preserve with the Minchumina-Telida winter trail, then south along the western boundary of Denali National Preserve to the southern boundary of Unit 19D, you may not use aircraft for hunting moose, including transportation of any moose hunter or moose part; however, this does not apply to transportation of a moose hunter or moose part by aircraft between publicly owned airports in the Controlled Use Area, or between a publicly owned airport within the area and points outside the area.*

*That portion of the Upper Kuskokwim Controlled Use Area within the North Fork drainage upstream from the confluence of the South Fork to the mouth of the Swift Fork—1 antlered bull* *Sept. 1–Sept. 30*

*Remainder of the Upper Kuskokwim Controlled Use Area—1 bull* *Sept. 1–Sept. 30*  
*Dec. 1–Feb. 28*

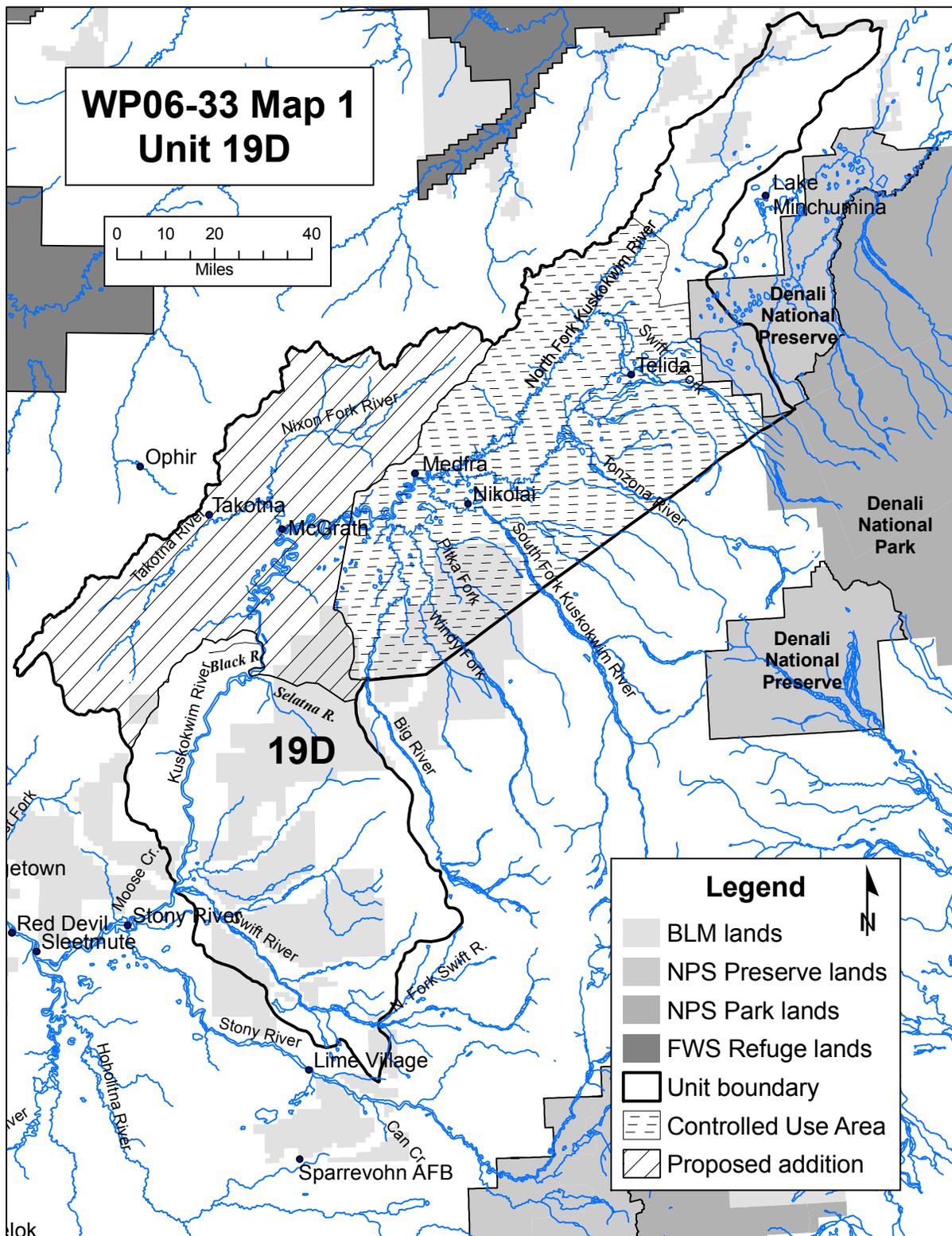
*Remainder—1 antlered bull* *Sept. 1–Sept. 30*  
*Dec. 1–Dec. 15*

**Extent of Federal Public Lands**

Federal public lands comprise approximately 16.5% of Unit 19D and consist of 14.3% BLM and 2.2% NPS lands (**Map 1**). The only Federal public lands within the UKCUA are BLM lands.

**Customary and Traditional Use Determinations**

All residents of Unit 19 and Lake Minchumina have a positive customary and traditional use determination for moose in Unit 19D.



## Regulatory History

The UKCUA is located in the upper portion of the North Fork of the Kuskokwim River drainage in the northcentral portion of Unit 19D (**Map 1**) and was established to reduce the participation of non-local hunters by prohibiting the use of aircraft. During a May 2001 special meeting in Fairbanks, the Alaska Board of Game made several changes to the moose season for 2001 in Unit 19D East. They also expanded the size of the Upper Kuskokwim Controlled Use Area for moose hunting to include all of the Takotna River drainage and the Kuskokwim drainage south of the Big River to the Selatna River and Black River drainages. This change expanding the area was to expire Mar. 31, 2006, unless the Alaska Board of Game acted to continue the enlarged boundaries. That action occurred at the Alaska Board of Game's March meeting in Fairbanks, where they extended the provision until March 31, 2008.

## Biological Background

Unit 19D is composed of generally lower elevation areas accessible by boat. Unit 19D hunters generally have been local residents from Units 19, 21, or 18. The moose population in Unit 19D remains at low densities. Low densities are indicative of the low-density equilibrium described by Gasaway et al. (1992) for wolf–bear–moose systems in Alaska and Yukon, Canada. Data indicate that the calf:cow ratios have increased, although the bull:cow ratios remain low (Boudreau and Parker McNeill 2004).

## Harvest History

In Unit 19D, compliance with reporting requirements has been poor. ADF&G implemented a registration hunt in most of the unit beginning in 2001. This may have increased reporting compliance for the portion of Unit 19D that remained a general season hunt during 2001 and 2002. Reported harvest averaged 106 during 2001 and 2002 (Boudreau and Parker McNeill 2004). No additional harvest information has been available from the State.

Federal regulations require the use of State harvest tickets, so there are no separate harvest numbers available for Federally qualified subsistence users/harvest in Unit 19D or the UKCUA.

## Effect of the Proposal

Adopting this proposal would align with State regulations for the UKCUA boundary. This would expand the UKCUA to include all of the Takotna River drainage and the Kuskokwim drainage south of the Big River to the Selatna River and Black River drainages, but would only impact two parcels of BLM lands. Increasing the size of the UKCUA would provide more harvest opportunity on two blocks of BLM lands, because those blocks would now have their winter season closing on Feb. 28 instead of Dec. 15. This change is expected to have minimal, if any, impact on the moose population or harvest in Unit 19D, but would reduce hunter confusion regarding the differing boundaries of the UKCUA.

## LITERATURE CITED

Boudreau T.A., and D.I. Parker McNeill. 2004. Units 19, 21A, and 21E moose management report. Pages 293–337 in C. Brown, ed. Moose management report of survey and inventory activities, 1 July 2001–30 June 2003. ADF&G. Proj. 1.0. Juneau, AK.

Gasaway W.C., R.D. Boertje, D.V. Grangaard, D.G. Kelleyhouse, R.O. Stephenson, and D.G. Larsen. 1992. The role of predation in limiting moose at low densities in Alaska and Yukon and implications for conservation. *Wildl. Monogr.* 120.

<b>WP06-34 Executive Summary</b>	
<b>General Description</b>	Change the closing dates for the fall moose seasons in Units 21A, 21B, 21D, and 21E and 24 from Sept. 25 to Oct. 1 and in the Koyukuk Controlled Use Area (CUA) in Units 21D and 24 from Sept. 20 to Oct. 1. <i>Submitted by the Western Interior Alaska Subsistence Regional Advisory Council</i>
<b>Proposed Regulation</b>	See the proposed Federal regulation in the analysis.
<b>Western Interior Alaska Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Yukon-Kuskokwim Delta Regional Council Recommendation</b>	<b>Oppose.</b>
<b>North Slope Regional Council Recommendation</b>	<b>Support with modification.</b> <b>No action taken</b> for Units 21A, 21B, 21D, and 21E.
<b>Interagency Staff Committee Recommendation</b>	<b>Support with modification.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support–1</b> <b>Support with modification–2</b> <b>Oppose–2</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATIONS WP06-34

### WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support with modification** presented by staff to apply the extended fall moose season dates to Units 21B and 24 Federal public lands north and east of, but not including, the Koyukuk National Wildlife Refuge.

The Western Interior Alaska Subsistence Regional Advisory Council clarified its recommendation to have the Council's recommendation for Unit 21B go forward to the Federal Subsistence Board, if the Alaska Board of Game does not grant the early August season requested by the Local Advisory Committees. If the Board of Game grants the August season, then the Council's recommendation is to not grant the October extension. The Council's justification to support their proposal as modified by staff and clarified by the Council's actions, was to allow moose hunting opportunity in the fall for bull moose where the moose populations can support that additional limited harvest. The bull:cow ratio data for Units 21B and 24 (except that portion of the Koyukuk National Wildlife Refuge) shows these areas can support this later limited fall harvest. In addition, the winter cow moose seasons have been restricted for conservation concerns and elevated fuel costs have limited travel and hunter effort. The Council's recommendation provides for economy of subsistence harvest where it can be supported biologically.

The modification would provide the Oct. 1 season extension for Unit 21B—that portion of the Nowitna National Wildlife Refuge and Unit 24 Federal public lands north and east of, but not including the Koyukuk National Wildlife Refuge. A Federal registration permit should be implemented for the Mar. 1–5 season for that portion of Unit 24—all drainages to the north of the Koyukuk River upstream from and including the Alatna River to and including the North Fork of the Koyukuk river, except that portion of the John River.

### EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support with modification** presented by staff. The environment is changing. Warming is occurring. Moose do not start moving until late September. Many subsistence hunters have not been able to get their moose during the current season. Moose are rutting later and later. The Eastern Interior Alaska Subsistence Regional Advisory Council felt the Federal subsistence management regulations need to provide an opportunity for Federally qualified subsistence users to feed their family where the resource can support it.

### YUKON-KUSKOKWIM DELTA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Oppose** the proposal. The Yukon-Kuskokwim Delta Subsistence Regional Advisory Council opposes this proposal because the Yukon-Innoko Moose Management Working and the Grayling, Anvik, Shageluk, and Holy Cross Fish and Game Advisory Committees did not support this proposal.

### NORTH SLOPE SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support with modification** to apply the extended fall moose season dates to Unit 24—Federal public lands north and east of, but not including the Koyukuk National Wildlife Refuge. The North Slope Subsistence Regional Advisory Council made no recommendations for Units 21A, 21B, 21D, and 21E.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-34**

**Support with modification**, as recommended by the Western Interior Alaska and the North Slope Subsistence Regional Advisory Councils, to provide season extensions for Unit 21B, 21D, and those portions of Unit 24 north and east of, but not including, the Koyukuk CUA or Koyukuk National Wildlife Refuge.

Based on a recent Alaska Board of Game action that eliminated the State Dec. 1–10 seasons in Units 21B and 21D, the Interagency Staff Committee also recommends that the Board align Federal regulations for Units 21B and 21D with the respective State regulatory actions. At its recent March 2006 meeting, the Western Interior Alaska Subsistence Regional Advisory Council stated that it would support an Aug. 22–31 season over the proposed Sept. 26–Oct. 1 season extension, should the Alaska Board of Game adopt the proposed Aug. 22–31 State season.

A Federal registration permit should be implemented for the Mar. 1–5 season for that portion of Unit 24B, north of the Koyukuk River except the John River drainage.

These modifications in combinations with the changes to be implemented through adoption of WP06-36, (on the consensus agenda) and the adoption of the new subunit descriptions for Unit 24 and Unit 21B should read:

**Units 21 and 24 Moose**

<i>Unit 21A—1 bull</i>	<i>Aug. 20–Sept 25 Nov. 1–Nov 30.</i>
<i>Unit 21B, that part of the Nowitna River drainage down stream from and including the Little Mud River drainage [original Unit 21B]—1 bull by State registration permit</i>	<i><b>Aug. 22–Aug. 31</b> Sept. 5–Sept. 25</i>
<i>Unit 21B, that part of the Nowitna River drainage upstream from but not including the Little Mud River drainage [formerly Unit 21A]—1 bull</i>	<i>Aug. 20–Sept 25 Nov. 1–Nov 30.</i>
<i>Unit 21D Koyukuk Controlled Use Area—1 moose; however, antlerless moose may be taken only during Aug. 27–31 and the Mar. 1–5 season if authorized by announcement by the Koyukuk/Nowitna National Wildlife Refuge Manager. Harvest of cow moose accompanied by calves is prohibited. During the Aug. 27–Sept. 20 season a State registration permit is required. During the Mar. 1–5 season a Federal registration permit is required. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&amp;G area biologist and the Chairs of the Western Interior Alaska Regional Advisory Council and Middle Yukon Fish and Game Advisory Committee.</i>	<i>Aug. 27–Sept. 20 <del>Dec. 1–Dec. 10</del>  Mar. 1–5 season to be announced.</i>

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- Unit 21D remainder—1 moose; however, antlerless moose may be taken only during Sept. 21–25 and the Mar. 1–5 season if authorized jointly by the Koyukuk/Nowitna National Wildlife Refuge Manager and the Central Yukon Field Office Manager, Bureau of Land Management. Harvest of cow moose accompanied by calves is prohibited. During the **Aug. 22–Aug. 31** and Sept. 5–Sept. 25 seasons a State registration permit is required. During the Mar. 1–5 season a Federal registration permit is required. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&G area biologist and the Chairs of the Western Interior Alaska Subsistence Regional Advisory Council and Middle Yukon Fish and Game Advisory Committee.*
- Aug. 22–Aug. 31**  
Sept. 5–Sept. 25  
~~Dec. 1–Dec. 10~~  
Mar. 1–5 season to be announced.
- Unit 24A—1 antlered bull by Federal registration permit only.*
- ~~Aug 25–Sept. 25~~  
Aug 25–**Oct. 1**
- Unit 24B, that portion within the John River drainage—1 moose.*
- Aug. 1–Dec. 31
- Unit 24B, all drainages to the north of the Koyukuk River, except the John River drainage—1 moose; however, antlerless moose may be taken only from **Sept. 27–Oct. 1** and Mar. 1–5, if authorized jointly by the Kanuti National Wildlife Refuge Manager, the BLM Central Field Office Manager, and Gates of the Arctic National Park Superintendent. **A Federal registration permit is required for the Sept. 26–Oct. 1 and Mar. 1–5 seasons.** Harvest of cows accompanied by calves is prohibited. The announcement will be made after consultation with the ADF&G Area Biologist and Chairs of the Western Interior Alaska Subsistence Regional Advisory Council, the Gates of the Arctic Subsistence Resource Commission, and the Koyukuk River Fish and Game Advisory Committee. Federal public lands in the Kanuti Controlled Use Area are closed to taking of moose, except by Federally qualified subsistence users of Unit 24, Koyukuk, and Galena hunting under these regulations.*
- ~~Aug 25–Sept. 25~~  
Aug 25–**Oct. 1**  
Mar. 1–5 season to be announced.
- Unit 24B remainder—1 antlered bull. **A Federal registration permit is required for the Sept. 26–Oct. 1 season.** Federal public lands in the Kanuti Controlled Use Area are closed to taking of moose, except by Federally qualified subsistence users of Unit 24, Koyukuk, and Galena hunting under these regulations.*
- ~~Aug 25–Sept. 25~~  
Aug 25–**Oct. 1**

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<p><i>Unit 24C and 24D, that portion within the Koyukuk Controlled Use Area and Koyukuk National Wildlife Refuge—1 moose; however, antlerless moose may be taken only during Aug. 27–31 and the Mar. 1–5 season, if authorized by announcement by the Koyukuk/Nowitna National Wildlife Refuge Manager and BLM Central Yukon Field Office Manager. Harvest of cow moose accompanied by calves is prohibited. During the Aug. 27–Sept. 20 season, a State registration permit is required. During the Mar. 1–5 season, a Federal registration permit is required. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&amp;G Area Biologist and the Chairs of the Western Interior Alaska Subsistence Regional Advisory Council, and the Middle Yukon and Koyukuk River Fish and Game Advisory Committees.</i></p>	<p><i>Aug. 27–Sept. 20</i> <i>Dec. 1–Dec. 10</i> <i>Mar. 1–5 season to be announced.</i></p>
<p><i>Unit 24C remainder and Unit 24D remainder—1 antlered bull; During the Sept. 5–25 season, a State registration permit is required.</i></p>	<p><i>Aug 25—Sept. 25</i> <i>Aug 25—Oct. 1</i></p>

## Justification

Adoption of the modified regulation would provide additional hunting opportunity for those residents that have a positive customary and traditional use determination for moose in portions of Units 21B, 21D, and 24. Analysis of results from moose survey data indicate that only the populations in those areas could support an additional but limited harvest during the proposed season extensions. The proposed six-day extensions for portions of Unit 24, are not expected to have detrimental impacts on the existing bull moose population. The remaining affected areas do not currently have moose populations that can sustain additional bull harvests expected to occur during the proposed six-day season extensions. Adoption of the recommended Aug. 22–31 season for part of Unit 21B and portions of Unit 21D and eliminating the Dec. 1–10 season for Unit 21D, would provide additional opportunity and would align Federal and State regulations. A State registration permit should be required for the recommended Aug. 22–31 seasons for Unit 21D, west of the Koyukuk Controlled Use Area and that portion north of the Yukon River and east of the Koyukuk Controlled Use Area and for Unit 21D remainder. As a result of this proposed change all portions of Unit 21D outside the Koyukuk CUA can be combined into the Unit 21D remainder description. A final recommended modification is to require a Federal registration permit for the Mar. 1–5 season for Unit 24B north of the Koyukuk River except the John River drainage. A registration permit would allow Federal land managers to closely monitor antlerless moose harvest in accordance with the management objectives.

## WRITTEN PUBLIC COMMENTS WP06-34

**Support** WP06-34. The Commission voted unanimously to endorse this proposal for the reasons stated by the proponents (declining moose populations, restrictions on cow harvest and warmer fall weather resulting in later pre-rutting movements). Bull moose have been increasingly difficult to harvest under the current regulations.

*—Gates of the Arctic National Park and Preserve Subsistence Resource Commission*

**Support with modification.** This proposal lists “because of moose population declines” as one of the reasons for the change in the season being suggested. Another reason rationalizing the change is “warmer

fall seasons” brought on by global warming. The suggested revision to the regulation extends the season by either a week or 10 days. Isn’t extending the season contradictory to the concern about moose population declines? To address the contraction, the Advisory Board might want to consider shifting the season later with no change in the season length, rather than just extending it.

*–Alaska Regional Office, National Parks Conservation Association*

**Oppose.** The Holy Cross Tribal Council opposes extending the bull moose season in their area to October 1.

*–Holy Cross Tribal Council*

**Oppose.** Note: This is based on the committee’s action to oppose the parallel Alaska Board of Game proposal 95.

*–Grayling/Anvik/Shageluk/Holy Cross Local Fish and Game Advisory Committee*

**Support with modification.** Note: This is based on the committee’s action to support with modification the parallel Alaska Board of Game proposal 95. The committee supported the season extension in their area of jurisdiction for only Unit 25B. They felt the moose population was healthy enough to support any additional harvest from this extension and the communities of Alatna and Allakaket need this fall season extension.

*–Koyukuk River Local Fish and Game Advisory Committee*

## STAFF ANALYSIS WP06-34

### ISSUES

Proposal WP06-34, submitted by the Western Interior Alaska Subsistence Regional Advisory Council (Council), would change the closing dates for the fall moose seasons in Units 21A, 21B, 21D, and 21E, and 24 from Sept. 25 to Oct. 1 and in the Koyukuk Controlled Use Area (CUA) in Units 21D and 24 from Sept. 20 to Oct. 1.

### DISCUSSION

Local concerns of moose population declines, restrictions on fall cow harvests, warmer fall seasons resulting in delayed bull movements, and high travel costs due to elevated fuel prices, have prompted the proponent's request for additional opportunity during the affected fall seasons. Local residents have stated that fall moose movements have been occurring later in recent years and that the onset of these movements occurs after the close of the regulatory seasons. The proponent feels that adoption of the proposed extensions would allow affected users to reallocate personal resources for gaining access to bulls at the onset of fall moose movements due to cooler temperatures. This proposal combines the concerns and intentions of several special action requests that were submitted to the Federal Subsistence Board (Board) during fall 2005 (WSA05-04–Unit 24, WSA05-07–Units 21B, 21C and 21D, WSA05-08–Unit 21B, and WSA05-9–Unit 21E).

### Existing Federal Regulations

#### Units 21 and 24 Moose

<i>Unit 21A—1 bull</i>	<i>Aug. 20–Sept. 25 Nov. 1–Nov. 30</i>
<i>Unit 21B—1 bull by State registration permit</i>	<i>Sept. 5–Sept. 25</i>
<i>Unit 21D Koyukuk Controlled Use Area—1 moose; however, antlerless moose may be taken only during Aug. 27–31 and the Mar. 1–5 season if authorized by announcement by the Koyukuk/Nowitna National Wildlife Refuge Manager. Harvest of cow moose accompanied by calves is prohibited. During the Aug. 27–Sept. 20 season a State registration permit is required. During the Mar. 1–5 season a Federal registration permit is required. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&amp;G area biologist and the Chairs of the Western Interior Alaska Regional Advisory Council and Middle Yukon Fish and Game Advisory Committee.</i>	<i>Aug. 27–Sept. 20 Dec. 1–Dec. 10  Mar. 1–5 season to be announced.</i>

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- Unit 21D, that portion within the Koyukuk River Drainage west of the Koyukuk Controlled Use Area and that portion north of the Yukon River and east of the Koyukuk Controlled Use Area—1 moose; however, antlerless moose may be taken only during Sept. 21–25 and the Mar. 1–5 season if authorized jointly by the Koyukuk/Nowitna National Wildlife Refuge Manager and the Northern Field Office Manager, Bureau of Land Management. Harvest of cow moose accompanied by calves is prohibited. During the Sept. 5–25 season a State registration permit is required. During the Mar. 1–5 season a Federal registration permit is required. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&G area biologist and the Chairs of the Western Interior Alaska Regional Advisory Council and the Middle Yukon Fish and Game Advisory Committee.*
- Sept. 5–Sept. 25  
Dec. 1–Dec. 10*
- Mar. 1–5 season to be announced.*
- Unit 21D remainder—1 moose; however, antlerless moose may be taken only during Sept. 21–25 and the Mar. 1–5 season if authorized jointly by the Koyukuk/Nowitna National Wildlife Refuge Manager and the Northern Field Office Manager, Bureau of Land Management. Harvest of cow moose accompanied by calves is prohibited. During the Mar. 1–5 season a Federal registration permit is required. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&G area biologist and the Chairs of the Western Interior Alaska Regional Advisory Council and Middle Yukon Fish and Game Advisory Committee.*
- Sept. 5–Sept. 25  
Dec. 1–Dec. 10*
- Mar. 1–5 season to be announced.*
- Unit 21E—1 moose; however, only bulls may be taken from Aug. 20–Sept. 25; moose may not be taken within one-half mile of the Innoko or Yukon River during the February season*
- Aug. 20–Sept. 25  
Feb. 1–Feb. 10*
- Unit 24 Koyukuk Controlled Use Area—1 moose; however, antlerless moose may be taken only during Aug. 27–31 and the Mar. 1–5 season if authorized by announcement by the Koyukuk/Nowitna National Wildlife Refuge Manager. Harvest of cow moose accompanied by calves is prohibited. During the Aug. 27–Sept. 20 season a State registration permit is required. During the Mar. 1–5 season a Federal registration permit is required. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&G area biologist and the Chairs of the Western Interior Alaska Regional Advisory Council and Middle Yukon Fish and Game Advisory Committee.*
- Aug. 27–Sept. 20  
Dec. 1–Dec. 10*
- Mar. 1–5 season to be announced.*

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- Unit 24, that portion west of the Hogatza River Drainage and the Koyukuk Controlled Use Area and that portion east of the Dakli River Drainage and the Koyukuk Controlled Use Area and west of the Kanuti Controlled Use Area, the Tanana-Allakaket Winter Trail and the Alatna River Drainage—1 moose; however, antlerless moose may be taken only during the Mar. 1–5 season only on Koyukuk National Wildlife Refuge lands if authorized by the Koyukuk/Nowitna National Wildlife Refuge Manager. Harvest of cow moose accompanied by calves is prohibited. During Sept. 5–25, a State registration permit is required. During the Mar. 1–5 season a Federal registration permit is required. Announcement for the antlerless moose season and cow quotas will be made after consultation with the ADF&G area biologist and the Chairs of the Western Interior Alaska Regional Advisory Council and the Middle Yukon Fish and Game Advisory Committee.*
- Aug. 25–Sept. 25*
- Mar. 1–5 season to be announced.*
- Unit 24, that portion that includes the John River drainage—1 moose.*
- Aug. 1–Dec. 31*
- Unit 24, all drainages to the north of the Koyukuk River upstream from and including the Alatna River to and including the North Fork of the Koyukuk River, except the John River drainage—1 moose; however, antlerless moose may be taken only from Sept. 21–25 and Mar. 1–5 if authorized jointly by the Kanuti National Wildlife Refuge Manager, the BLM Northern Field Office Manager, and the Gates of the Arctic National Park Superintendent. Harvest of cows accompanied by calves is prohibited. The announcement will be made after consultation with the ADF&G Area Biologist and the Chairs of the Western Interior Alaska Regional Advisory Council, the Gates of the Arctic Subsistence Resource Commission, and the Koyukuk River Fish and Game Advisory Committee.*
- Aug. 25–Sept. 25*
- Mar. 1–5 season to be announced.*
- Unit 24, that portion within the Dalton Highway Corridor Management Area; except for Gates of the Arctic National Park—1 antlered bull by Federal registration permit only.*
- Aug. 25–Sept. 25*
- Unit 24 remainder—1 antlered bull. Federal public lands in the Kanuti Controlled Use Area are closed to taking of moose, except by eligible rural Alaska residents hunting under these regulations.*
- Aug. 25–Sept. 25*

## Proposed Federal Regulations

### Units 21 and 24 Moose

*Unit 21A—1 bull*

~~Aug. 20–Sept. 25~~  
 Aug. 20–**Oct. 1**  
 Nov. 1–Nov. 30

*Unit 21B—1 bull by State registration permit*

~~Sept. 5–Sept. 25~~  
 Sept. 5–**Oct. 1**

*Unit 21D Koyukuk Controlled Use Area—1 moose; however, antlerless moose may be taken only during Aug. 27–31 and the Mar. 1–5 season if authorized by announcement by the Koyukuk/Nowitna National Wildlife Refuge Manager. Harvest of cow moose accompanied by calves is prohibited. During the Aug. 27–Sept. 20 season a State registration permit is required. During the Mar. 1–5 season a Federal registration permit is required. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&G area biologist and the Chairs of the Western Interior Alaska Subsistence Regional Advisory Council and Middle Yukon Fish and Game Advisory Committee.*

~~Aug. 27–Sept. 20~~  
 Aug. 27–**Oct. 1**  
 Dec. 1–Dec. 10

*Mar. 1–5 season to be announced.*

*Unit 21D, that portion within the Koyukuk River Drainage west of the Koyukuk Controlled Use Area and that portion north of the Yukon River and east of the Koyukuk Controlled Use Area—1 moose; however, antlerless moose may be taken only during Sept. 21–25 and the Mar. 1–5 season if authorized jointly by the Koyukuk/Nowitna National Wildlife Refuge Manager and the Northern Field Office Manager, Bureau of Land Management. Harvest of cow moose accompanied by calves is prohibited. During the Sept. 5–25 season a State registration permit is required. During the Mar. 1–5 season a Federal registration permit is required. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&G area biologist and the Chairs of the Western Interior Alaska Subsistence Regional Advisory Council and the Middle Yukon Fish and Game Advisory Committee.*

~~Sept. 5–Sept. 25~~  
 Sept. 5–**Oct. 1**  
 Dec. 1–Dec. 10

*Mar. 1–5 season to be announced.*

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- Unit 21D remainder—1 moose; however, antlerless moose may be taken only during Sept. 21–25 and the Mar. 1–5 season if authorized jointly by the Koyukuk/Nowitna National Wildlife Refuge Manager and the Northern Field Office Manager, Bureau of Land Management. Harvest of cow moose accompanied by calves is prohibited. During the Mar. 1–5 season a Federal registration permit is required. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&G area biologist and the Chairs of the Western Interior Alaska Regional Advisory Council and Middle Yukon Fish and Game Advisory Committee.
- ~~Sept. 5–Sept. 25~~  
Sept. 5–**Oct. 1**  
Dec. 1–Dec. 10
- Mar. 1–5 season to be announced.
- Unit 21E—1 moose; however, only bulls may be taken from Aug. 20–Sept. 25; moose may not be taken within one-half mile of the Innoko or Yukon River during the February season
- ~~Aug. 20–Sept. 25~~  
Aug. 20–**Oct. 1**  
Feb. 1–Feb. 10
- Unit 24 Koyukuk Controlled Use Area—1 moose; however, antlerless moose may be taken only during Aug. 27–31 and the Mar. 1–5 season if authorized by announcement by the Koyukuk/Nowitna National Wildlife Refuge Manager. Harvest of cow moose accompanied by calves is prohibited. During the Aug. 27–Sept. 20 season a State registration permit is required. During the Mar. 1–5 season a Federal registration permit is required. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&G area biologist and the Chairs of the Western Interior Alaska Regional Advisory Council and Middle Yukon Fish and Game Advisory Committee.
- ~~Aug. 27–Sept. 20~~  
Aug. 27–**Oct. 1**  
Dec. 1–Dec. 10
- Mar. 1–5 season to be announced.
- Unit 24, that portion west of the Hogatza River Drainage and the Koyukuk Controlled Use Area and that portion east of the Dakli River Drainage and the Koyukuk Controlled Use Area and west of the Kanuti Controlled Use Area, the Tanana-Allakaket Winter Trail and the Alatna River Drainage—1 moose; however, antlerless moose may be taken only during the Mar. 1–5 season only on Koyukuk National Wildlife Refuge lands if authorized by the Koyukuk/Nowitna National Wildlife Refuge Manager. Harvest of cow moose accompanied by calves is prohibited. During Sept. 5–25, a State registration permit is required. During the Mar. 1–5 season a Federal registration permit is required. Announcement for the antlerless moose season and cow quotas will be made after consultation with the ADF&G area biologist and the Chairs of the Western Interior Alaska Subsistence Regional Advisory Council and the Middle Yukon Fish and Game Advisory Committee.
- ~~Aug. 25–Sept. 25~~  
Aug. 25–**Oct. 1**
- Mar. 1–5 season to be announced.
- Unit 24, that portion that includes the John River drainage—1 moose.
- Aug. 1–Dec. 31

continued on next page

- Unit 24, all drainages to the north of the Koyukuk River upstream from and including the Alatna River to and including the North Fork of the Koyukuk River, except the John River drainage—1 moose; however, antlerless moose may be taken only from Sept. 21–25 and Mar. 1–5 if authorized jointly by the Kanuti National Wildlife Refuge Manager, the BLM Northern Field Office Manager, and the Gates of the Arctic National Park Superintendent. Harvest of cows accompanied by calves is prohibited. The announcement will be made after consultation with the ADF&G Area Biologist and the Chairs of the Western Interior Alaska Regional Advisory Council, the Gates of the Arctic Subsistence Resource Commission, and the Koyukuk River Fish and Game Advisory Committee.*
- Aug. 25–Sept. 25  
Aug. 25–Oct. 1*
- Mar. 1–5 season to be announced.*
- Unit 24, that portion within the Dalton Highway Corridor Management Area, except for Gates of the Arctic National Park—1 antlered bull by Federal registration permit only.*
- Aug. 25–Sept. 25  
Aug. 25–Oct. 1*
- Unit 24 remainder—1 antlered bull. Federal public lands in the Kanuti Controlled Use Area are closed to taking of moose, except by Federally qualified subsistence users hunting under these regulations.*
- Aug. 25–Sept. 25  
Aug. 25–Oct. 1*

**Existing State Regulations**

**Moose—Units 21A, 21B, 21D, 21E, and 24**

<b>Unit/Species/Harvest Limit</b>	<b>Permit/Ticket Required</b>	<b>Open Season</b>
<i>Unit 21A, within the Nowitna River drainage</i>		
<i>Residents: One antlered bull</i>	<i>Harvest</i>	<i>Sept. 5–Sept. 25</i>
<i>Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side</i>	<i>Harvest</i>	<i>Sept. 5–Sept. 20</i>
<i>Remainder of Unit 21A</i>		
<i>Residents: One antlered bull</i>	<i>Harvest</i>	<i>Sept. 5–Sept. 25</i>
<i>Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side.</i>	<i>Harvest</i>	<i>Sept. 5–Sept. 25</i>
<i>Unit 21B</i>		
<i>Residents: One bull by permit, available online at <a href="http://www.hunt.alaska.gov/">http://www.hunt.alaska.gov/</a> or in person at license vendors in Units 21B, 21D, 24, and ADF&amp;G in Fairbanks beginning Aug. 26. Trophy value will be destroyed.</i>	<i>RM834</i>	<i>Sept. 5–Sept. 25</i>
<i>OR One bull by permit</i>	<i>DM802/DM806/ DM808</i>	<i>Sept. 5–Sept. 25</i>

<b>Unit/Species/Harvest Limit</b>	<b>Permit/Ticket Required</b>	<b>Open Season</b>
<i>Unit 21B: Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side by permit</i>	<i>DM802/DM805/ DM808</i>	<i>Sept. 5–Sept. 20</i>
<i>Unit 21D, within the Koyukuk River drainage west of the Koyukuk Controlled Use Area</i>		
<i>Residents: One bull by permit available online at <a href="http://hunt.alaska.gov">hunt.alaska.gov</a> or in person at license vendors in Units 21B, 21D, 24, and ADF&amp;G in Fair-banks beginning Aug. 26. Trophy value will be destroyed.</i>	<i>RM834</i>	<i>Sept. 5–Sept. 25</i>
<i>OR One bull by permit</i>	<i>DM820</i>	<i>Sept. 5–Sept. 25</i>
<i>OR One bull</i>	<i>Harvest</i>	<i>Dec. 1–Dec. 10</i>
<i>Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side by permit</i>	<i>DM820</i>	<i>Sept. 5–Sept. 25</i>
<i>Unit 21D, that portion north of the Yukon River and east of the Koyukuk Controlled Use Area</i>		
<i>Residents: One bull by permit available online at <a href="http://hunt.alaska.gov">hunt.alaska.gov</a> or in person at license vendors in Units 21B, 21D, 24, and ADF&amp;G in Fair-banks beginning Aug. 26. Trophy value will be destroyed.</i>	<i>RM834</i>	<i>Sept. 5–Sept. 25</i>
<i>OR One bull by permit</i>	<i>DM814</i>	<i>Sept. 5–Sept. 25</i>
<i>OR One bull</i>	<i>Harvest</i>	<i>Sept. 5–Sept. 25</i>
<i>Unit 21D, that portion within the Koyukuk Controlled Use Area</i>		
<i>Residents: One bull by permit, available at Ella's Cabin Check-station, Huslia or Hughest beginning Aug. 26. No aircraft allowed and trophy value will be destroyed.</i>	<i>RM832</i>	<i>Aug. 27–Sept. 20</i>
<i>OR One bull by permit</i>	<i>DM828/830</i>	<i>Sept. 5–Sept. 25</i>
<i>OR One bull</i>	<i>Harvest</i>	<i>Dec. 1–Dec. 10</i>
<i>Nonresidents: One bull with 50-inch antlers with 4 or more brow tines on at least one side by permit.</i>	<i>DM823/825 DM827/829</i>	<i>Sept. 5–Sept. 25</i>
<i>Remainder of Unit 21D</i>		
<i>Residents: One Bull</i>	<i>Harvest</i>	<i>Sept. 5–Sept. 25</i>
<i>OR One bull</i>	<i>Harvest</i>	<i>Sept. 5–Sept. 25</i>
<i>Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side</i>	<i>Harvest</i>	<i>Sept. 5–Sept. 25</i>
<i>Unit 21E</i>		
<i>Residents: One antlered bull</i>	<i>Harvest</i>	<i>Sept. 5–Sept. 25</i>

<b>Unit/Species/Harvest Limit</b>	<b>Permit/Ticket Required</b>	<b>Open Season</b>
<i>Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side.</i>	<i>Harvest</i>	<i>Sept. 5–Sept. 25</i>
<i>Unit 24, west of the Hogatza River drainage and west of the Koyukuk Controlled Use Area:</i>		
<i>Residents: One bull by permit available online at <a href="http://hunt.alaska.gov">hunt.alaska.gov</a> or in person at license vendors in Units 21B, 21D, 24, and ADF&amp;G in Fairbanks beginning Aug. 26. Trophy value will be destroyed.</i>	<i>RM834</i>	<i>Sept. 5–Sept. 25</i>
<i>OR One bull by permit</i>	<i>DM892</i>	<i>Sept. 5–Sept. 25</i>
<i>Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side by permit.</i>	<i>DM892</i>	<i>Sept. 5–Sept. 25</i>
<i>Unit 24, east of the Dakli River drainage and east of the Koyukuk Controlled Use Area, and west of the Kanuti Controlled Use Area, the Tanana-Allakaket Winter Trail and the Alatna River drainage:</i>		
<i>Residents: One bull by permit available online at <a href="http://hunt.alaska.gov">hunt.alaska.gov</a> or in person at license vendors in Units 21B, 21D, 24, and ADF&amp;G in Fairbanks beginning Aug. 26. Trophy value will be destroyed.</i>	<i>RM834</i>	<i>Sept. 5–Sept. 25</i>
<i>OR One bull by permit</i>	<i>DM896</i>	<i>Sept. 5–Sept. 25</i>
<i>Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side by permit.</i>	<i>DM896</i>	<i>Sept. 5–Sept. 25</i>
<i>Unit 24, that portion within the Koyukuk Controlled Use Area:</i>		
<i>Residents: One bull by permit, available at Ella's Cabin, Huslia, or Hughes beginning Aug. 26. No aircraft allowed; trophy value will be destroyed.</i>	<i>RM832</i>	<i>Aug. 27–Sept. 20</i>
<i>OR Residents: One bull by permit.</i>	<i>DM828/830</i>	<i>Sept. 5–Sept. 25</i>
<i>OR Residents: One bull</i>	<i>Harvest</i>	<i>Dec. 1–Dec. 10</i>
<i>Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side by permit.</i>	<i>DM823/825</i> <i>DM827/829</i>	<i>Sept. 5–Sept. 25</i>
<i>Unit 24, the John and Alatna river drainages on private lands within the Gates of the arctic National Park</i>		
<i>Residents: One bull</i>	<i>Harvest</i>	<i>Aug. 1–Dec. 31</i>
<i>Nonresidents:</i>	<i>–</i>	<i>No open season.</i>

<b>Unit/Species/Harvest Limit</b>	<b>Permit/Ticket Required</b>	<b>Open Season</b>
<i>Unit 24, the North Fork Koyukuk River drainage on private lands within the Gates of the Arctic National Park</i>		
<i>Residents: One bull</i>	<i>Harvest</i>	<i>Sept. 1–Sept. 25</i>
<i>OR Residents: One bull</i>	<i>Harvest</i>	<i>Dec. 1–Dec. 10</i>
<i>Nonresidents:</i>	<i>–</i>	<i>No open season</i>
<i>Unit 24, all drainages to the north of the Koyukuk River between and including the Alatna River, and Henshaw Creek drainages, except that portion of the Alatna River drainage within Gates of the Arctic National Park:</i>		
<i>Residents: One bull</i>	<i>Harvest</i>	<i>Sept. 1–Sept. 25</i>
<i>OR Residents: One bull</i>	<i>Harvest</i>	<i>Dec. 1–Dec. 10</i>
<i>Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side</i>	<i>Harvest</i>	<i>Sept. 5–Sept. 25</i>
<i>Unit 24, all drainages to the north of the Koyukuk River upstream from the Henshaw Creek drainage, to and including the North Fork Koyukuk River drainage, except that portion of the John River and North Fork Koyukuk River drainages within Gates of the Arctic National Park:</i>		
<i>Residents: One bull</i>	<i>Harvest</i>	<i>Sept. 1–Sept. 25</i>
<i>Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side</i>	<i>Harvest</i>	<i>Sept. 5–Sept. 25</i>
<i>Unit 24, the Dalton Highway Corridor Management Area, except that portion in the North Fork Koyukuk River drainage:</i>		
<i>Residents: One bull by bow and arrow only by permit</i>	<i>DM920/922</i>	<i>Sept. 1–Sept. 25</i>
<i>Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side by bow and arrow only by permit</i>	<i>DM920/922</i>	<i>Sept. 1–Sept. 25</i>
<i>Remainder of Unit 24:</i>		
<i>Residents: One bull</i>	<i>Harvest</i>	<i>Sept. 1–Sept. 25</i>
<i>Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side</i>	<i>Harvest</i>	<i>Sept. 5–Sept. 25</i>

### **Extent of Federal public lands**

Federal public lands account for 37% of Unit 21A (34% FWS and 3% BLM lands), 37% of Unit 21B (33% FWS and 4% BLM lands), 50% of Unit 21D (28% FWS and 22% BLM lands), and 55% of Unit 21E (44% BLM and 11% FWS lands). Federal public lands account for 64% of Unit 24 (22% NPS, 21% BLM, and 21% FWS lands). (See **Units 21** and **24 Maps**).

## **Customary and Traditional Use Determination**

Under Federal subsistence management regulations, the following communities are included in the customary and traditional use determination for moose in the following Units:

- Unit 21A—Residents of Units 21A, 21E, Takotna, McGrath, Aniak, and Crooked Creek.
- Unit 21B—Residents of Units 21B, 21C, Tanana, Galena, and Ruby.
- Unit 21D—Residents of Unit 21D, Huslia, and Ruby.
- Unit 21E—Residents of Unit 21E and Russian Mission.
- Unit 24—Residents of Unit 24, Anaktuvuk Pass, Koyukuk, and Galena.

## **Regulatory History**

See **Appendix A**.

## **Current Events Involving Species**

Recent climatological changes have caused unseasonably warmer than normal temperatures in interior Alaska (Chapin et al. 2005, Hinzmann et al. 2005, Inkley et al. 2004, Nuttall et al. 2004, Klein et al. 2004, NWS 2005). Generally, moose do not begin seasonal movements to rivers and streams until cooler fall temperatures have arrived. Local accounts of moose being unavailable to hunters, because of these warm weather trends, were included in previous special action requests (WSA05-04, WSA05-07, WSA05-08 and WSA-05-09). Local users in the affected areas have in recent years claimed that the onset of fall moose movements does not occur until after the fall regulatory seasons have closed. Agency resource Managers agree that additional climatological data is needed before a determination can be made that the recent warmer than normal fall temperatures are part of a long term climatic pattern.

At the suggestion of ADF&G staff, the Council also submitted a companion proposal to the Alaska Board of Game, for action to be taken on the proposal in Mar. 2006. Proposal WP06-35, submitted by the ADF&G, affects Unit 21B by establishing a Dec. 1–10 season with a one-antlered bull harvest limit. Proposal WP06-36 that was also submitted by ADF&G, requests that the Board simplify regulations for Unit 24 moose. The proposed subunits are Units 24A, 24B, 24C, and 24D. Adoption of WP06-36 could affect the implementation of this proposal.

In its fall 2005 meeting, the Middle Yukon Fish and Game Advisory Committee did not support the proposed extension requested in WP06-34 and submitted a proposal to the Alaska Board of Game requesting a late-August season extension for Unit 21D. The Grayling, Anvik, Shageluk, and Holy Cross Fish and Game Advisory Committee also did not support WP06-34 at its most recent meeting.

## **State Management Objectives**

See **Appendix B**.

## **Population Status**

### Unit 21

*Innoko National Wildlife Refuge and BLM lands, Units 21A and 21E:*

Based on harvest data, winter observations by trappers, and survey data from the Innoko NWR, the BLM, and the ADF&G, it is estimated that the moose population in Unit 21A is stable to declining

(ADF&G 2004). Because of budgetary constraints and weather conditions, trend count data has not been collected on a regular basis in past years. Observations by trappers indicate a decline in the overwintering population. Innoko NWR staff have estimated a population density of 0.64 moose/mi<sup>2</sup> for the refuge portion of Units 21A and 21E (ADF&G 2004). The Unit 21E moose population adjacent to the communities of Grayling, Anvik, Shageluk, and Holy Cross (GASH) continues to exist in high numbers and at a high density (Denton 2005, pers. comm.). At the Nov. 2005 GASH moose planning meeting, the ADF&G reported that the total Unit 21E harvest is 360 moose, with a harvestable surplus of 280–360 moose. The ADF&G also reported that to manage moose harvests conservatively, a 4% harvest rate should be applied at the current moose population level (ADF&G 2005b). Moose harvest in Unit 21E is currently near the upper limit of the sustainable level; therefore, additional harvest should not be allowed.

#### *Lower Nowitna River Combined, Unit 21B*

Overall, the lower Nowitna River moose population shows good calf production and recruitment with a slight improvement in bull numbers and continued lower cow numbers. Snow conditions during the 2005 survey were good. Analysis of results from the 2005 surveys suggests that an additional but limited fall harvest of bull moose could be sustained in the lower Nowitna River drainage. Analysis of results from the combined Trend Count Areas (TCA) extending from the Little Mud River downstream to the Nowitna River mouth (Nowitna/Sulatna Confluence and Nowitna Mouth TCAs) show an improvement in the number of bulls (24 bulls:100 cows) indicating good recruitment from the large number of yearling bulls observed in Nov. 2004 (**Table 1**, Geostatistical Population Estimator). Total yearling bull moose in 2005 was slightly lower than 2004, but is still considered good. 2005 cow moose numbers are similar to that seen in 2004, and both are lower than the 2001 and 2003 counts. The total number of calves decreased from the highs seen in 2003 and 2004, but is still considered good.

#### *Dulbi River Mouth and Three Day Slough TCAs Combined, Unit 21D*

Analysis of results from the two combined TCAs show the overall number of moose observed decreased by 14% from those seen in the 2004 survey (**Table 2**). Snow conditions during the 2005 survey were marginal to good. Analysis of results from the 2005 surveys suggests that the existing populations can not sustain an additional fall harvest of bull moose in these survey areas, and at the same time, be managed by the objectives established in the Koyukuk River Moose Management Plan (Management Plan) (ADF&G 2001). It is important to note that Biological Decision-Making Factors for recruitment and reproductivity are based on the Management Plan and some of the TCA survey results from this year do not meet the prescribed management objectives. Declines were most evident in calves and yearling bulls compared to results from the 2004 survey. The number of cows decreased only slightly and the number of medium and large bulls has remained stable since 2001. During surveys, concentrations of moose are observed on the TCA borders, especially the northern edge of the Dulbi River, leading Refuge staff to suspect movement in and out of areas of good habitat within and surrounding the TCAs.

#### *Koyukuk River Mouth, Pilot Mountain, and Squirrel Creek TCAs Combined, Unit 21D*

All segments of the population decreased slightly in the combined TCAs in 2005 (**Table 3**). Analysis of results from the 2005 surveys suggests that the existing populations can not sustain an additional fall harvest of bull moose in these survey areas, and at the same time, be managed by the objectives established in the Management Plan. Analysis of results from the four survey years revealed that bull moose have exhibited slight fluctuations in numbers annually, but remain below the necessary management objective. The 2005 combined average of 24 bulls:100 cows is below the average for the previous three years. Because the three TCAs have low density populations, they are managed for 30–40 bulls:100 cows to ensure adequate breeding success where cows may be sparsely distributed. In areas of

**Table 1.** Lower Nowitna (Novi) River combined TCAs, Nowitna/Sulatna Confluence and Nowitna River Mouth, 2001-2005 GSPE Summary, Nowitna NWR, Alaska.

TCA	Year	Total		Total Cows	Total Calves	Total Moose	Total Yearling Bulls	Bulls/100 Cows		Calves/100 Cows	Yrlyg Bulls/100 Cows		Total Cows w/Calves	Twins/100 Cows w/Calves
		Bulls	Calves					Bulls/100 Cows	Calves/100 Cows		Bulls/100 Cows	Calves/100 Cows		
Novi Mouth	2001	19	33	186	8		14	25	6	2	30	7		
	2003	14	57	204	7		10	42	5	5	52	10		
	2004	23	48	194	16		19	39	13	3	45	7		
	2005	27	32	195	12		20	24	9	0	32	0		
	Total	83	170	780	53		73	140	52	10	161	24		
Novi/Sulatna Conf.	2001	27	23	200	9		18	15	6	0	23	0		
	2003	18	34	172	12		15	28	10	1	33	3		
	2004	26	47	188	14		23	41	12	6	40	15		
	2005	29	47	167	10		29	37	10	4	33	12		
	Total	100	151	627	45		85	121	38	21	130	30		
Total	2001	46	56	386	17		16	20	6	2	53	4		
	2003	32	91	378	19		13	36	7	6	85	7		
	2004	49	95	382	30		21	40	13	9	85	11		
	2005	56	69	362	22		24	29	9	4	55	7		
	Total	183	311	1508	88		74	125	35	21	273	28		

**Table 2.** Dulbi River Mouth and Three Day Slough TCAs Combined, Unit 21D, 2001-2005 GSPE Summary, Koyukuk NWR, Alaska.

TCA	Year	Total		Total Bulls	Total Cows	Total Calves	Total moose	Total yrlyg bulls	Bulls/100 cows		Calves/100 cows	Yrlyg bulls/100 cows		Total cows w twins	Twins/100 cows w calves
		Bulls	Calves						Bulls/100 cows	Calves/100 cows		Bulls/100 cows	Calves/100 cows		
Dulbi River	2001	53	250	38	341	14		21	15	6	1	37	3		
	2003	49	294	68	411	19		17	23	7	3	65	5		
	2004	53	252	101	406	14		21	40	6	7	94	7		
	2005	42	237	54	333	19		18	23	8	2	52	4		
	Total	197	1013	361	1491	66		77	111	26	17	218	19		
3-Day Slough	2001	125	612	79	816	35		20	13	6	1	80	1		
	2003	106	610	130	846	43		17	21	7	9	121	7		
	2004	130	568	128	826	52		23	23	9	7	120	6		
	2005	114	506	107	727	28		23	21	6	7	100	7		
	Total	475	2306	544	2915	168		83	68	28	34	37	421	21	
Combined Totals	2001	178	862	117	1157	49		21	14	6	2	117	2		
	2003	155	904	198	1257	62		17	22	7	12	186	7		
	2004	183	820	229	1232	66		22	28	8	14	214	7		
	2005	156	743	161	1060	47		21	22	6	9	152	6		
	Total	672	3329	705	4506	224		81	86	27	47	213	22		

**Table 3.** Koyukuk River Mouth, Pilot Mountain Slough, and Squirrel Creek TCAs Combined, Unit 21D. 2001-2005 GSPE Summary. Northern Unit of the Innoko NWR, Alaska.

TCA	Year	Total Bulls	Total Cows	Total Calves	Total Moose	Total Yrlg Bulls	Bulls/ 100 Cows	Calves/ 100 Cows	Yrlg Bulls/ 100 Cows	Total Cows w Twins	Total Cows w Calves	Twins/ 100 Cows w Calves
Koyukuk River Mouth	2001	109	275	45	429	23	40	16	8	0	45	0
	2003	82	326	113	521	35	25	35	11	6	107	6
	2004	100	307	145	552	47	33	47	15	15	130	12
	2005	65	274	104	443	27	24	38	10	7	96	7
		38	215	46	299	18	18	21	8	2	44	5
Pilot Mt. Slough	2003	27	213	102	342	21	13	48	10	10	92	11
	2004	27	249	101	377	9	11	41	4	11	90	12
	2005	35	187	96	318	12	19	51	6	10	86	12
	2001	87	197	45	329	10	44	23	5	1	44	2
		50	154	38	242	13	33	25	8	7	31	23
Squirrel Creek	2004	58	128	55	241	19	45	43	15	4	51	8
	2005	52	162	38	252	12	32	24	7	3	35	9
	2001	234	687	136	1057	51	34	20	7	3	133	2
	2003	159	693	253	1105	69	23	37	10	23	230	10
		185	684	301	1170	75	27	44	11	30	271	11
2005	152	623	238	1013	51	24	38	8	20	217	9	
Combined Totals												

higher moose density, 15–20 bulls:100 cows is sufficient for breeding success as compared to a higher density area managed for trophy size antlers would require 30–40 bulls:100 cows, or higher. Analysis of results from surveys also revealed that total cows for 2005 was 623 and had dropped below the previous three survey-year average.

*Koyukuk/Northern Innoko National Wildlife Refuge Unit 21D and Southern Unit 24*

When all TCAs on the Koyukuk/Northern Innoko NWRs (181 GSPE units) are considered together, it appears that the overall production and/or survival of calves-to-fall was lower than observed in 2003 and 2004, but was still good (25 calves:100 cows). Survival of yearlings from 2004 was good (9 yearling bulls per 100 cows), however, the slight decrease in cows overall and the decreases seen in large bulls warrant the need to follow conservative harvest guidelines for this population. The good production and recruitment from the past three years have been good reasons for optimism, but as yet there are no clear signs of growth in the overall population. Continued high numbers of predators, weak cohorts from 1999–2001, and harsher than average winters like 2004/05 have probably held the overall population at stable levels.

Local residents have reported seeing fewer large bulls and more yearlings and medium bulls (FWS 2005). Because of the poor production and recruitment observed in the 1999–2001 surveys, these declines appear to have produced a “ripple effect” in the affected populations. Lower recruitment in the previous years combined with continued harvest at the same levels, created a decline in medium bulls and probably the 2–3 year old cows in 2003. But as production and recruitment continued to improve, slight increases in the younger cohorts were observed in the 2004 and 2005 surveys. As a result, the population of both adult bulls and cows are probably now skewed toward these younger cohorts, which can be attributed to the lack of recruitment in 1999–2000. Breeding potential would most likely decrease due to the number of younger bulls and cows. This has resulted in an overall decrease in production. In addition to the age-specific demographic effects of the poor production years of 1999–2001, last winter’s higher than average snow levels may have had a negative effect on older age class animals. During the 2005 surveys, the total number of observed large bulls had decreased in virtually all of the TCAs.

Unit 24

*Treat Island and Huslia Flats TCAs Combined, southern Unit 24*

Analysis of results from the 2005 surveys suggests that the existing populations can not sustain an additional fall harvest of bull moose in these TCAs at this time, and at the same time, be managed by the objectives established in the Management Plan. Analysis of results from the 2005 survey indicates a stable adult population with good sex ratios and recruitment but low production of calves (**Table 4**). Lower numbers of calves and large bulls were observed in both TCAs than compared to the previous two and three survey years, respectively. The yearling bull to 100-cow ratio is 12 and the number of bulls to 100 cows ratio is normal at 28. Movement between these two TCAs has been evident in the past and also has probably occurred this year as well. The 2005 results show 98 fewer cows in the Treat Island TCA and 64 more cows in the Huslia Flats TCA when compared to 2004.

*Kanuti National Wildlife Refuge, Unit 24*

Analysis of results of data from recent surveys conducted on the Kanuti NWR reveal that the population could sustain an additional but limited bull harvest during the proposed Sept. 26–Oct. 1 season extension. The refuge moose population was estimated to be 842 moose in 2004 with an overall density of 0.31 moose/mi<sup>2</sup> (**Table 5**) and 1,025 moose in 2005 with an overall density of 0.38 moose/mi<sup>2</sup>. Because

methods used and survey units were the same, results from the 1999 and 2004 surveys are the easiest to compare. The 2004 moose estimate was lower than in 1999, but the calf:cow and yearling bull:cow ratios were higher in 2004. The bull:cow ratio was similar among all survey years. Analysis of results from surveys conducted during 2001/02 through 2004/05 revealed that the number of calves:100 cows remained stable overall (**Table 6**). Analysis of results from the 2004 and 2005 population estimates revealed increases in all components of the population. Total bulls, yearling bulls, cows, and calves have shown significant increases from those surveyed last year (**Table 7**). Analysis of results from the 2004 and 2005 population estimates also revealed that the numbers of moose by sex and age in Kanuti NWR have increased for the number of bulls:100 cows (62 and 70, respectively) and yearling bulls:100 cows (9 and 20, respectively) (**Table 8**). The number of calves:100 cows has slightly decreased according to the 2005 estimate.

### *Moose Trend Survey*

Trend surveys in the Kanuti Canyon and Henshaw Creek trend count areas were also conducted in 2004, as part of the larger population survey. Results from those surveys are displayed in **Tables 5 and 6**. Analysis of results revealed that the number of moose counted in the Kanuti Canyon trend area continued to decline. The number of moose counted in the Henshaw Creek trend area, which burned in 1991, was similar to what was seen in 2003.

### *Gates of the Arctic National Park and Preserve, Unit 24*

Because no historical data for the Gates of the Arctic National Park and Preserve (Park) exists prior to a 2004 population survey, it is difficult to evaluate the health of the moose population within the Park (ADF&G 2004). Additional surveys will be needed to determine if the population is stable, increasing, or decreasing in size.

Analysis of results from 2004 surveys conducted in the Park reveal that the population could sustain an additional but limited bull harvest during the proposed Sept. 26–Oct. 1 season extension. A total of 164 moose were observed during the fall 2004 survey (**Table 9**) (Lawler et. al. 2005). The majority of cow moose observed did not have calves (> 84%). Large bulls made up approximately 60% of all bulls observed, medium bulls comprised approximately 30% of all bulls observed, and yearling bull moose represented approximately 10% of all bulls observed. No single-antlered bulls were observed during the survey. Ratios of 62 mature bulls:100 cows (large and medium bulls), 8 yearling bulls:100 cows, and 18 calves per:100 cows were observed during the survey. Moose were found most commonly in the eastern portion of the NPS survey area.

Results from the GSPE program indicate a population density of 0.18 moose/ mi<sup>2</sup> over the entire 5,008 mi<sup>2</sup> survey area with estimated densities of bulls, cows and calf moose of 0.07 per mi<sup>2</sup>, 0.10 per mi<sup>2</sup>, and 0.02 per mi<sup>2</sup>, respectively (**Table 9**). Yearling bulls densities were < 0.01 per mi<sup>2</sup>. Bull:cow and calf:cow ratios generated from the GSPE program are presented in **Table 10**.

### *Middle Fork of the Koyukuk River TCA, BLM, Unit 24*

Analysis of results from 2004 surveys conducted in the Middle Fork of the Koyukuk River TCA, revealed that the population could sustain an additional but limited bull harvest during the proposed Sept. 26–Oct. 1 season extension. The majority of the affected area are uplands that are not easily accessed, except for the Dalton Highway Management Corridor which allows access by licensed highway vehicles. While a downward trend in the overall moose population from 1987 to 2004 is apparent, yearly data from 2000–04 fluctuate widely. Current estimated ratios for the population include 21.7 calves:100 cows, 5.8 yearling

**Table 4.** Treat Island and Huslia Flats TCAs Combined, southern Unit 24, 2001-2005 GSPE Summary, Koyukuk NWR, Alaska.

TCA	Year	Total Bulls	Total Cows	Total Calves	Total Moose	Total Yrlyg Bulls	Bulls/100 Cows	Calves/100 Cows	Yrlyg Bulls/100 Cows	Total Cows w Twins	Total Cows w Calves	Twins/100 Cows
Huslia Flats	2001	156	432	67	655	35	36	16	8	0	66	0
	2003	137	376	108	621	38	36	29	10	3	105	3
	2004	163	425	145	733	67	38	34	16	10	134	8
	2005	150	489	113	752	67	31	23	14	4	109	4
	2001	104	457	43	604	16	23	9	4	1	42	2
Treat Island	2003	137	513	109	759	47	27	21	9	4	101	4
	2004	145	504	151	800	35	29	30	7	13	137	10
	2005	102	406	58	566	36	25	14	9	5	53	9
	2001	260	889	110	1259	51	29	12	6	1	108	1
Combined Totals	2003	274	889	217	1380	85	31	24	10	7	206	3
	2004	308	929	296	1533	102	33	32	11	23	271	9
	2005	252	895	171	1318	103	28	19	12	3	162	2

**Table 5.** Results of moose population surveys on the Kanuti NWR, 1989-2004.

	2005		2004		1999		1993		1989	
Survey Area (miles) <sup>1</sup>	2710	2,710	2,710	2,715	2,644	2,615				
Population Estimate	1025	842	1,003	1,003	2,010	1,172				
Range of Estimate <sup>2</sup>	581-1470	602-1,083	794-1,211	1,567-2,453	867-1,476					
Moose Density (moose/mile <sup>2</sup> )	0.38	0.31	0.37	0.37	0.76	0.45				
Estimated Cows	471	403	542	542	Not Available	Not Available				
Estimated Bulls	331	252	320	320	Not Available	Not Available				
Bulls:100 Cows	70	62	59	59	61	64				
Yearling Bulls:100 Cows	20	9	4	4	8	4				
Calves:100 Cows	43	46	30	30	33	17				

<sup>1</sup> For all surveys, some survey units extended beyond the refuge boundaries.

<sup>2</sup> 90% confidence interval.

**Table 6.** Results of moose trend surveys in the Kanuti Canyon trend area (1988–2004) and the Henshaw Creek trend area (1991–2004).

Regulatory year	Survey Area (mi <sup>2</sup> )	Bulls: 100 Cows	Yrlg. Bulls: 100 Cows	Calves: 100 Cows	% Calves	Moose Counted	Moose/mi <sup>2</sup>
<b>Kanuti Canyon</b>							
1988-1989	96	118	41	41	16	101	1.05
1992-1993	79	77	8	27	1	106	1.34
2000-2001	86	38	7	7	5	87	1.01
2001-2002	86	40	9	23	14	57	0.66
2002-2003	86	16	4	13	10	72	0.84
2003-2004	86	29	11	10	6	62	0.72
2004-2005	86	41	0	18	11	35	0.41
<b>HenshawCreek</b>							
1991-1992	67	80	30	30	14	42	0.62
1992-1993	67	58	11	5	3	64	0.85
2000-2001	106	129	18	24	9	43	0.41
2001-2002	106	106	0	31	13	38	0.36
2002-2003	106	72	6	28	14	36	0.34
2003-2004	106	68	15	29	15	67	0.63
2004-2005	106	76	15	33	16	69	0.65

**Table 7.** Estimated number of moose by sex and age in Kanuti NWR at different confidence intervals, Oct. 30–Nov. 7, 2004 and 2005.

Population Estimate	2005			2004		
	Total (±SE)	80% CI <sup>a</sup>	90% CI <sup>a</sup>	Total (±SE)	80% CI <sup>a</sup>	90% CI <sup>a</sup>
Total Moose	1,025 (±270)	680–1,372	581–1,470	842 (±146)	655–1030	602–1083
Total Bulls	331 (±90)	215–447	182–479	252 (±53)	185–320	165–339
Yearling Bulls	95 (±38)	46–143	32–157	37 (±8)	27–57	24–49
Total Cows	471 (±128)	306–635	260–681	403 (±88)	290–517	258–549
Total Calves	202 (±73)	108–296	81–323	172 (±31)	133–212	122–223

<sup>a</sup> Upper and lower bounds of confidence intervals (CI).

**Table 8.** Estimated ratios of moose at different confidence intervals in Kanuti NWR, Alaska (Fall 2004 and 2005).

Ratio Estimate	2005		2004	
	Total ( $\pm$ SE)	90% CI <sup>a</sup>	Total ( $\pm$ SE)	90% CI <sup>a</sup>
Bulls:100 Cows	70 ( $\pm$ 27)	26–115	62 ( $\pm$ 14)	39–85
Yearling Bulls:100 Cows	20 ( $\pm$ 10)	4–36	9 ( $\pm$ 2)	5–12
Calves:100 Cows	43 ( $\pm$ 19)	12–74	46 ( $\pm$ 11)	28–65

<sup>a</sup> Upper and lower bounds of confidence intervals (CI).

**Table 9.** Summary of moose observed in GAAR during a population survey conducted from Oct. 26–Nov. 2, 2004, in the upper Koyukuk River drainage, Alaska.

	# Observed	Observed Density (# moose per mi <sup>2</sup> )
Large Bulls <sup>a</sup>	36	0.04
Medium Bulls <sup>a</sup>	18	0.02
Yearling Bulls <sup>a</sup>	7	< 0.01
Cows	87	0.10
Calves	16	0.02
<b>Totals</b>	<b>164</b>	<b>0.18</b>

<sup>a</sup>Bulls were classified as 'large' if their antler spread was estimated to be  $\geq$ 50 inches, 'medium' if their antler spread was estimated to be <50 inches but greater than a spike or fork, and a 'yearling' if their antler conformation was either a spike or a fork.

**Table 10.** Estimated sex and age ratios of moose at difference confidence intervals in Gates of the Arctic National Park and Preserve, including the Alatna, John, and North fork of the Kotukuk Rivers, Alaska. Oct. 26–Nov. 2, 2004.

Population Estimate	Total (+SE)	80% CI <sup>a</sup> (% of est.) <sup>b</sup>	90% CI <sup>a</sup> (% of est.) <sup>b</sup>	95% CI <sup>a</sup> (% of est.) <sup>b</sup>
All Bulls:100 Cows	71 ( $\pm$ 0.13)	54–88 (24)	49–93 (31)	44–97 (37)
Yearling Bulls:100 Cows	7 ( $\pm$ 0.02)	5–10 (40)	4–11 (50)	3–12 (59)
Calves:100 Cows	25 ( $\pm$ 0.08)	15–35 (39)	13–38 (50)	10–40 (59)

<sup>a</sup>Upper and lower bounds of confidence intervals (CI).

<sup>b</sup>Confidence interval expressed as a percentage ( $\pm$ ) of the total estimate.

bulls:100 cows, and 37.7 bulls:100 cows (Lawler et. al. 2005). The estimated 2004 population density is 0.97 moose/mi<sup>2</sup>, the highest it has been during the last five regulatory years.

<b>Unit</b>	<b>Additional harvest of moose population during the proposed season extensions.</b>
Unit 21A	Could not support.
Unit 21B	Could support.
Unit 21D	Could not support.
Unit 21E	Could not support.
Unit 24	Could support except that portion of the Koyukuk NWR.

### *Predation*

Based on reports from agency land managers and from local area residents and hunters in Units 21 and 24, predator populations (black bear, wolves, and brown bear) have significantly increased in recent years (Andersen 2003). Predation continues to be a limiting factor for moose calf and yearling bull survival and population growth. Except for limited areas around the villages, predation on moose by wolves and bears is likely the major limiting factor. Normal village activity most likely provides a buffer between populations immediately adjacent to these villages. In areas where predators have been lightly harvested for extended periods, moose densities remain very low (0.1–1.0 moose/mi<sup>2</sup> in areas >800 mi<sup>2</sup>, Gasaway et al. 1992). Concerns of increased predation rates also have been expressed by the Council and the Fish and Game Advisory Committees of the affected region. Because predation has a direct impact on production and recruitment, both area residents and some resource Managers are concerned that current predation rates on moose could result in further population declines in isolated areas.

### *Habitat*

While no recent moose browse surveys have been conducted within the majority of the affected areas, results from browse surveys from portions of Units 21 and 24 are currently being finalized. ADF&G use calf twinning data as an indicator of habitat quality. Naturally occurring wildland fires and flooding are major forces affecting the productivity and distribution of moose habitat in this region. Except for certain areas in upper Unit 24, habitat is generally excellent (given the huge area this proposal covers, there are vast differences in habitat between the northern portion of Unit 2.4 and the southern portion of Unit 21E) along most of the drainages, providing adequate areas of nutritious winter browse.

### **Harvest**

Moose continue to be the most important and widely used large animal for the residents of the interior Alaska region. Subsistence uses of moose include human consumption of the meat and the production of clothing. In addition to these uses, traditional folklore and strong spiritual beliefs regarding moose, along with the passing on of the hunting skills necessary to pursue and harvest the animal remain in perpetuity throughout interior Alaska.

Based on harvest data collected by the ADF&G, Division of Subsistence, there is support for the conclusion that moose harvests in the affected region have remained overall consistent for local residents (ADF&G 2005a). Local reports of warmer than normal fall temperatures, also indicate that local hunters are traveling farther and hunting longer to search for fall moose. Aside from this year's prolonged rains and temperatures that may have impeded seasonal movements of moose, as well as the very high cost of fuel prices, the majority of hunters who did harvest moose within the affected area did so by establishing

camps and hunting localized areas in the majority of the affected drainages. This approach saved fuel costs and allowed access to nearby grass lakes, meadows, and backwater areas that moose utilize during the warmer months.

### **Effects of the Proposal**

If adopted, the proposed season extensions would provide additional opportunity to harvest fall moose during the proposed season extensions in Unit 21B and portions of Unit 24. The intent of the proposed extensions is to compensate for lost opportunity due to the lack of access to moose during the existing fall seasons. Adoption of the proposal could also alleviate some hunting pressure from the existing November, December and the “to be announced” March seasons. Some other effects of the proposed regulatory changes include the following.

#### 1. Alignment with State regulations.

A. Since the advent of the dual management system a primary goal has been to limit, when possible, hunter confusion over regulations. An important means of attaining this is by having Federal/State alignment of regulations. Extensive efforts have been made to ensure alignment in hunting and fishing regulations throughout the affected area when and where possible. If Proposal WP06-34 were adopted, it would bring the Federal regulations out of alignment with the State.

#### B. Land status

State and Federal regulations not in alignment would produce mixed blocks of Federal and non-Federal lands with different season dates around villages. Some local residents would have difficulty in determining the difference between Federal and State jurisdiction.

#### C. Law Enforcement

In addition to the land status confusion, this nonalignment creates potential law enforcement issues. Having a mixed network of lands where hunters may be unaware of the differing land status makes them vulnerable to enforcement actions by both Federal and State agencies.

#### 2. Koyukuk River Moose Management Plan

The FWS, NPS, and BLM participated in and supported this process and both the Board and the Council endorsed the five-year Koyukuk River Moose Management Plan. The proposed season extensions fall outside the existing management objectives prescribed by the Management Plan. In addition, current moose survey data show many TCAs fall below the ‘Biological Decision-Making Factors’ outlined in the Management Plan. Action 1.2.1 examines the amounts necessary to meet subsistence needs in Units 21 and 24. In Mar. 2000, the Alaska Board of Game reevaluated the amount of moose necessary to meet subsistence needs and revised the amounts to 450–550 moose for Unit 21 and 150–250 moose for Unit 24 (ADF&G 2005*b*). Action 1.2.2 of the Management Plan establishes the fall season dates of Aug. 27 to Sept. 20 within the Koyukuk Controlled Use Area of Units 21D and 24. The proposed season dates for the Koyukuk Controlled Use Area would deviate from the Moose Management Plan. Because the Koyukuk River Moose Hunters Working Group (Working Group) was disbanded on June 30, 2005, the Working Group will not have the opportunity to make recommendations on the proposals to the Federal and State Boards.

### 3. Federal permit system.

Adoption of the proposed regulatory changes may result in the need to establish a Federal permit system for the Federal-only fall seasons. Because current management objectives prescribe a “close watch” to keep harvest totals within management guidelines, a separate harvest reporting system may be necessary. Although a Federal permit would place a significant workload on Refuge staff, it could serve as an opportunity to outreach with local hunters on differing land status and thus avoid potential law enforcement issues.

### 4. Outreach

It will be necessary to do extensive outreach with hunters regarding differing land status in order to avoid potential law enforcement and to collect harvest information.

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## APPENDIX A

### WP06-34

## REGULATORY HISTORY

### Unit 21A and E

The Paradise CUA was established in 1978 by the Alaska Board of Game in response to concerns that hunter success rates favored nonrural users and the total harvest level threatened the resource. The Paradise CUA access restrictions and the State's moose seasons for Units 21A and 21E were adopted by the Federal Subsistence Board (Board) in 1990. State and Federal regulations provided Sept. 5-25 and Nov. 1-30 seasons for Unit 21A, and a Sept. 5-25 season for Unit 21E for the 1990/91 regulatory year. The Feb. 1-10 season was adopted by the State and Federal Boards for the 1991/92 regulatory year. State and Federal regulations provided a one-bull harvest limit for the September and November seasons, while the taking of any moose was legal for the Feb. 1-10 season, during the 1990/91 and 1991/92 regulatory years. The Federal Subsistence Board also adopted a five-day extension for the 1991/92 regulatory year, that changed the fall season from Sept. 5-25 to Sept. 5-30 for Units 21A and 21E. In April 1995, the Federal Subsistence Board shifted the additional opportunity from the last five days of September to Aug. 20 through Sept. 4, for Units 21A and 21E for the 1995/96 regulatory year. The Board action provided a 16-day, Federal-only season prior to the opening of the State and Federal Sept. 5-25 seasons. Federal regulations for Units 21A and 21E remained unchanged during the 1995/96 through 2000/01 regulatory years. State regulations remained unchanged during the 1991/92 through 2000/01 regulatory years for Units 21A and 21E.

### Unit 21B

Federal regulations for Unit 21B moose were adopted by the Federal Subsistence Board from State regulations in 1990. A summary of the regulatory history for Units 21B and 21C follows:

*July 1, 1990–June 30, 1994: Units 21B and 21C, 1 bull, Sept. 5–25*

*July 1, 1994–June 30, 2004: Units 21B and 21C, 1 antlered bull, Sept. 5–25*

Note: There was a State registration hunt for all hunters in 1996 and 1997.

### Unit 21D–Moose

State and Federal moose seasons for Unit 21D were in alignment until the end of the 1992/93 regulatory year. The Alaska Board of Game expanded the State winter moose season by five days in Mar. 1993, as requested by the Middle Yukon Fish and Game Advisory Committee. Federal regulations were then realigned with State regulations for the winter moose season in Unit 21D in April 1996. State and Federal regulations remained in alignment until 2002. This same proposal to eliminate the one-half mile buffer zone was submitted to and adopted by, the Alaska Board of Game in Mar. 2002. State regulations were changed to eliminate the one-half mile restriction along the Yukon River for the winter moose season in Unit 21D. A similar request (Proposal WP01-27) was also considered by the Federal Subsistence Board (Board) in May 2001. The Board rejected the proposal as recommended by the Council. The Council opposed the proposal at that time due to the limited amount of affected Federal public lands and asked that the proposal be submitted to the Alaska Board of Game. The proponent submitted the same proposal to the Alaska Board of Game the following year.

The Federal Subsistence Board originally adopted the State Sept. 5-25 and Feb. 1-5 seasons for moose in Unit 21D in 1990. The harvest of antlerless moose was permitted Sept. 21-25 and Feb. 1-5. State and Federal moose seasons for Unit 21D were in alignment from Aug. 1990 through the end of the 1992/93 regulatory year. In Mar.

of 1993, the Alaska Board of Game expanded the State winter, antlerless moose season to Feb. 1–10. The five-day expansion was granted at the request of the Middle Yukon Fish and Game Advisory Committee, in response to extreme cold temperature patterns that are often present late January through mid-February. The Federal Subsistence Board aligned the February regulations with the State Feb. 1–10 season in April 1996. In Aug. of 1996, the Federal Subsistence Board expanded the Unit 21D fall moose regulations to allow for the taking of any moose during Sept. 1–25, in response to a local request for additional opportunity. The expanded season provided for an additional 20 days of opportunity to harvest antlerless moose and an additional four days to harvest bull moose on Federal public lands. The Alaska Board of Game adopted the Federal fall season and harvest limits for the Koyukuk Controlled Use Area (CUA) in Unit 21D in Mar. 1997. State regulations for the remainder of Unit 21D continued to provide Sept. 21–25 and Feb. 1–10 antlerless moose seasons through the 1999/2000 regulatory year. However, in response to decreases in calf production and yearling bull recruitment, the Alaska Board of Game closed the fall antlerless moose seasons by emergency order in Units 21D and 24 for the 2000/01 through 2003/04 regulatory years.

In Mar. 2000, the Alaska Board of Game adopted regulations for Unit 21D based on recommendations made by ADF&G and the Working Group. Current State regulations for that portion within the Koyukuk CUA of Unit 21D provide an Aug. 27–31 season (by registration permit) and a 10–day winter season to harvest moose of either sex. Current State regulations also allow for the harvest of any bull during Sept. 1–20 by registration permit. State regulations also provide a Sept. 5–25 season with a one-bull harvest limit by drawing permit. At its May 2000 meeting, the Federal Subsistence Board adopted regulation changes based on recommendations made by the Western Interior Alaska Subsistence Regional Advisory Council (Council). Current Federal regulations provide for a one-moose harvest limit as do State regulations during the Aug. 27–31 and the 10-day February season. Federal regulations also provide for a one-bull harvest limit during the Sept. 1–20 season for the Koyukuk CUA. A State registration permit is required for the Federal Aug. 27–Sept. 20 season. Total annual harvest quotas for the State and Federal seasons are established by ADF&G in accordance with the Management Plan. The ADF&G mandatory moose hunter check station remains in State and Federal regulations.

In response to public and agency concerns of harvest levels and declining productivity in moose populations in the Koyukuk River drainage, the State began a planning process through the establishment of the Koyukuk River Moose Hunters Working Group (Working Group). A basic premise of the Working Group is a consensus decision-making process, rather than majority-rule voting (ADF&G 2000). The Working Group includes members of local and nonrural State Fish and Game Advisory Committees and the Council. The focus of this group was to identify concerns and make recommendations to ADF&G for drafting proposals to the Alaska Board of Game and the Management Plan for 2000–2005 (ADF&G 2000). Recommendations made by the Working Group are reflected in the Management Plan. Also involved in the planning process were representatives of the Tanana Chiefs Conference, ADF&G, FWS Division of Refuges and Wildlife and the Office of Subsistence Management, BIA, State and Federal law enforcement, BLM, and the NPS. Members of the Working Group agreed by consensus that the Management Plan, including the revisions they requested, adequately represented their recommendations and should be forwarded to the Alaska Board of Game.

The Management Plan and several regulatory proposals were approved by the Alaska Board of Game at the Mar. 2000 meeting. The Alaska Board of Game approved the new regulations based on the Management Plan, because the Management Plan was backed by public support and there was public involvement in drafting the new regulations. The Alaska Board of Game changed the State fall season for the 2000/01 regulatory year, from Sept. 1–25 to Aug. 27–Sept. 25 for Unit 21D within the Koyukuk CUA. This regulatory action provided for two separate hunts, one for subsistence hunters and the second for hunters seeking a large-antlered bull and meat. By State regulations, hunters have the option to choose between the two hunts, but not both. It should be noted that the State registration hunts are the subsistence hunts under State regulations. The harvest limit remained as one moose; however, antlerless moose harvest was permitted only from Aug. 27–31 and during the February season. State regulations for the remainder of Unit 21D, continue to provide the Sept. 21–25 antlerless moose season through the 1999/2000 regulatory year. However, in response to decreases in calf production and yearling bull recruitment, the Alaska Board of Game

closed the fall antlerless moose seasons by emergency order in Units 21D and 24 for the 2000/01 and 2001/02 regulatory years. The current to be announced, February season was also implemented for the remainder of Unit 21D by the State and Federal Subsistence Boards during the 2001/02 regulatory year. Adoptions of the existing State and Federal regulations were achieved through public and agency consensus. One important component of the Management Plan is the realization of the prescribed harvest regimes through aligned State and Federal regulations for Unit 21D. The Federal Subsistence Board adopted nearly similar regulations for Unit 21D at the request of Council (see Existing Federal Regulations). The Council's recommendation served as an amendment to Proposal 47 (April 2000) that would eliminate cow moose harvest on Federal public lands in Unit 21D during the fall season. As the Working Group includes four members of the Council including cooperation from the Refuge, the proponent of Proposal 47, the Council's requested amendment was supported by the Refuge Manager.

Special Action WS00-06 was submitted to the Board in Aug. 2000. The special action request was submitted on behalf of the Koyukuk River Tribal Task Force on Moose Management (Task Force) by their attorney, Michael J. Walleri. The proponent requested the Board limit the total human harvest to 315 moose in that portion of Unit 21D within the Refuge, by closure of the Refuge to nonsubsistence hunting; or, limit the number of State-issued general hunt permits that are valid within the Refuge. The proponent also requested the Board to monitor hunter access during the fall season in Unit 24; and close or restrict hunting on Federal public lands within the unit should the nonrural component exceed 253 hunters. The Federal Subsistence Board denied the proponent's request in May 2000. The Board stated that concerns of the Task Force were addressed by the Working Group through the cooperative management plan for the Koyukuk River and further concerns and regulatory proposals should be channeled through the Working Group.

Proposal WP01-28 was submitted on behalf of the Koyukuk River Basin Moose Co-management Team (Co-management Team and formerly the Task Force) by their attorney, Michael J. Walleri. The proponent requested that the Board close public lands to the taking of moose in Unit 21D within the Koyukuk Controlled Use Area (Koyukuk CUA), except for Federally qualified subsistence users or holders of a Federal permit. The proponent also requested the Board to authorize the Refuge Manager of the Koyukuk National Wildlife Refuge (Refuge) to issue no more than 45 Federal permits for the affected area, for the harvest of moose by persons other than Federally qualified subsistence users in conjunction with the State general drawing or subsistence registration hunt. The Board denied the proponent's requests in May 2001. The Board stated that Koyukuk River moose management issues should be considered by the Working Group and addressed as appropriate through revisions to the Management Plan and regulatory proposals.

Proposal WP03-35 was submitted to the Board by a resident of Huslia in Oct. 2002. The proponent requested that the Board close public lands within the Koyukuk River drainage in Units 21D and 24 to the hunting of moose, except by Federally qualified subsistence users. The Board denied the proponent's request based on harvest levels, local-user success rates, and the moose population status within the affected area did not warrant the proposed restrictions. Also for these reasons, the proponent's request did not meet the criteria of Section 815 of ANILCA, which allows the restriction of nonsubsistence uses where wildlife populations are of concern.

Emergency orders were issued by ADF&G in Aug. 2002 and 2003 that closed the August and September antlerless moose seasons in all of Unit 21D and in portions of Unit 24 outside the Gates of the Arctic National Park. The Alaska Board of Game granted the emergency orders, in response to ADF&G concerns of continuing declines in yearling bull recruitment and cow moose components of the population. These declines are also of mutual concern to Refuge and BLM land managers. Parallel regulatory action by the Federal Subsistence Board was necessary to protect the continued viability of the moose population on Federal public lands in Units 21D and 24 and to prevent public confusion due to unaligned State and Federal regulations. Special Actions WSA02-07 and WSA03-11, were approved by the Board and closed the affected areas of WP04-65 to the taking of antlerless moose during the fall seasons.

Special action requests WSA05-07-Units 21B, 21C and 21D; WSA05-08-Unit 21B; and WSA05-9-Unit 21E, submitted by the communities of Ruby and GASH, requested that the Board provide an extended fall season to harvest moose due to unseasonably warm fall temperatures. The three special action requests were rejected because the proposed regulation failed to meet the following criteria that would validate the need for extended fall seasons.

- 1) *Have there been unusual, significant and unanticipated changes in resource abundance or unusual conditions affecting harvest opportunities that could potentially have significant adverse effects on fish and wildlife populations or the subsistence uses?*
- 2) *Is the requested action needed for reasons of public safety or administration?*
- 3) *Is the above condition an extenuating circumstance that necessitates a regulatory change before the next annual Subpart D review process (winter-spring 2005-2006).*

Following this decision, the Western Interior Alaska Subsistence Regional Advisory Council submitted Proposal WP06-34 to the Federal Subsistence Board and a similar proposal to the Alaska Board of Game on behalf of the affected communities. The Alaska Board of Game will take action on the State proposal in Mar. 2006 and the Federal Subsistence Board will take action on WP06-34 in May 2006.

## **Unit 24—Moose**

The Federal regulations for moose in Unit 24 (That portion within the Koyukuk Controlled Use Area—1 moose, Sept. 5-25; however, upstream from Huslia antlerless moose may only be taken Sept. 21-25, Dec. 1-10, and Mar. 1-10) remained aligned with State regulations from July 1, 1990 through June 30, 1994. The Alaska Board of Game expanded the State fall season with the opening on the first day of September. The four-day expansion gave local residents additional opportunity over the nonresident Sept. 5-25 season. The Board of Game increased opportunity for local residents to harvest antlerless moose during the fall season. The State regulations provided a fall antlerless moose season during Sept. 1-25 for residents beginning the 1996/97 regulatory year. Federal regulations for the proposal area remained unchanged until May 1998, when the Federal Subsistence Board aligned the September season dates with State regulations for the 1998/99 regulatory year. Federal and State regulations for moose in the Koyukuk CUA of Unit 24 remained in alignment during 1998/99 through the 1999/2000 regulatory year. In response to decreases in calf production and yearling bull recruitment, the Alaska Board of Game closed the fall antlerless moose seasons by emergency order in Unit 24 north of Bettles for the 1999/2000 regulatory year and eliminated the regulatory provision for antlerless moose harvest in 2001.

In Mar. 2000, the Alaska Board of Game adopted regulations for Unit 24 based on recommendations made by ADF&G and the Working Group. Current State regulations for that portion within the Koyukuk CUA of Unit 24 provide an Aug. 27-31 season with a one-moose harvest limit by registration permit. State regulations also provide for the harvest of any bull during Sept. 1-20 by registration permit and provide a Sept. 5-25 season with a one-bull harvest limit by drawing permit. The State's Dec. 1-10 and Mar. 1-10 seasons remain unchanged.

At its May 2000 meeting, the Federal Subsistence Board adopted regulation changes based on recommendations made by the Council. Current Federal regulations provide for a one-moose harvest limit as do State regulations during the Aug. 27-31, Dec. 1-10, and Mar. 1-10 seasons. Federal regulations also provide for a one-bull harvest limit during the Sept. 1-20 season. A State registration permit is required for the Federal Aug. 27-Sept. 20 season.

Adoptions of the existing State and Federal regulations were achieved through public and agency consensus. One important component of the Management Plan is the realization of the prescribed harvest regimes, through aligned State and Federal regulations for the Koyukuk CUA within Unit 24. The Federal Subsistence Board adopted nearly similar regulations for the proposal area at the request of Council (see Existing Federal Regulations). The Council's recommendation served as an amendment to Proposal 48 (April 2000) that would eliminate cow moose harvest on

Federal public lands in Unit 24 during the fall season. As the Working Group includes four members of the Council including cooperation from the Refuge, the proponent of Proposal 48, the refuge Manager supported the Council's requested amendment.

Proposal WP01-31 was also submitted on behalf of the Co-Management Team by their attorney, Michael J. Walleri. The proponent requested that the Board close public lands to the taking of moose in Unit 24 within the Koyukuk CUA, except for Federally qualified subsistence users or holders of a Federal permit. The proponent also requested the Board to authorize the refuge Manager of the Koyukuk Refuge to issue no more than 45 Federal permits for the affected area, for the harvest of moose by persons other than Federally qualified subsistence users in conjunction with the State general drawing or subsistence registration hunt. The Board denied the proponent's requests in May 2001. The Board stated that Koyukuk River moose management issues should be considered by the Working Group and addressed as appropriate through revisions to the Management Plan and regulatory proposals.

Proposal WP01-30, submitted by the Huslia Tribal Council, requested the creation of a new Federal CUA in Unit 24, directly adjacent to the existing Koyukuk CUA. The intent was to protect moose numbers from air taxis transporting non-local hunters beyond the Koyukuk CUA. The Board denied the proponent's request based on Koyukuk River moose management issues should be considered by the Working Group and addressed as appropriate through revisions to the Management Plan and regulatory proposals.

Proposal WP02-32, submitted by the Huslia Tribal Council, requested the establishment of a Huslia/Dakli River Drainage Controlled Use Area in Unit 24. The proponent's intent was to protect traditional harvest of moose within the proposal area, by the establishment of a regulatory restriction that would prevent access via aircraft for the purposes of hunting moose or transporting hunters and harvested moose to and from the field. The Board denied the proponent's request in May 2002. The Board stated that no new information exists since the analysis of WP01-30 and that Koyukuk River moose management issues should be considered by the Working Group and addressed as appropriate through revisions to the Management Plan and regulatory proposals.

Proposal WP03-35 was submitted to the Board by a resident of Huslia in Oct. 2002. The proponent requested that the Board close public lands within the Koyukuk River drainage in Units 21D and 24 to the hunting of moose, except by Federally qualified subsistence users. The Board denied the proponent's request based on harvest levels, local-user success rates, and the moose population status within the affected area did not warrant the proposed restrictions. Also for these reasons, the proponent's request did not meet the criteria of Section 815 of ANILCA, which allows the restriction of nonsubsistence uses where wildlife populations are of concern.

Emergency orders were issued by ADF&G in Aug. 2002 and 2003 that closed the August and September antlerless moose seasons in all of Unit 21D and in portions of Unit 24 outside the Gates of the Arctic National Park. The Alaska Board of Game granted the emergency orders, in response to ADF&G concerns of continuing declines in yearling bull recruitment and cow moose components of the population. These declines are also of mutual concern to Refuge and BLM land managers. Parallel regulatory action by the Federal Subsistence Board was necessary to protect the continued viability of the moose population on Federal public lands in Units 21D and 24 and to prevent public confusion due to unaligned State and Federal regulations. Special Actions WSA02-07 and WSA03-11, were approved by the Board and closed the affected areas of WP04-65 to the taking of antlerless moose during the fall seasons.

Although the moose harvest regulations for upper Koyukuk River drainage have been adjusted several times over the past 14 years, the regulations for those portions of Unit 24 (all drainages north of the Koyukuk River upstream from and including the Alatna River drainage) addressed in this proposal were, for the most part, established in 1994. However, in 1996 the upper Alatna River drainage harvest season was expanded to the current regulations to provide additional opportunity, as requested by Mr. Jim Schwarber. In addition, Special Actions WSA02-07, WSA03-11 and WSA03-13 were approved to temporarily reduce the antlerless moose harvest in various parts of

the unit, as surveys indicated a declining population. In May 2004, the Board also shortened (Proposal WP04-65) the Mar. 1–10 season within the Koyukuk CUA to Mar. 1–5 with a “to be announced” season authorization. Also adopted by the Board for 2004–2005 were Aug. 25–Sept. 25 and Mar. 1–5 seasons for “that portion of west of the Hogatza River drainage and the Koyukuk CUA” area of Unit 24. The Board adopted these regulation changes to facilitate a reduction in antlerless moose harvests. A similar proposal (WP04-67), submitted by the NPS in Oct. 2003, requested similar changes in seasons and harvest limits for the upper Koyukuk River drainage of Unit 24. At their Mar. 2004 meeting, the Council tabled the proposal to allow more work to be conducted that would address concerns of impacts of this proposal and to better address the proponent’s concerns than as stated in the proposal as written. The proposal was withdrawn by the proponent to address the Council’s concerns and to allow for further coordination with the Gates of the Arctic SRC, the proponent of WP05-12. The Board adopted a modification of WP05-12 in May 2005. At their Mar. 2004 meeting, the Alaska Board of Game made changes to State regulations similar to what was proposed by the NPS in Proposal WP04-67. The proposed action, along with the recent action taken in response to WSA03-11 and WSA03-13, are consistent with the Management Plan, which calls for additional regulatory restrictions on antlerless moose harvest in response to the ongoing population declines. Because these additional restrictions were viewed to be consistent with the Management Plan, WSA03-11, WSA03-13 and this proposal were not channeled through the Working Group.

At their Mar. 2004 meeting, the Alaska Board of Game made changes to State regulations similar to what was proposed by the NPS in Proposal WP04-67. Proposals WP05-12, WP05-13, plus action taken in response to WSA03-11 and WSA03-13, are consistent with the Management Plan, which calls for additional regulatory restrictions on antlerless moose harvest in response to the ongoing population declines.

Special action request WSA05-04, submitted by upper Koyukuk River communities, requested that the Board provide a extended fall season to harvest moose due to unseasonably warm fall temperatures. The special action request was rejected because the proposed regulation failed to meet the following criteria that would validate the need for extended fall seasons.

- 4) *Have there been unusual, significant and unanticipated changes in resource abundance or unusual conditions affecting harvest opportunities that could potentially have significant adverse effects on fish and wildlife populations or the subsistence uses?*
- 5) *Is the requested action needed for reasons of public safety or administration?*
- 6) *Is the above condition an extenuating circumstance that necessitates a regulatory change before the next annual Subpart D review process (winter-spring 2005–2006).*

Following this decision, the Western Interior Alaska Subsistence Regional Advisory Council submitted Proposal WP06-34 to the Federal Subsistence Board and a similar proposal to the Alaska Board of Game on behalf of the affected communities. The Alaska Board of Game will take action on the State proposal in Mar. 2006 and the Federal Subsistence Board will take action on WP06-34 in May 2006.

## APPENDIX B WP06-34

### State Management Objectives—Moose (ADF&G 2004)

#### Unit 21A

- Maintain an annual average antler spread measurement of at least 48 inches in Unit 21A.
- Assess accuracy of harvest reporting in selected portions of the area.
- Encourage landowners to reduce fire suppression efforts on wildfire that do not threaten human life, property, or valuable resources, so that fire can fulfill its natural role in maintaining young, highly productive, and diverse habitats.
- Annually assess population status, trends, and bull:cow ratios in portions of the area where harvest levels make significant impacts on moose populations.

#### Unit 21B

- Provide for harvest not to exceed 150 moose or 5% of the annual moose population estimate.
- In Combination with Unit 21C, implement at least two habitat enhancement activities every five years.

#### Unit 21D

- Maintain a moose population of 9000–10,000.
- Provide for a harvest of moose not to exceed 700 moose or 7% of the annual moose population estimate each regulatory year.
- Provide for moose hunting opportunity not to exceed 950 hunters per regulatory year.
- In combination with Unit 24, implement at least two habitat enhancement activities every five years.
- Reduce meat spoilage by hunters.
- Reduce the amount of spoiled meat observed at Ella's cabin and at hunting camps by 10% each regulatory year.
- Increase the number of people engaging in nonconsumptive uses of wildlife by >1% each regulatory year.

#### Unit 21E

- Unit boundaries within the area were designed to provide for 2 major uses of moose. The lowland areas along the Kuskokwim River (Units 19A and 19D) and along the Yukon and lower Innoko Rivers (Unit 21E) have been managed to attempt to provide a sustained, relatively high harvest of moose.
- Annually assess population status, trend, and bull:cow ratios in portions of the area where harvest levels make significant impacts on moose populations.
- Assess accuracy of harvest reporting in selected portions of the area.
- Encourage landowners to reduce fire suppression efforts on wildfires that do not threaten human life, property, or valuable resources, so that fire can fulfill its natural role in maintaining young, highly productive, and diverse habitats.

#### Unit 24

- Maintain a moose population of 10,000-12,000.
- Provide for a harvest of moose not to exceed 360 moose or 5% of the annual moose population estimate each regulatory year.
- Provide for moose hunting opportunity not to exceed 500 hunters per regulatory year.
- In combination with Unit 21D, implement at least two habitat enhancement activities every five years.
- Reduce the amount of spoiled meat observed at Ella's cabin and at hunting camps by 10% each regulatory year.
- Increase the number of people engaging in nonconsumptive uses of wildlife by >1% each regulatory year.

<b>WP06-35 Executive Summary</b>	
<b>General Description</b>	Establish a Dec. 1–10 moose season in Unit 21B with a harvest limit of one antlered bull. <i>Submitted by the Alaska Department of Fish and Game.</i>
<b>Proposed Regulation</b>	<p><i>Unit 21B, that portion of the Nowitna River drainage formerly in Unit 21A—1 bull*</i>      <i>Aug. 20–Sept. 25</i> <i>Nov. 1–Nov. 30</i> <b><i>Dec. 1–Dec. 10</i></b></p> <p><i>Unit 21B, that portion that is the existing Unit 21B—1 antlered bull*</i>      <i>Sept. 5–Sept. 25</i> <b><i>Dec. 1–Dec. 10</i></b></p> <p>*These regulatory descriptors are temporary for the purpose of discussion in the analysis. If adopted, these regulatory descriptors would be modified to appropriately accommodate the changed boundaries and these regulations.</p>
<b>Western Interior Alaska Regional Council Recommendation</b>	<b>No action taken.</b>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Take no action.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Take no action.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Oppose.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-35**

**WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**No action taken.** A motion to support the proposal died for the lack of a second.

**EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Take no action.** The Alaska Department of Fish and Game proposal was originally supported by the department, but they no longer support a December season. The Alaska Board of Game did not support the December season and honored the wishes of the local advisory committees for an extended August season.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-35**

**Take no action** as recommended by the Eastern Alaska Subsistence Regional Advisory Council.

**Justification**

The proponent no longer supports this proposal as expressed the Eastern Interior Alaska Subsistence Regional Advisory Council meeting in Fairbanks on March 22, 2006, because the Alaska Board of Game provided for an Aug. 22–31 season and eliminated the Dec. 1–10 season. Therefore, this proposed action would not align Federal and State regulations as intended by the proponent.

**WRITTEN PUBLIC COMMENTS  
WP06-35**

**Oppose.** Urge caution and recommend more conservative action. Late season winter moose hunts advocated by these [WP06 35, 38, and 68] proposals invites driving, herding and harassing moose with snow machines, activities currently prohibited under Federal subsistence law. Enforceability is extremely difficult in remote areas at this time of year. Abuses connected with htis method of hunting can diminish healthy populations of moose in an area, counter to Section 802 of Title VIII, ANILCA. Unless it is absolutely necessary to provide a subsistence opportunity that is lacking in earlier seasons, we urge the board to take a very conservative approach with late season mechanized winter hunts.

*–Alaska Defenders of Wildlife*

**STAFF ANALYSIS  
WP06-35**

**ISSUES**

Proposal WP06-35, submitted by the Alaska Department of Fish and Game (ADF&G), would establish a Dec. 1–10 moose season in Unit 21B with a harvest limit of one antlered bull.

**DISCUSSION**

The ADF&G submitted WP06-35 to the Board and a similar proposal to the Alaska Board of Game for consideration in Mar. 2006. The intent of the proposals is to provide users the opportunity to harvest bull moose in a remote area not easily accessed during the fall moose seasons. Adoption of WP06-35 would align Federal and State regulations if the proposed regulations are adopted by the Federal and State Boards. The proponent will request the withdrawal of WP06-35 should the Alaska Board of Game decide not to adopt the State's companion proposal.

**Existing Federal Regulations–Moose**

*Unit 21B—1 bull by State registration permit* *Sept. 5–Sept. 25*

**Existing Federal Regulations****Displayed with proposed State Units 21A and B boundary changes.**

*Unit 21B, that portion of the Nowitna River drainage formerly in Unit 21A—1 bull* *Aug. 20–Sept. 25*

*Nov. 1–Nov. 30*

*Unit 21B, that portion that was originally Unit 21B—1 antlered bull* *Sept. 5–Sept. 25*

**Proposed Federal Regulations****Displayed with proposed State Units 21A and B boundary changes.**

*Unit 21B, that portion of the Nowitna River drainage formerly in Unit 21A—1 bull\** *Aug. 20–Sept. 25*

*Nov. 1–Nov. 30*

*Dec. 1–Dec. 10*

*Unit 21B, that portion that is the existing Unit 21B—1 antlered bull\** *Sept. 5–Sept. 25*

*Dec. 1–Dec. 10*

**Note:** Pending an Alaska Board of Game action that would revise the Units 21A and 21B boundaries to including all of the Nowitna River drainage in Unit 21B, Federal subsistence management regulations for the upper Nowitna River drainage would reflect the proposed Dec. 1–10 season with the Aug. 20–Sept. 25 season formerly stated for the affected area in Unit 21A.

*\*These regulatory descriptors are temporary for the purpose of discussion in this analysis. If adopted, these regulatory descriptors would be modified to appropriately accommodate the changed boundaries and these regulations.*

## Extent of Federal public lands

Federal public lands account for 37% of Unit 21B, comprised of 33% FWS and 4% BLM lands (**Map 1**).

## Customary and Traditional Use Determination

Residents of Units 21B, 21C, Tanana, Galena, and Ruby have a positive customary and traditional use determination to harvest moose in Unit 21B.

## Regulatory History

### Unit 21B

Federal subsistence management regulations for Unit 21B moose were adopted by the Board from State regulations in 1990. A summary of the regulatory history for Unit 21B is as follows.

July 1, 1990–June 30, 1996: Units 21B, 1 bull, Sept. 5–25.

July 1, 1996–June 30, 2006: Units 21B, 1 bull by State registration permit, Sept. 5–25.

## Current Events Involving Species

The ADF&G also submitted a proposal to the Alaska Board of Game that would change the Units 21A and 21B boundaries so that Units 21B will include all of the Nowitna River drainage (**Map 1**). This proposal would change the moose hunting season in those portions of the current Unit 21A which would become 21B. The Alaska Board of Game adopted the State's proposal at its recent meeting. Because of the Alaska Board of Game's action, Proposal WP06-35 would result in the existing Federal November season replaced by the proposed December season for the upper Nowitna River drainage. The proposed change in subunit boundaries would also result in the proposed December harvest occurring in the lower Nowitna River drainage closer to Ruby and Tanana. The redefining of the subunit boundaries would include the vast area of State jurisdiction lands in the upper Nowitna River drainage and Federal public lands in the lower drainage that previously were not open during winter months.

## State Management Objectives—Moose

1. Provide for harvest not to exceed 150 moose or 5% of the annual moose population estimate.
2. In combination with Unit 21C, implement at least two habitat enhancement activities every five years.

## Population Status

Aerial moose trend surveys were cooperatively conducted with ADF&G on the Koyukuk/Nowitna National Wildlife Refuge in Nov. 2005. These moose surveys were conducted in the Nowitna River drainage portion of Unit 21B. Surveys in two Trend Count Areas (TCAs) on the Nowitna National Wildlife Refuge were completed. Snow conditions were good during the Nowitna River drainage surveys.

### Lower Nowitna River Combined, Unit 21B

Results from the combined trend count areas extending from the Little Mud River down to the Nowitna River mouth (Nowitna/Sulatna Confluence and Nowitna Mouth TCAs) show an improvement in the

number of bulls (24 bulls:100 cows) indicating good recruitment from the large number of yearling bulls observed in Nov. 2004 (**Table 1**). Yearling bull numbers in 2005 were a little lower than 2004, but are still considered good. Cow numbers in 2005 are similar to that seen in 2004, and both are lower than the 2001 and 2003 counts. The number of calves decreased from the highs seen in 2003 and 2004, and is considered good. The incidence of twins also decreased to 7%. Overall, the lower Nowitna River moose population shows good calf production and recruitment with a slight improvement in bull numbers and continued lower cow numbers.

Over the long term, the Nowitna moose population is probably stable at a low density. Trend count areas in the river corridor portion of the unit indicate recent lower cow numbers, a slight increase in the number of bulls, and good production and recruitment, though not as high as that seen in 2003 and 2004. Recent improvements in the bull:cow ratio in the TCAs, now up to 24 per 100 cows are a result of improved calf production and recruitment the last 3 years and is mostly young bulls. The bull-cow ratio in other portions of the unit where hunting pressure is lower (away from the river corridors) is undoubtedly higher. A conservative harvest strategy for this area is also warranted due to the overall performance of the population, slightly decreasing cow numbers in the TCAs and the just recovered bull cow ratio.

### *Predation*

Based on reports from local area residents and hunters in Unit 21, predator populations (black bear, wolves, and brown bear) have significantly increased in recent years (Andersen 2003). Weather did allow for a wolf population estimate for Unit 21B and the northern portion of the Nowitna National Wildlife Refuge in 2004. A total of 13 distinct packs were identified with an average pack size of four wolves. The population estimate for the area surveyed was 62 wolves  $\pm 16\%$  (52–72 wolves) at the 80% confidence interval. These results were similar to those obtained from this survey when last flown in 1996. At that time, the estimate was 68 wolves in 14 packs (Scotton and Bryant, 2004).

Concerns of increased predation rates also have been expressed by the Western Interior Alaska Regional Council (Council) and the State Fish and Game Advisory Committees of the affected region. Because predation has a direct impact on calf production and yearling bull recruitment, both area residents and some resource managers are concerned that current predation rates on moose could result in further population declines and inadequate subsistence opportunity in the future.

### *Habitat*

While no recent moose browse surveys have been conducted within the affected area, habitat does not appear to be the limiting factor affecting population size in Unit 21B. Naturally occurring wildland fires and flooding are major forces affecting the productivity and distribution of moose habitat in this region. Habitat is generally excellent along most of the drainages, providing adequate areas of nutritious winter browse. Browse production appears not to be limiting the size of the moose population at current moose densities.

### **Effects of the Proposal**

The proposed season would provide an increased opportunity to harvest moose in the areas of Unit 21B, where the population can support the harvest of bulls that are not easily accessed during the fall season. Adoption of the Federal and State proposals would simplify regulatory complexity and should help to avoid confusion for the users. Federal public lands are not close to any community, but would align State and Federal regulations and provide opportunities for harvest while traveling/trapping. The proposed Dec. 1–10 season will also simplify hunting activity on the Ruby-Poorman Road where hunters are currently

**Table 1.** Lower Nowitna River (Novi) combined TCAs, Nowitna (Novi)/Sulatna confluence and Nowitna River mouth (Novi), 2001–2005 GSPE summary, Nowitna NWR, Alaska.

TCA	Year	Total Bulls	Total Cows	Total Calves	Total moose	Total yrlyg bulls	Bulls/ 100 cows	Calves/ 100 cows	Yrlyg bulls/ 100 cows	Total cows with twins	Total cows with calves	Twins/ 100 cows with calves
Novi Mouth	2001	19	134	33	186	8	14	25	6	2	30	7
Novi Mouth	2003	14	135	57	204	7	10	42	5	5	52	10
Novi Mouth	2004	23	123	48	194	16	19	39	13	3	45	7
Novi Mouth	2005	27	136	32	195	12	20	24	9	0	32	0
Novi/Sulatna Conf.	2001	27	150	23	200	9	18	15	6	0	23	0
Novi/Sulatna Conf.	2003	18	120	34	172	12	15	28	10	1	33	3
Novi/Sulatna Conf.	2004	26	115	47	188	14	23	41	12	6	40	15
Novi/Sulatna Conf.	2005	29	101	47	167	10	29	37	10	4	33	12
Total	2001	46	284	56	386	17	16	20	6	2	53	4
Total	2003	32	255	91	378	19	13	36	7	6	85	7
Total	2004	49	238	95	382	30	21	40	13	9	85	11
Total	2005	56	237	69	362	22	24	29	9	4	55	7

permitted to hunt and harvest moose only on the west side of the road during the Unit 21D December season. The Alaska Board of Game recently adopted the State's proposal that will change the Units 21A and B boundaries so that Units 21B will include all of the Nowitna River drainage.

Total annual harvest for the affected area is not anticipated to change as a result of adoption of this proposal. However, if hunter harvest is shifted to include more bull moose and fewer cows, then population decline will likely be decreased by retaining more cow moose (ADF&G 2005). Because cows are the limiting reproductive component of the population at this time, any increase in the productive capacity of the population will potentially result in population growth and more moose available for harvest.

Results from analysis of harvest data, from ADF&G harvest reports for the upper Nowitna River drainage, suggest that harvest is not expected to change, as little Federal public land currently exists in Unit 21A that will be transferred to Unit 21B by action recently taken by the Alaska Board of Game. Because Federal public lands in the upper Nowitna River drainage are very remote and costly to access, no adverse impacts to the area moose populations are anticipated should WP06-35 become adopted by the Board. The ADF&G anticipates that with the additional opportunity for bull harvest in the lower Nowitna and Yukon River portion of Unit 21B during the time of year when bulls still possess antlers, unreported harvest of cow moose during the remainder of the winter should be reduced (ADF&G 2005). Because of the vast remoteness of the upper Nowitna River drainage in conjunction with the high cost of travel, the majority of the moose harvest is expected to occur in areas closest to the communities of Ruby and Tanana. Some harvest of bull moose by local residents would likely occur in conjunction with trapping that occurs in the middle and upper Nowitna River.

## LITERATURE CITED

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<b><i>WP06-36 Executive Summary</i></b>	
<b>General Description</b>	Requests that moose regulations for Unit 24 be modified to reduce the regulatory complexity. <i>Submitted by the Alaska Department of Fish and Game.</i>
<b>Proposed Regulation</b>	See the proposed Federal regulation language in the analysis.
<b>North Slope Regional Council Recommendation</b>	<b>Support.</b>
<b>Western Interior Alaska Regional Advisory Council</b>	<b>Support.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-36**

**NORTH SLOPE SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification** to include the language requiring a Federal registration permit for the March season in the area described as: All drainages to the north of the Koyukuk River, except the John River drainage.

Note: The Council's recommended modification is being considered relative to proposal 34. The Council therefore supports this proposal as written.

**WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support WP06-36.** The Western Interior Alaska Subsistence Regional Advisory Council supports the simplification of unit boundaries. This has been a long time in coming. The passage of this proposal will reduce regulatory complexity with the existing undivided Unit 24.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-36**

**Support** the proposal as recommended by the Western Interior Alaska and the North Slope Subsistence Regional Advisory Councils.

**Justification**

The regulatory complexity will be decreased. Combining all of Unit 24A into one management unit with the use of a single registration permit will minimize confusion and provide important harvest data to managers. Changing the harvest limit in the area west of Todatonten Lake from one moose to one antlered bull, and eliminating the need for a registration permit for this area, is inconsequential because this area receives very little hunting activity.

## STAFF ANALYSIS WP06-36

### ISSUES

Proposal WP06-36, submitted by the Alaska Department of Fish and Game (ADF&G), requests that moose regulations for Unit 24 be modified to reduce the regulatory complexity.

### DISCUSSION

The Alaska Department of Fish and Game proposed the creation of subunits for Unit 24, to allow for an improved ability to manage smaller areas of the unit in a manner that is biologically relevant. Subpart A § \_\_.4 of the Federal subsistence regulations state that; *Game Management Units or GMU means one of the 26 geographic areas listed under game management units in the codified State of Alaska hunting and trapping regulations and the Game Unit Maps of Alaska.* Therefore, modifications to the Unit 24 descriptions by the State will result in usage of the modified descriptions by the Federal Subsistence Management Program.

Translation of the existing Federal subsistence regulations for moose in Unit 24 to the new Unit 24 subunit descriptions will result in two additional moose management subdivisions (see below). This proposal will eliminate two of those management subdivisions.

### Existing Federal Regulation

#### Moose Unit 24

Harvest Limits	Open Season
<p><i>Unit 24—Koyukuk Controlled Use Area—1 moose; however, antlerless moose may be taken only during Aug. 27–31 and the Mar. 1–5 season, if authorized by announcement by the Koyukuk/Nowitna National Wildlife Refuge manager. Harvest of cow moose accompanied by calves is prohibited. During the Aug. 27–Sept. 20 season, a State registration permit is required. During the Mar. 1–5 season, a Federal registration permit is required.</i></p>	<p><i>Aug. 27–Sept. 20 Dec. 1–Dec. 10</i></p> <p><i>Mar. 1–5 season to be announced. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&amp;G Area Biologist and the Chairs of the Western Interior Alaska Regional Advisory Council and Koyukuk River Fish and Game Advisory Committees.</i></p>

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Harvest Limits	Open Season
<p><i>Unit 24, that portion west of the Hogatza River Drainage and the Koyukuk Controlled Use Area and that portion east of the Dakli River Drainage and the Koyukuk Controlled Use Area and west of the Kanuti Controlled Use Area, the Tanana-Allakaket Winter Trail and the Alatna River Drainage—1 moose; however, antlerless moose may be taken only during the March 1–5 season, only on Koyukuk National Wildlife Refuge lands, if authorized by the Koyukuk/Nowitna National Wildlife Refuge manager. Harvest of cow moose accompanied by calves is prohibited. During the Sept. 5–25 season, a State registration permit is required. During the Mar. 1–5 season, a Federal registration permit is required.</i></p>	<p><i>Aug. 25–Sept. 25</i></p> <p><i>Mar. 1–5 season to be announced.</i></p> <p><i>Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&amp;G Area Biologist and the Chairs of the Western Interior Alaska Regional Advisory Council and Middle Yukon Fish and Game Advisory Committees.</i></p>
<p><i>Unit 24, that portion that includes the John River drainage—1 moose</i></p>	<p><i>Aug. 1–Dec. 31</i></p>
<p><i>Unit 24—All drainages to the north of the Koyukuk River upstream from and including the Alatna River to and including the North Fork of the Koyukuk River; except the John River drainage—1 moose; however, antlerless moose may be taken only from Sept. 21–25 and Mar. 1–5 if authorized jointly by the Kanuti National Wildlife Refuge manager, the BLM Northern Field Office manager, and Gates of the Arctic National Park superintendent. Harvest of cows accompanied by calves is prohibited.</i></p>	<p><i>Aug. 25–Sept. 25</i></p> <p><i>Mar. 1–5 season to be announced.</i></p> <p><i>Announcement will be made after consultation with the ADF&amp;G Area Biologist and Chairs of the Western Interior Alaska Regional Advisory Council, the Gates of the Arctic Subsistence Resource Commission, and the Koyukuk River Fish and Game Advisory Committee.</i></p>
<p><i>Unit 24, that portion within the Dalton Highway Corridor Management Area; except, Gates of the Arctic National Park—1 antlered bull by Federal registration permit only.</i></p>	<p><i>Aug. 25–Sept. 25</i></p>
<p><i>Unit 24 remainder—1 antlered bull. Federal public lands in the Kanuti Controlled Use Area are closed to taking of moose, except by rural Alaska residents of Unit 24, Koyukuk, and Galena.</i></p>	<p><i>Aug. 25–Sept. 25</i></p>

**Existing Federal Regulations** (displayed with the new Unit 24 subunits)**Moose Unit 24**

<b>Harvest Limits</b>	<b>Open Season</b>
<i>Unit 24A, that portion within the Dalton Highway Corridor Management Area; except, Gates of the Arctic National Park—1 antlered bull by Federal registration permit only.</i>	<i>Aug. 25—Sept. 25</i>
<i>Unit 24A remainder—1 antlered bull</i>	<i>Aug. 25—Sept. 25</i>
<i>Unit 24B, that portion within the John River drainage—1 moose.</i>	<i>Aug. 1—Dec. 31</i>
<i>Unit 24B—All drainages to the north of the Koyukuk River, except the John River drainage—1 moose; however, antlerless moose may be taken only from Sept. 21–25 and Mar. 1–5, if authorized jointly by the Kanuti National Wildlife Refuge manager, the BLM Northern Field Office manager, and Gates of the Arctic National Park superintendent. Harvest of cows accompanied by calves is prohibited.</i>	<i>Aug. 25–Sept. 25</i>  <i>Mar. 1–5 season to be announced. Announcement will be made after Consultation with the ADF&amp;G Area Biologist and Chairs of the Western Interior Alaska Regional Advisory Council, the Gates of the Arctic Subsistence Resource Commission, and the Koyukuk River Fish and Game Advisory Committee.</i>
<i>Unit 24B, that portion south of the Koyukuk River and west of the Kanuti controlled Use Area and the Tanana-Allakaket Winter Trail—1 moose; Harvest of cow moose accompanied by calves is prohibited. During the Sept. 5–25 season, a State registration permit is required.</i>	<i>Aug. 25–Sept. 25</i>
<i>Unit 24B remainder—1 antlered bull. Federal public lands in the Kanuti Controlled Use Area are closed to taking of moose, except by rural Alaska residents of Unit 24, Koyukuk, and Galena.</i>	<i>Aug. 25–Sept. 25</i>

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<b>Harvest Limits</b>	<b>Open Season</b>
<i>Units 24C and 24D, that portion within the Koyukuk Controlled Use Area—1 moose; however, antlerless moose may be taken only during Aug. 27–31 and the Mar. 1–5 season, if authorized by announcement by the Koyukuk/Nowitna National Wildlife Refuge manager. Harvest of cow moose accompanied by calves is prohibited. During the Aug. 27–Sept. 20 season, a State registration permit is required. During the Mar. 1–5 season, a Federal registration permit is required.</i>	<p>Aug. 27–Sept. 20 Dec. 1–Dec. 10</p> <p>Mar. 1–Mar. 5 season to be announced. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&amp;G Area Biologist and the Chairs of the Western Interior Alaska Regional Advisory Council and Koyukuk River Fish and Game Advisory Committees.</p>
<i>Unit 24C remainder and Unit 24D remainder—1 moose; however, antlerless moose may be taken only during the March 1–5 season, only on Koyukuk National Wildlife Refuge lands, if authorized by the Koyukuk/Nowitna National Wildlife Refuge manager. Harvest of cow moose accompanied by calves is prohibited. During the Sept. 5–25 season, a State registration permit is required. During the Mar. 1–5 season, a Federal registration permit is required.</i>	<p>Aug. 25–Sept. 25</p> <p>Mar. 1–5 season to be announced. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&amp;G Area Biologist and the Chairs of the Western Interior Regional Advisory Council and Middle Yukon Fish and Game Advisory Committees.</p>

**Proposed Federal Regulation**

**Moose Unit 24**

<b>Harvest Limits</b>	<b>Open Season</b>
<i>Unit 24A, that portion within the Dalton Highway Corridor Management Area; except, Gates of the Arctic National Park—1 antlered bull by Federal registration permit only.</i>	Aug 25—Sept 25
<i>Unit 24A remainder—1 antlered bull</i>	Aug 25—Sept 25
<i>Unit 24B, that portion within the John River drainage—1 moose.</i>	Aug. 1—Dec. 31

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Harvest Limits	Open Season
<p><i>Unit 24B, all drainages to the north of the Koyukuk River, except the John River drainage—1 moose; however, antlerless moose may be taken only from Sept. 21–25 and Mar. 1–5, if authorized jointly by the Kanuti National Wildlife Refuge manager, the BLM Northern Field Office manager, and Gates of the Arctic National Park superintendent. Harvest of cows accompanied by calves is prohibited.</i></p>	<p><i>Aug. 25–Sept. 25 Mar. 1–5 season to be announced. Announcement will be made after consultation with the ADF&amp;G Area Biologist and Chairs of the Western Interior Alaska Regional Advisory Council, the Gates of the Arctic Subsistence Resource Commission, and the Koyukuk River Fish and Game Advisory Committee.</i></p>
<p><del><i>Unit 24B, that portion south of the Koyukuk River and west of the Kanuti Controlled Use Area and the Tanana-Allakaket Winter Trail—1 moose. Harvest of cow moose accompanied by calves is prohibited. During the Sept. 5–25 season, a State registration permit is required.</i></del></p>	<p><del><i>Aug. 25–Sept. 25</i></del></p>
<p><i>Unit 24B remainder—1 antlered bull. Federal public lands in the Kanuti Controlled Use Area are closed to taking of moose, except by rural Alaska residents of Unit 24, Koyukuk, and Galena.</i></p>	<p><i>Aug. 25–Sept. 25</i></p>
<p><i>Units 24C and 24D, that portion within the Koyukuk Controlled Use Area—1 moose; however, antlerless moose may be taken only during Aug. 27–31 and the Mar. 1–5 season, if authorized by announcement by the Koyukuk/Nowitna National Wildlife Refuge manager. Harvest of cow moose accompanied by calves is prohibited. During the Aug. 27–Sept. 20 season, a State registration permit is required. During the Mar. 1–5 season, a Federal registration permit is required.</i></p>	<p><i>Aug. 27–Sept. 20 Dec. 1–Dec. 10 Mar. 1–Mar. 5 season to be announced. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&amp;G Area Biologist and the Chairs of the Western Interior Alaska Regional Advisory Council and Koyukuk River Fish and Game Advisory Committees.</i></p>

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Harvest Limits	Open Season
<p><i>Unit 24C remainder and Unit 24D remainder—1 moose; however, antlerless moose may be taken only during the March 1–5 season, only on Koyukuk National Wildlife Refuge lands, if authorized by the Koyukuk/Nowitna National Wildlife Refuge manager. Harvest of cow moose accompanied by calves is prohibited. During the Sept. 5–25 season, a State registration permit is required. During the Mar. 1–5 season, a Federal registration permit is required.</i></p>	<p><i>Aug. 25–Sept. 25 Mar. 1–5 season to be announced. Announcement for the antlerless moose seasons and cow quotas will be made after consultation with the ADF&amp;G Area Biologist and the Chairs of the Western Interior Alaska Regional Advisory Council and Middle Yukon Fish and Game Advisory Committees.</i></p>

### Extent of Federal Public Lands

Federal public lands account for 64% of Unit 24 (22% NPS, 21% BLM, and 21% FWS lands). (See **Unit 24 Map**).

### Customary and Traditional Use Determinations

Residents of Unit 24 and residents of Koyukuk and Galena have a customary and traditional use determination for moose in Unit 24.

### Regulatory History

See **WP06-34 Analysis** (Appendix A) for a description of the regulatory history of moose in Unit 24.

In addition, analysts have recognized an oversight in the Unit 24 moose regulations that occurred in 2005 when proposal WP05-12 was adopted by the Federal Subsistence Board. WP05-12 established a to-be-announced Mar. 1–5 season in the area described as; All drainages to the north of the Koyukuk River, except the John River drainage, however, the need for a Federal registration permit was not included in the new regulations. Federal registration permits are utilized for all the other March moose hunts in Unit 24.

### Biological Background

Moose occur in very low densities throughout most of Unit 24 and have declined substantially over the past 10 years in the northern portion of the unit; however, the southern portion of Unit 24 has maintained very high densities of moose. For a more complete description of the biological background of moose in Unit 24 see **WP06-34 Analysis**.

## Effects of the Proposal

The proposed action would combine all of Unit 24A into one management subdivision requiring the use of a Federal registration permit for the entire subunit. Currently, permits are not required for the National Park Service lands, the BLM lands and a small piece of Kanuti National Wildlife Refuge lands that are now within Unit 24A. The Dalton Highway Corridor will no longer be a separate management subdivision. Implementation of this change will require the design of a permit that can be utilized by both those eligible to hunt on National Park lands and other Federally qualified rural residents hunting on BLM and refuge lands. Coordination by land managers will be needed to make these permits available to all eligible moose hunters.

Also, current regulations identify an area southwest of the Kanuti Controlled Use Area (CUA) within Unit 24B (west of Todatonten Lake and northeast of Indian Mt.). Under the old unit descriptions this area was part of the described area north of and adjacent to the Koyukuk CUA where a State registration permit is required for the Sept 5–25 hunt. Under the new subunit descriptions this area is now within Unit 24B. By eliminating this subdivision description this area becomes part of Unit 24B remainder, where no registration permits are required for an Aug. 25–Sept. 25 season, the harvest limit changes from one moose to one antlered bull.

<b>WP06-69 Executive Summary</b>	
<b>General Description</b>	Requests that sheep regulations for Unit 24 be modified to reduce the regulatory complexity. <i>Submitted by the Alaska Department of Fish and Game.</i>
<b>Proposed Regulation</b>	<i>Unit 24A and 24B, within Gates of the Arctic National Park, excluding Anaktuvuk Pass residents—3 sheep</i> Aug. 1–Apr. 30
	<i>Unit 24A and 24B (Anaktuvuk Pass residents only), that portion within the Gates of the Arctic National Park—Community harvest quota of 60 sheep, no more than 10 of which may be ewes and a daily possession limit of 3 sheep per person, no more than 1 of which may be a ewe.</i> July 15–Dec. 31
	<i>Unit 24A, <b>except</b> that portion within the Dalton Highway Corridor Management Area, except Gates of the Arctic National Park—1 ram with 7/8 curl horn or larger by Federal registration permit only. [We could also call this Unit 24A remainder]</i> Aug. 20–Sept. 30
	<i><del>Unit 24A remainder</del>, Unit 24B remainder, Unit 24C, and Unit 24D—1 ram with 7/8 curl horn or larger.</i> Aug. 10–Sept. 20
<b>North Slope Regional Council Recommendation</b>	<b>Support.</b>
<b>Western Interior Alaska Regional Council Recommendation</b>	<b>Support.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-69**

**NORTH SLOPE SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support** the proposal. The Board of Game has divided Unit 24 in to subunits and this proposal is necessary to establish seasons and harvest limits for Dall sheep in each new subunit. It also simplifies the regulations. The Council encourages the staff to continue the monitoring.

**WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL.**

**Support** the proposal. The Western Interior Alaska Subsistence Regional Advisory Council recognizes the extended season has been very beneficial to subsistence users. Having a uniform season throughout most of Unit 24A will reduce complexity of the sheep hunting regulations. Adoption of this proposal is consistent with the preferred season requested in 2004 by local subsistence sheep hunters. The use of a Federal registration permit for areas outside the Dalton Highway Corridor may be inconvenient for some hunters. The Federal agencies will need to explore ways to reduce this inconvenience

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-69**

**Support** the proposal as recommended by the Western Interior Alaska and North Slope Subsistence Regional Advisory Councils.

**Justification**

This uniform season throughout most of Unit 24A (Aug. 20–Sept. 30) will reduce complexity of the sheep regulations by eliminating separate management for the DHCMA. This action is consistent with the preferred season requested in 2004 by local subsistence sheep hunters. The use of a Federal registration permit for areas outside the corridor may be inconvenient for some hunters. The Federal agencies will need to explore ways to reduce this inconvenience.

**STAFF ANALYSIS  
WP06-69**

**ISSUES**

Proposal WP06-69, submitted by the Alaska Department of Fish and Game (ADF&G), requests that sheep regulations for Unit 24 be modified to reduce the regulatory complexity.

**DISCUSSION**

The ADF&G proposed the creation of subunits for Unit 24, to allow for an improved ability to manage smaller areas of the unit in a manner that is biologically relevant. [The Board of Game will address this subunit decision in Jan. 2006]. Subpart A §\_\_ .4 of the Federal subsistence management regulations state that; *Game Management Units or GMU means one of the 26 geographic areas listed under game management units in the codified State of Alaska hunting and trapping regulations and the Game Unit Maps of Alaska.* Therefore, modifications to the Unit 24 descriptions by the State will result in incorporation of the modified descriptions into the Federal Subsistence Management Program. This proposal intends to further reduce complexity of the sheep regulations by eliminating separate management for the Dalton Highway Corridor Management Area (DHCMA).

**Existing Federal regulation****Sheep Unit 24**

<b>Harvest Limits</b>	<b>Open Season</b>
<i>Unit 24, that portion within the Gates of the Arctic National Park, excluding Anaktuvuk Pass residents—3 sheep</i>	<i>Aug. 1–Apr. 30</i>
<i>Unit 24 (Anaktuvuk Pass residents only), that portion within the Gates of the Arctic National Park—Community harvest quota of 60 sheep, no more than 10 of which may be ewes and a daily possession limit of 3 sheep per person, no more than 1 of which may be a ewe.</i>	<i>July 15–Dec. 31</i>
<i>Unit 24, that portion within the Dalton Highway Corridor Management Area, except Gates of the Arctic National Park—1 ram with 7/8 curl horn or larger by Federal registration permit only.</i>	<i>Aug. 20–Sept. 30</i>
<i>Unit 24 remainder—1 ram with 7/8 curl horn or larger.</i>	<i>Aug. 10–Sept. 20</i>

**Existing Federal Regulations displayed with the new Unit 24 subunits****Sheep Unit 24**

<b>Harvest Limits</b>	<b>Open Season</b>
<i>Units 24A and 24B, within the Gates of the Arctic National Park, excluding Anaktuvuk Pass residents—3 sheep</i>	<i>Aug. 1–Apr. 30</i>

<i>Unit 24A and 24B (Anaktuvuk Pass residents only), that portion within the Gates of the Arctic National Park—Community harvest quota of 60 sheep, no more than 10 of which may be ewes and a daily possession limit of 3 sheep per person, no more than 1 of which may be a ewe.</i>	<i>July 15–Dec. 31</i>
<i>Unit 24A, that portion within the Dalton Highway Corridor Management Area, except Gates of the Arctic National Park—1 ram with 7/8 curl horn or larger by Federal registration permit only.</i>	<i>Aug. 20–Sept. 30</i>
<i>Unit 24A remainder, Unit 24B remainder, Unit 24C, and Unit 24D—1 ram with 7/8 curl horn or larger.</i>	<i>Aug. 10–Sept. 20</i>

## Proposed Federal Regulations

### Sheep Unit 24

<b>Harvest Limits</b>	<b>Open Season</b>
<i>Unit 24A and 24B, within Gates of the Arctic National Park, excluding Anaktuvuk Pass residents—3 sheep</i>	<i>Aug 1–Apr. 30</i>
<i>Unit 24A and 24B (Anaktuvuk Pass residents only), that portion within the Gates of the Arctic National Park—Community harvest quota of 60 sheep, no more than 10 of which may be ewes and a daily possession limit of 3 sheep per person, no more than 1 of which may be a ewe.</i>	<i>July 15–Dec. 31</i>
<i>Unit 24A, <del>except that portion within the Dalton Highway Corridor Management Area, except</del> Gates of the Arctic National Park—1 ram with 7/8 curl horn or larger by Federal registration permit only. [We could also call this Unit 24A remainder]</i>	<i>Aug. 20–Sept. 30</i>
<i>Unit 24A remainder, Unit 24B remainder, Unit 24C, and Unit 24D—1 ram with 7/8 curl horn or larger.</i>	<i>Aug. 10–Sept. 20</i>

### Extent of Federal Public Lands

Federal public lands account for 64% of Unit 24 (22% NPS, 21% BLM, and 21% FWS lands). (See **Map 1**).

### Customary and Traditional Use Determinations

All rural residents of Unit 24 residing north of the Arctic Circle, Anaktuvuk Pass, Allakaket, Alatna, Hughes and Huslia have a positive customary and traditional use determination for sheep in Unit 24.



## Regulatory History

When the Federal Subsistence Management Program began in 1991, the Unit 24 sheep season outside the Gates of the Arctic National Park was 1 ram with 7/8 curl horn or larger with an Aug. 10–Sept. 20 season. In 1992 the regulations were modified to require sheep hunters outside the Park to use a Federal registration permit when hunting within the DHCMA. In 2004 the season within the DHCMA was shifted ten days to Aug. 20–Sept 30. This ten day shift in the season was at the request of local subsistence users who asked for the change because hunters are occupied by moose hunting activities during much of the current (earlier) sheep season.

## Biological Background

Dall sheep are found throughout the mountains of the eastern Brooks Range. Highest densities are in the northern drainages, where weather and habitat conditions provide the most favorable winter range. The eastern Brooks Range includes that portion of Unit 24 in the DHCMA. Sheep were generally abundant during the last several decades. Based on sporadic sheep surveys and available data and observations by local users familiar with the area, relatively high populations occurred during the 1980s and declined since the early 1990s. The most likely cause of this decline was severe weather, which reduced recruitment and increased predation (ADF&G 2002).

The ADF&G conducted sheep surveys during June 2002 and 2003 in part of the upper Chandalar River drainage east of the Dalton Highway. The upper Chandalar area includes the area south and west of the North Fork of the Chandalar River, north of the Bettles River, Twin Lakes and Chandalar Lake, including all or part of the Dietrich River and North Fork Chandalar River. The area surveyed includes 779 mi<sup>2</sup> in western Unit 25A and eastern Unit 24. Survey conditions for both years were considered fair to good. Sheep observed were generally found between 4,000 and 5,000 ft. elevation and most were concentrated near patches of new growth or around mineral licks. Ewes and lambs were generally separate from rams (ADF&G 2003).

In the western part of the Chandalar survey (Dietrich River to Robert Creek), 631 sheep were observed in 2003 compared to 945 in 2002. In the eastern part of the Chandalar survey, 358 sheep were observed in 2003 compared to 574 in 2002. The same pilot/observer team surveyed the eastern portion in both years. Some of the differences in the survey results were due to the fact that Sheep Creek was not surveyed in 2003 and Roberts Creek was omitted in 2003 due to high winds (ADF&G 2003)

There was at least a 30% reduction in all age classes, with the greatest declines in lambs and young rams (32% in legal, 46% in sub legal, 30% in ewe-likes, 48% in lambs). The decline is consistent with the theory that there was high winter mortality due to deep snow. In addition, it is possible that some sheep may have moved outside the survey area. Also, the change in legal rams observed in the surveys was similar to the other sheep age classes. This would indicate that hunting was not the cause of the decline from 2002 to 2003. It should also be noted that the number of sport hunters and the sheep harvest in the survey area (between the Dalton Highway and North Fork Chandalar River) during the last four years has increased (ADF&G 2003).

The number of hunters, both subsistence and sport, and the sheep harvest in the survey areas is difficult to determine with complete accuracy because the harvest report information oftentimes doesn't identify the specific area(s) involved (ADF&G 2003).

The ADF&G management goals for sheep in the Eastern Brooks Range, which includes that portion of the DHCMA in Unit 24, are to:

- Protect, maintain and enhance the sheep population and its habitat in concert with the other components of the ecosystem.
- Provide for continued subsistence use of sheep by rural Alaska residents who have customarily and traditionally used the population.
- Provide an opportunity to hunt sheep under aesthetically pleasing conditions.
- Provide an opportunity to view and photograph sheep.

The ADF&G Management Objective for this area is to manage for a harvest of Dall sheep rams with full-curl or larger horns (ADF&G 2002).

### **Harvest History**

Land and wildlife resource use by residents of the Wiseman area in the central Brooks Range was studied in 1991–93. The study documented current and historic land and renewable resource use patterns of local residents. Hunting of large mammals was an integral part of the livelihoods of Wiseman community residents. In all households in Wiseman, the importance of harvesting local food was stressed. Moose, caribou and Dall sheep provided the major proportion of game meat for community residents. Bears, both black and brown, are also harvested for meat (Scott, 1993).

Beginning in 1992, BLM administered two Federal subsistence hunts along the DHCMA. Permit hunt number RS424 in Unit 24 was for residents of Unit 24 north of the Arctic Circle and residents of Allakaket, Alatna, Hughes and Huslia. The second Federal subsistence hunt was in the Unit 26B portion of the DHCMA. Non-Federally qualified hunters also were allowed to hunt in the DHCMA under more restrictive State regulations.

Most sheep hunting in the eastern Brooks Range occurs during August and early September when the weather is most favorable. An estimated 80–90% of the sheep harvest occurred before September 1.

From 1995–2002 a total of 55 Federally qualified subsistence hunters reported harvesting 16 sheep in RS424 hunt area which is in the DHCMA in Unit 24. They spent 117 days hunting and the hunting dates ranged from Aug. 24 to Sept. 20. The number of hunters and the annual harvest reported during this time period has remained consistent.

### **Effects of the Proposal**

This proposal would result in a change in season for the area of Unit 24A outside the DHCMA. The area east of the corridor and southwest of the corridor would experience a 10 day shift in the season, from a beginning date of Aug. 10 to a beginning date of Aug. 20; and a closing date from Sept. 20 to Sept. 30. Hunters within the area outside the DHCMA will also be required to obtain a Federal registration permit. This change is determined to be inconsequential biologically, but it will simplify the regulations for hunters by providing uniform regulations for all Federal public lands in Unit 24A outside Gates of the Arctic National Park. The use of a Federal registration permit for areas outside the corridor may be inconvenient for some hunters. Coordination by land managers will be needed to make these permits available to all eligible sheep hunters. The additional harvest data obtained through the permit system, however, will aid in sheep management. This uniform season throughout most of Unit 24A (Aug. 20–Sept. 30) is consistent with the preferred season requested in 2004 by local subsistence sheep hunters.

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*WP06-37 Executive Summary*

<b>General Description</b>	Requests caribou season dates be changed to Oct. 1–April 30 in Unit 22B (west of Golovin Bay and west of the west bank of the Fish, Niukluk, and Libby Rivers) and in Unit 22D in the Pilgrim River drainage; and that the May 1–Sept. 30 season be opened when announced by BLM. <i>Submitted by the Seward Peninsula Subsistence Regional Advisory Council</i>
<b>Proposed Regulation</b>	<p><i>Units 22A, 22B remainder, that portion of Unit 22D in the Kougaruk, Kuzitrin, Pilgrim, American, and Agiapuk River Drainages, and Unit 22E, that portion east of and including the Sanaguich River drainage—5 caribou per day; however, cow caribou may not be taken May 16–June 30</i></p> <p><i>Unit 22B (west of Golovin Bay and west of the west bank of the Fish, Niukluk and Libby Rivers) and Unit 22D in the Pilgrim drainage.)—5 caribou per day; however, cow caribou may not be taken May 16–June 30</i></p> <p><i>July 1–June 30</i></p> <p><i>July 1–June 30</i> <i>Oct. 1–Apr. 30</i></p> <p><i>From May 1 through Sept. 30, the season may be opened by announcement by the Field Office manager of the BLM, in consultation with ADF&amp;G.</i></p>
<b>Seward Peninsula Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Yukon-Kuskokwim Delta Regional Council Recommendations</b>	<b>Support with modification.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support with modification.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-37**

**SEWARD PENINSULA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification**, to change the boundary language to align with language adopted by the Alaska Board of Game during its November 2005, meeting. The Seward Peninsula Subsistence Regional Advisory Council supported the proposal as presented by staff. It will help to prevent the harvest of reindeer as caribou along the road system and has been agreed upon by reindeer herders, hunters and the State. The proposal will also align Federal regulations with recently changed State regulations.

The modified proposed regulation should read:

*Units 22A, 22B remainder, that portion of Unit 22D in the Kougaruk, Kuzitrin (excluding the Pilgrim River drainage), Pilgrim, American, and Agiapuk River Drainages, and Unit 22E, that portion east of and including the Sanaguich River drainage—5 caribou per day; however, cow caribou may not be taken May 16–June 30.*

***July 1–June 30***

***Unit 22B (west of Golovin Bay and west of a line along the west bank of the Fish and Niukluk Rivers and excluding the Libby River drainage—5 caribou per day; however, cow caribou may not be taken May 16–June 30.***

~~July 1–June 30~~  
***Oct. 1–Apr. 30***

***From May 1 through Sept. 30, the season may be opened by announcement by the Field Office manager of the BLM, in consultation with ADF&G.***

**YUKON-KUSKOKWIM DELTA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification.** Hunters of the Yukon-Kuskokwim Delta do not hunt this area until after Oct. 1. There is broad support for this proposal.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-37**

**Support with modification** as recommended by the Seward Peninsula Subsistence Regional Advisory Council.

The modified regulation should read:

<p><i>Units 22A, 22B remainder, that portion of Unit 22D in the Kougaruk, Kuzitrin (excluding the Pilgrim River drainage), Pilgrim, American, and Agiapuk River Drainages, and Unit 22E, that portion east of and including the Sanaguich River drainage—5 caribou per day; however, cow caribou may not be taken May 16–June 30.</i></p>	<p><b>July 1–June 30</b></p>
<p><i>Unit 22B (west of Golovin Bay and west of a line along the west bank of the Fish and Niukluk Rivers and excluding the Libby River drainage—5 caribou per day; however, cow caribou may not be taken May 16–June 30.</i></p>	<p><del>July 1–June 30</del></p> <p><b>Oct. 1–Apr. 30</b></p> <p><i>From May 1–Sept. 30, the season may be opened by announcement by the Anchorage BLM Field Office manager in consultation with ADF&amp;G.</i></p>

**Justification**

This proposal should be adopted as there should be no effects on subsistence caribou hunters and it should help prevent the harvest of reindeer. This proposal should reduce conflicts and was supported by the NNSAC, hunters, and the Kawerak Reindeer Herders Association. This proposal would also align State and Federal regulations.

## STAFF ANALYSIS WP06-37

### ISSUES

Proposal WP06-37, submitted by the Seward Peninsula Subsistence Regional Advisory Council, requests that in Unit 22B (west of Golovin Bay and west of the west bank of the Fish, Niukluk, and Libby Rivers) and in Unit 22D in the Pilgrim River drainage, the caribou season dates be changed from July 1–June 30 to Oct. 1–Apr. 30. The Council also recommends that from May 1–Sept. 30, the season may be opened by announcement by the Field Office manager of the Bureau of Land Management, in consultation with ADF&G.

### DISCUSSION

The proponent believes the public, composed of both local residents and visitors, shoot or poach privately owned reindeer, both intentionally and when mistakenly harvested as caribou. The Western Arctic Caribou Herd migrates from its summer range on the North Slope and a portion of the herd typically winters on the Seward Peninsula arriving in late September and leaving the Peninsula by May. Some caribou, particularly bulls, may remain on the Peninsula during summer months. This proposal would close the caribou season during the summer months in areas where reindeer typically are found, but caribou are scarce or absent. The proponent believes the later season would help assure that hunters harvest caribou and would help prevent the loss of valuable reindeer. The proponent believes the economic impact of loss of reindeer, which mingle and migrate with caribou, is tremendous. The proponent also states that the additional loss of reindeer to hunters, who believe they are harvesting caribou, is very high.

At the Nov. 2005 Board of Game meeting in Kotzebue, a similar proposal was addressed. The Board of Game after discussions with the reindeer herders, hunters and State biologists, adopted the proposal with a minor modification. The Board changed the suggested boundary language to “Unit 22B west of Golovin Bay, and west of a line along the west bank of the Fish and Niukluk Rivers and excluding the Libby River drainage” based on public testimony.

#### Existing Federal Regulation

*Units 22A, 22B, that portion of Unit 22D in the Kougaruk, Kuzitrin, Pilgrim, American, and Agiapuk River Drainages; and Unit 22E, that portion east of and including the Sanaguich River drainage—5 caribou per day; however, cow caribou may not be taken May 16–June 30.* *July 1–June 30*

#### Proposed Federal Regulation

*Units 22A, 22B remainder, that portion of Unit 22D in the Kougaruk, Kuzitrin, Pilgrim, American, and Agiapuk River Drainages; and Unit 22E, that portion east of and including the Sanaguich River drainage—5 caribou per day; however, cow caribou may not be taken May 16–June 30.* *July 1–June 30*

**Unit 22B (west of Golovin Bay and west of the west bank of the Fish, Niukluk and Libby Rivers) and Unit 22D in the Pilgrim drainage.)—5 caribou per day; however, cow caribou may not be taken May 16–June 30.**

*July 1–June 30*

**Oct. 1–Apr. 30**

**From May 1 through Sept. 30, the season may be opened by announcement by the Field Office manager of the BLM, in consultation with ADF&G.**

**Existing State Regulation**

<b>Species/bag limits</b>	<b>Permit/ticket required</b>	<b>Open season</b>
<b>Unit 22A and 22B:</b>		
<b>Residents:</b> Five Caribou per day: Bulls	Harvest	No closed season
Cows	Harvest	July 1–May 15
<b>Nonresidents:</b> Five caribou total: Bulls	Harvest	No closed season
Cows	Harvest	July 1–May 15
<b>Unit 22D, that portion in the Kougarok, Kuzitrin, Pilgrim, American and Agiapuk River drainages:</b>		
<b>Residents:</b> Five caribou per day: Bulls	Harvest	No closed season
Cows	Harvest	July 1–May 15
<b>Nonresidents:</b> Five caribou total: Bulls	Harvest	No closed season
Cows	Harvest	July 1–May 15
<b>Unit 22E, that portion east and including the Sanaguich River drainage:</b>		
<b>Residents:</b> Five Caribou per day: Bulls	Harvest	No closed season
Cows	Harvest	July 1–May 15
<b>Nonresidents:</b> Five caribou total: Bulls	Harvest	No closed season
Cows	Harvest	July 1–May 15
<b>Remainder of Unit 22: Residents*:</b> Five Caribou per day	Harvest	May be announced
<b>Nonresidents:</b> Five caribou total	Harvest	May be announced

\*If you live north of the Yukon River and hunt caribou in that area, you do not need caribou harvest tickets/reports but you must register with ADF&G or an authorized representative within the area.

Species/bag limits	Permit/ticket required	Open season
<b><i>NEW</i></b> <i>Beginning in the 2006 regulatory year:</i> <i>Unit 22B west of Golovin Bay, and west of a line along the west bank of the Fish and Niukluk Rivers and excluding the Libby River drainage:</i>		
<i>Residents: Five Caribou per day: Bulls</i>	<i>Harvest</i>	<i>Oct. 1–Apr. 30</i>
<b><i>NEW</i></b> <i>Unit 22D, that portion in the Pilgrim River drainage</i>	<i>Harvest</i>	<i>Oct. 1–Apr. 30</i>

### Extent of Federal Public Lands

Federal public lands comprise approximately 21% of Unit 22B (**Unit 22 Map**). In Unit 22B, the Bering Land Bridge National Preserve manages 2.1% and the BLM manages 19.3 % of Federal public lands. Federal public lands comprise approximately 15% of Unit 22D (**Unit 22 Map**). The Bering Land Bridge National Preserve manages 10.9% and BLM manages 4.6% of Federal public lands in Unit 22D.

### Customary and Traditional Use Determinations

The rural residents of Unit 21D (west of the Koyukuk and Yukon rivers), Unit 22 (except St. Lawrence Island), Units 23, 24, and residents of Kotlik, Emmonak, Hooper Bay, Scammon Bay, Chevak, Marshall, Mountain Village, Nunam Iqua, Pilot Station, Pitka's Point, Russian Mission, St. Marys, and Alakanuk have a positive customary and traditional use determination for caribou in Unit 22B.

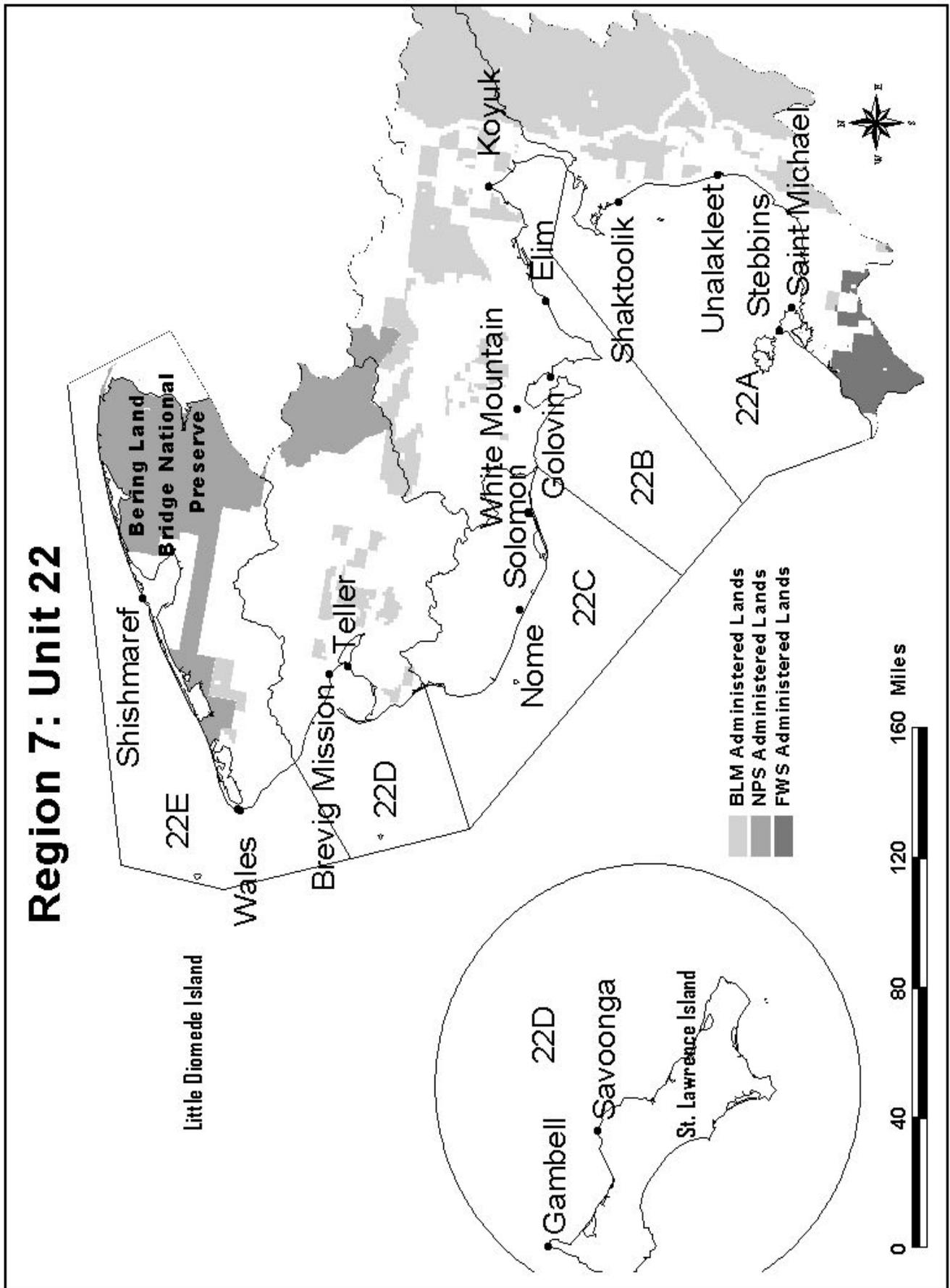
### Regulatory History

Proposal WP03-40, submitted by the Seward Peninsula Subsistence Regional Advisory Council, originally proposed to open a July 1–June 30 caribou harvest season in Unit 22E east of and including the Sanaguich River drainage. However, after further review and public testimony at the Feb. 2003 Council meeting, the Council recommended support of the proposal with modification to include adding Unit 22D—that portion in the Kougarok, Kuzitrin, Pilgrim, American, Agiapuk River drainages. The modified proposal language was adopted by the Federal Subsistence Board at its May 20–22, 2003 regulatory meeting and the Unit 22D regulations have remained unchanged since.

During its Nov. 2005 meeting, the Alaska Board of Game adopted a proposal changing the boundaries for caribou in Units 22B and 22D. The proposal also changed the harvest season to Oct. 1–Apr. 30.

### Biological Background

Caribou historically were present and harvested in Unit 22D during the early to mid-1800s, but the Western Arctic Caribou Herd (WACH) declined in the 1860s, with very few caribou left anywhere on the Seward Peninsula by 1880 (Stern 1980). By the mid-1900s, the WACH had grown enough to migrate south to winter in the eastern portion of the Seward Peninsula, but did not make it to the western portion (Skoog 1968). The WACH crashed in size in the early 1970s. By 1976, the herd started to rebound, increasing 13% annually until 1990 (Bente 1997). Since 1990, the herd has grown 1%–3% annually numbering over 463,000 in 1996 (Bente 1998). The herd was estimated at approximately 430,000 caribou in 1999 (Dau 2002). The most recent census in 2003 estimated 490,000 caribou in the WACH. With population growth of the herd came an expansion of their range. Caribou first expanded their winter range onto the central Seward Peninsula in Oct. 1996, and since that time have increased their use of the Seward Peninsula for winter range. Caribou winter range extended further west on the Seward Peninsula, reaching



the Bering Strait coast in small numbers in 1998 and 1999. This trend has continued, with thousands of caribou moving into central Unit 22D and Unit 22E.

### **Reindeer Herding**

Currently, there are seven reindeer ranges that are fully or partially encompassed by Unit 22D. All of Leonard Olanna's (Brevig Mission, AK) range is located in the unit. His herd is estimated at 100 animals. Prior to caribou interactions, his herd population was over 600 (Fosdick 2005, pers. comm.). Most of James Noyakuk's (Teller, AK) range is located within the unit. His herd is estimated at 200 animals. Prior to caribou interactions, his herd was at 1,000 (Fosdick 2005, pers. comm.). About half of Harry Karmun's (Wasilla, AK formerly of Deering, AK) range is in the unit. His estimated herd population is zero manageable (there are reindeer scattered on the range, but unable to do anything with them), perhaps 50–200 reindeer on his range at various times (Fosdick 2005, pers. comm.). Prior to the influx of caribou, his herd population was 3,000. Much of Roger Menadelook's (Teller, AK) range is in the unit. His estimated population is also zero manageable, perhaps 50–100 reindeer on his range at various times. Prior to the influx of caribou, his herd population was 1,500 (Fosdick 2005, pers. comm.). Over half of the "Kakaruk herd" range is within the unit. This herd is managed by Julia Lee (Teller, AK). This herd has an estimated population of 3,000 reindeer, about the same as prior to caribou interaction, which has been minimal; however the predators (grizzly bears and wolves) that follow caribou have increased and interfered with her herding efforts (Fosdick 2005, pers. comm.). A very small portion of Larry Davis' (Nome, AK) range is within unit. His herd's estimated population is 3,000. Prior to caribou interaction, his herd population was over 5,000 (Fosdick 2005, pers. comm.). A very small portion of Clifford Weyiouanna's (Shishmaref, AK) range is in Unit 22D. His estimated herd population on his range is zero manageable, perhaps 50 on his range at certain times, however, under 50 of his reindeer herd are mixed with his neighbor's herd (Fosdick 2005, pers. comm.).

Misidentification of caribou versus reindeer has been the likely source of some accidental illegal harvesting of reindeer on the Seward Peninsula. Local knowledge is split as to the ease of distinguishing between reindeer and caribou. Reindeer are said to have shorter legs and are generally fatter, and some have splotched-white hides and misshapen antlers due to regrowth after cutting; however these traits do not apply to all animals. Further education in area villages may lessen some of the identification problems and accidental harvest of reindeer. Better marking of reindeer would also help the situation, but is often cost prohibitive. Segregating reindeer herds from migrating caribou, when possible, is the best method of preventing accidental reindeer harvest and also helps prevent reindeer from out-migrating with the WACH.

### **Harvest History**

Hunters, both recreational and subsistence combined, reported harvesting nearly 15,700 Western Arctic Herd caribou during the 2000/01 regulatory year and 15,200 during the 2001/02 regulatory year (ADF&G 2003). Assuming hunters took 15,000–17,000 caribou annually since 1999, this constituted approximately 3.5%–4% of the 1999 population of 430,000 caribou (ADF&G 2003). The total estimated Unit 22 Caribou harvest, during the 2001/02 regulatory year by communities located in Unit 22 was 2,326 animals (ADF&G 2003).

### **Effects of the Proposal**

If this proposal is adopted, there should be little impact on the caribou population and caribou hunters, however, it should help prevent the harvest of reindeer. There should be little effect on subsistence users, because caribou are not present in large numbers in the area between June and September. This change

was discussed at length at the Northern Norton Sound Fish and Game Advisory Committee (NNSAC) Meeting on Oct. 11, 2005 and the original suggested regulation change was amended to this compromise language and was supported by the NNSAC, hunters, and the Kawerak Reindeer Herders Association. Proposal WP06-37 also requests that the area field office manager of the BLM, after consultation with the ADF&G, determine needed openings. This flexibility would create a more flexible and responsive management system, which would benefit subsistence users, by allowing a hunt if caribou are present in the area during the May 1–Sept. 30 season.

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<b>WP06-38 Executive Summary</b>	
<b>General Description</b>	Requests that the winter moose season in Unit 22A remainder be shifted from Dec. 1–Dec. 31 to Jan. 1–Jan. 31. This would place changes made by special action WSA05-12/13 into permanent regulation. <i>Submitted by the Seward Peninsula Subsistence Regional Advisory Council.</i>
<b>Proposed Regulation</b>	<p><b>Unit 22–Moose</b></p> <p><i>Unit 22A remainder—1 bull. However, during the period <del>Dec. 1–Dec. 31</del>, only an antlered bull may be taken. Federal public lands are closed to the taking of moose except by residents of Unit 22A hunting under these regulations.</i></p> <p><i>Aug. 1–Sept. 30</i> <i><del>Dec. 1–Dec. 31</del></i> <i>Jan. 1–Jan. 31</i></p>
<b>Seward Peninsula Regional Council Recommendation</b>	<b>Support.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Oppose.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATION  
WP06-38**

**SEWARD PENINSULA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support.** The Seward Peninsula Subsistence Regional Advisory Council supported this proposal. This proposed change was requested by the residents of Stebbins and St. Michael and would allow the harvest of moose when there is more daylight and better weather conditions. This would also align Federal regulation with recent changes made in State regulations.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-38**

**Support** the proposal as recommended by the Seward Peninsula Subsistence Regional Advisory Council.

**Justification**

If this proposal is adopted, it will address the interest of the residents of Stebbins and St. Michael to harvest moose in January when the weather and daylight are more favorable. There should be little impact on the moose population in Unit 22A remainder. This proposal would also align State and Federal regulations.

**WRITTEN PUBLIC COMMENTS  
WP06-38**

**Oppose.** Urge caution and recommend more conservative action. Late season winter moose hunts advocated by these proposals invites driving, herding and harassing moose with snow machines, activities currently prohibited under Federal subsistence law. Enforceability is extremely difficult in remote areas at this time of year. Abuses connected with this method of hunting can diminish healthy populations of moose in an area, counter to Section 802 of Title VIII, ANILCA. Unless it is absolutely necessary to provide a subsistence opportunity that is lacking in earlier seasons, we urge the board to take a very conservative approach with late season mechanized winter hunts.

*–Alaska Defenders of Wildlife*

**STAFF ANALYSIS  
WP06-38**

**ISSUES**

This proposal, submitted by the Seward Peninsula Subsistence Regional Advisory Council, requests that the winter moose season in Unit 22A remainder be shifted from Dec. 1–31 to Jan. 1–31. The shift in season timing would better allow the communities of Stebbins and St. Michael to meet their subsistence needs in the upcoming season. This proposal would place changes made by Special Action WSA05-12/13 into permanent regulation.

**DISCUSSION**

The December winter moose season is during short daylight and inclement weather (wind and limited visibility for spotting game). Residents of Stebbins and St. Michael would like to change the moose harvest season from December to January. In January there is usually more snow for ease of access by snowmobile. The Southern Norton Sound Fish and Game Advisory Committee discussed this issue in Jan. 2005 and is in support of the change. The Stebbins IRA initiated the request and the Village of St. Michael concurs. Alaska Department of Fish and Game supports the proposed season change and in Nov. 2005 the Alaska Board of Game adopted the proposed change. The requested actions would align Federal regulations with recently changed State regulations.

**Existing Federal Regulation**

<i>Unit 22A remainder—1 bull. However, during the period</i>	<i>Aug. 1–Sept. 30</i>
<i>Dec. 1–Dec. 31, only an antlered bull may be taken. Federal</i>	<i>Dec. 1–Dec. 31</i>
<i>public lands are closed to the taking of moose except by resi-</i>	
<i>dents of Unit 22A hunting under these regulations.</i>	

**Proposed Federal Regulation**

<i>Unit 22A remainder—1 bull. However, during the period <del>Dec</del> <b>Jan.</b></i>	<i>Aug. 1–Sept. 30</i>
<i>1–<del>Dec.</del> <b>Jan.</b> 31, only an antlered bull may be taken. Federal</i>	<i><del>Dec. 1–Dec. 31</del></i>
<i>public lands are closed to the taking of moose except by resi-</i>	<i><b>Jan. 1–Jan. 31</b></i>
<i>dents of Unit 22A hunting under these regulations.</i>	

## Existing State Regulation

Units and Bag Limits	Permit/ticket required	Open Season
<i>Unit 22A, that portion north of and including the Tagoomenik and Shaktoolik River drainages</i>		
<b>Residents:</b> <i>One bull</i>	<i>Harvest</i>	<i>Aug. 1–Sept. 30</i>
<b>Nonresidents:</b> <i>One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side</i>	<i>Harvest</i>	<i>Sept. 1–Sept. 14</i>
<i>Unit 22A, that portion in the Unalakleet River drainage and all drainages flowing into Norton Sound north of the Golsovia River drainage and south of the Tagoomenik and Shaktoolik River drainages:</i>		
<b>Residents:</b> <i>One bull</i>	<i>Harvest</i>	<b><i>No open season*</i></b>
<b>Nonresidents:</b>	–	<i>No open season</i>
<i>Remainder of Unit 22A:</i>		
<b>Residents:</b> <i>One bull</i>	<i>Harvest</i>	<i>Aug. 1–Sept. 30</i>
<b>OR one antlered bull</b>	<i>Harvest</i>	<b><i>Jan. 1–Jan. 31**</i></b>
<b>Nonresidents:</b> <i>One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side</i>	<i>Harvest</i>	<i>Sept. 1–Sept 30</i>
*This is a recent change made at the Nov. 11–14, 2005, Alaska Board of Game meeting and by Emergency Order 05-04-05 issued July 22, 2005.		
**This is a recent change made at the Nov. 11–14, 2005, Alaska Board of Game meeting and by Emergency Order 05-08-05 issued Nov. 16, 2005.		

## Extent of Federal Public Lands

Federal public lands comprise approximately 60% of Unit 22A. The BLM manages 50.6 % and the Yukon Delta National Wildlife Refuge manages 9.1% of Federal public lands in Unit 22A.

## Customary and Traditional Use Determinations

All rural residents of Unit 22A have a customary and traditional use determination for moose in Unit 22A remainder.

## Regulatory History

The Federal Subsistence Board first dealt with moose regulations in Unit 22A in 1995. A 10-day season extension (Oct. 1–10) was granted by the Board in April 1995 (FSB 1995a) to give subsistence users who were still out fishing in September a chance to harvest a moose. Based on a Request for Reconsideration filed by the State, the season extension was repealed by the Board in Sept. 1995, prior to going into effect (FSB 1995b). During the 1996 proposal cycle, the season extension was again raised, along with the question of closing all Federal public lands to non-Federally qualified moose hunters. The Board ruled in Apr. 1996 that the biological and harvest summary information did not support either extending the moose season or closing Federal public lands to nonsubsistence moose hunters (FSB 1996). In May

1998, the Board adopted P98-086 with a modification to change the moose hunting season limit from one antlered bull to one bull, during both seasons (Aug. 1–Sept. 30 and Dec. 1–Jan. 31) in Unit 22A.

In Nov. 2003, the Alaska Board of Game made a number of changes to the regulations in Unit 22A. These changes included changing the description of hunt areas, changes to the bag limit and open seasons for moose. In the Unalakleet drainage area the State nonresident season was closed, the fall resident season was shortened by 3 weeks to Aug. 15–Sept 25 and the winter season was closed. In Nov. 2003, the State issued Emergency Order 05-05-03 shortening the moose season to Dec. 1–Dec. 31 and the bag limit from one bull to one antlered bull in a portion of Unit 22A in the Golsovia River drainage and south, and closing the winter season north of the Golsovia River drainage. In Nov. 2003, WSA03-14 was submitted by Grace Cross, Chair, Seward Peninsula Subsistence Regional Advisory Council requesting the following changes to moose seasons in Unit 22A: Unit 22A North of the Golsolvia River drainage—close the winter season; Unit 22A- remainder (the Golsolvia River drainage and south) change the harvest from one bull to one antlered bull and shorten the moose season by 31 days. In Dec. 2003, Special Action WSA03-14 was adopted by the Federal Subsistence Board. In 2004, Proposal WP04-70 was submitted and requested the following in Unit 22A: 1) change the harvest from one bull to one antlered moose; 2) shorten the moose season by 14 days in some portions of the subunit; 3) eliminate the winter season in some portions of the subunit; and 4) close Federal public lands for moose hunting except by Unit 22A residents during the entire harvest season. This proposal was adopted with modification by the Federal Subsistence Board at its May 2004 meeting. The proposal was modified to change 1 antlered moose to 1 bull during the fall season and to shorten the harvest season in Unit 22A, that portion in the Unalakleet drainage and all drainages flowing into Norton Sound north of the Golsovia drainage and south of the Tagoomenik and Shaktoolik River drainages by five days, to close Sept. 25th.

During the Nov. 11–14, 2005 Alaska Board of Game meeting in Kotzebue, the Board passed Proposal 6, which shifted the resident winter moose season for the remainder of Unit 22A from Dec. 1–Dec. 31 to Jan. 1–Jan. 31, but does not take effect until July 1, 2006. On Nov. 16, 2005, ADF&G issued Emergency Order 05-08-05, which shifted the resident winter moose season for the remainder of Unit 22A from Dec. 1–Dec. 31 to Jan. 1–Jan. 31. This emergency order took effect immediately and changed the State winter resident moose season to January in the remainder of Unit 22A.

### **Biological Background**

Currently, there is no population estimate for moose in southern Unit 22A. Based on composition and recruitment surveys indications are that, while overall numbers of moose are low, moose are more abundant than in the northern parts of the subunit (Persons 2005, pers. comm.). Local reports suggest moose numbers may be increasing. It is likely that immigration may be occurring from adjacent areas of the lower Yukon River where moose numbers are increasing rapidly, and calf survival may be higher here than in other parts of the unit (Persons 2005, pers. comm.). Recruitment rates and calf:cow ratios are significantly higher in southern Unit 22A than in the rest of the unit (Persons 2005, pers. comm.). This increased calf survival may be attributed to calves being born in late May and early June during the period when herring spawn. During the calving period in this area, bears typically congregate along the southern Norton Sound coastline and have a reliable alternate food source (herring) during this critical time for moose calves (Persons 2003, pers. comm.).

In Unit 22A larger bulls begin to drop their antlers in December (Gorn 2005, pers. comm.). However, there are still a large number of medium and smaller bulls that retain their antlers through January and would be available for harvest (Gorn 2005, pers. comm.).

## Harvest History

Unit 22A harvest data from the ADF&G harvest database (ADF&G 2001a) provides a reasonably accurate summary for harvest by nonresident and nonlocal Alaskans, but local harvest is thought to be underreported. Little harvest information regarding moose harvests in Unit 22A is available from the ADF&G Community Profile Database (ADF&G 2001b); there is only one year of data for Stebbins. According to the ADF&G biologists, there is a tendency for the reported figures for moose taken in Unit 22 to be lower than the actual harvest and thus harvest estimates do not accurately reflect the total harvest in the unit (Persons 2003, pers. comm.). The most realistic moose harvest data available for Unit 22A comes from large mammal harvest surveys conducted by ADF&G and Kawerak in Shaktoolik in 1999, 2000 and 2003, in Unalakleet in 2002 and 2004, in Stebbins in 2002, and in St. Michael in 2003.

The southern portion of Unit 22A includes harvests by residents of St. Michael and Stebbins. Much of the harvest is unreported on harvest tickets. In 2002, two moose were reported harvested by Stebbins (ADF&G 2001b), however an additional 18 moose were reported in a Stebbins harvest survey (Persons 2003, pers. comm.). In 2003, two moose were reported harvested by St. Michael residents and an additional three were reported in a St. Michael harvest survey. Since 2000, 62% of the known harvest by residents of Stebbins and St. Michael has occurred in December or January. The preferred harvest period is during the winter season because access to moose habitat in the area is difficult before freeze up. Harvest during the fall season is low.

Limited harvest data from harvest reports and village surveys show more historical harvest in December than January, but changes in weather patterns may now be making December harvest problematic. The villages of Stebbins and St. Michael now are asking that the winter season be changed from December to January.

ADF&G supports the continuation of a winter season in southern Unit 22A. Based on harvest records changing from a December season to a January season is unlikely to significantly increase harvest (Persons 2005, pers. comm.).

## Effects of the Proposal

If this proposal is adopted, it would allow the residents of Stebbins and St. Michael to harvest moose when the weather and daylight are more favorable. This change is unlikely to have a significant impact on the moose population; therefore, there is no conservation concern at this time. This proposal would also align Federal regulations with recently changed State regulations.

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<b>WP06-39 Executive Summary</b>	
<b>General Description</b>	Requests that a portion of Unit 22A, including the Unalakleet River drainage and all drainages flowing into Norton Sound north of the Golsovia drainage and south of the Tagoomenik and Shaktoolik River drainages, be closed to the taking of moose. This would place changes made by Special Action WSA05-03 into permanent regulation. <i>Submitted by Seward Peninsula Subsistence Regional Advisory Council</i>
<b>Proposed Regulation</b>	<i>Unit 22A, that portion in the Unalakleet drainage and all drainages flowing into Norton Sound north of the Golsovia drainage and south of the Tagoomenik and Shaktoolik River drainages—1 bull. Federal public lands are closed to the taking of moose except by residents of Unit 22A.</i>  <i>Aug 15–Sept 25</i> <i>No winter season</i> <b>No Federal open season</b>
<b>Seward Peninsula Regional Council Recommendation</b>	<b>Support.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATION  
WP06-39**

**SEWARD PENINSULA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support.** The Seward Peninsula Subsistence Regional Advisory Council supported the proposal. Based on recent BLM and ADF&G surveys there has been a drastic reduction in the moose population. This proposal is important to conserve the moose population in the affected area. This proposal would also align Federal subsistence management regulations with recent changes made in State regulations.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-39**

**Support** the proposal as recommended by the Seward Peninsula Subsistence Regional Advisory Council.

**Justification**

Although previous actions have been taken to help conserve the moose population, they have been ineffective and more drastic measures are required. Eliminating the harvest of moose in this part of Unit 22A because of the combination of low moose density, the declining population trend and low numbers of yearling moose, is consistent with sound wildlife management principles. This action is supported by most, but not all, of the community members in Unalakleet.

**STAFF ANALYSIS  
WP06-39**

**ISSUES**

Proposal WP06-39, submitted by Seward Peninsula Subsistence Regional Advisory Council, requests that a portion of Unit 22A, which includes the Unalakleet River drainage and all drainages flowing into Norton Sound north of the Golsovia drainage and south of the Tagoomenik and Shaktoolik River drainages, be closed to the taking of moose. This proposal would place changes made by Special Action WSA05-03 into permanent regulation.

**DISCUSSION**

Based on recent BLM and ADF&G moose surveys, there has been a drastic reduction in the moose population in portions of Unit 22A. The proponent believes the combination of a low moose density, a declining population trend and low numbers of yearling moose requires eliminating human harvest to allow for conservation of the herd. Eliminating the moose harvest would also align Federal regulations with recent changes made to State regulations adopted at the Nov. 11–14, 2005 Alaska Board of Game meeting. The new State regulations will close the resident moose season within the central portion of Unit 22A, and includes the Unalakleet River drainage and all drainages flowing into Norton Sound north of the Golsovia River drainage and south of the Tagoomenik and Shaktoolik River drainages. There is no nonresident season under State regulations within this area. Recently, caribou have been moving into Unit 22A, which should help to offset the loss of harvest opportunity for moose in this area.

**Existing Federal Regulation**

<i>Unit 22A, that portion in the Unalakleet drainage and all drainages flowing into Norton Sound north of the Golsovia drainage and south of the Tagoomenik and Shaktoolik River drainages—1 bull. Federal public lands are closed to the taking of moose except by residents of Unit 22A .</i>	<i>Aug 15–Sept 25 No winter season</i>
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**Proposed Federal Regulation**

<i>Unit 22, that portion in the Unalakleet drainage and all drainages flowing into Norton Sound north of the Golsovia drainage and south of the Tagoomenik and Shaktoolik River drainages—1 bull. Federal public lands are closed to the taking of moose. <del>except by residents of Unit 22A.</del></i>	<i>Aug 15–Sept 25 No winter season <b>No Federal open season</b></i>
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## Existing State Regulation

<b>Species/bag limit</b>	<b>Permit/ticket required</b>	<b>Open season</b>
<i>Unit 22A, that portion in the Unalakleet River drainage and all drainages flowing into Norton Sound north of the Golsovia River drainage and south of the Tagoomenik and Shaktoolik river drainages: <b>Residents: one bull</b></i>	<i>Harvest</i>	<i>Aug. 15–Sept 25**</i>
<i>Nonresidents</i>		<i>No open season</i>

\*\*At the Nov. 2005 Alaska Board of Game meeting the Board closed the resident moose season within the central portion of Unit 22A, which includes the Unalakleet River drainage and all drainages flowing into Norton Sound north of the Golsovia River drainage and south of the Tagoomenik and Shaktoolik River drainages.

## Extent of Federal Public Lands

Federal public lands comprise approximately 59.7% of Unit 22A and consist of 50.6% BLM and 9.1% FWS lands (see **Unit 22 map**).

## Customary and Traditional Use Determinations

All rural residents of Unit 22 have a customary and traditional use determination for moose in Unit 22A; however, the current Federal closure applies to all except residents of Unit 22A.

## Regulatory History

The Federal Subsistence Board first dealt with moose regulations in Unit 22A in 1995. A 10-day season extension (Oct. 1–10) was granted by the Board in April 1995 (FSB 1995a) to give subsistence users who were still out fishing in September a chance to harvest a moose. Based on a Request for Reconsideration filed by the State, the season extension was repealed by the Board in Sept. 1995, prior to going into effect (FSB 1995b). During the 1996 proposal cycle, the season extension was again raised along with the question of closing all Federal public lands to non-Federally qualified moose hunters. The Board determined in April 1996 that the biological and harvest summary information did not support either extending the moose season or closing Federal public lands to nonsubsistence moose hunters (FSB 1996). In May 1998, the Board adopted Proposal P98-86 with a modification to change the moose harvest limit from one antlered bull to one bull, during both seasons (Aug. 1–Sept. 30 and Dec. 1–Jan. 31 in Unit 22A).

In Nov. 2003, the Alaska Board of Game made a number of changes to the regulations in Unit 22A. These changes included changing the description of hunt areas, and changes to the bag limit and open seasons for moose. The State's fall resident season in the Unalakleet River drainage was shortened by three weeks to Aug. 15–Sept. 25, and the two-month nonresident and winter seasons were closed. In Nov. 2003, the State issued Emergency Order 05-05-03 shortening the moose season to Dec. 1–Dec. 31 and the bag limit from one bull to one antlered bull in the portion of Unit 22A within the Golsovia River drainage and south, and closing the winter season north of the Golsovia River drainage. In Nov. 2003, WSA03-14 was submitted requesting the following changes to moose seasons in Unit 22A: Unit 22A north of the Golsovia River drainage, close the winter season; Unit 22A remainder (the Golsovia River drainage and south), change the harvest from one bull to one antlered bull and shorten the moose season by 31 days. In Dec. 2003, Special Action WSA03-14 was adopted by the Federal Subsistence Board. In 2004, WP04-70

was submitted and requested that in Unit 22A: 1) the harvest be changed from one bull to one antlered moose; 2) the moose season be shortened by 14 days in some portions of the subunit; 3) the winter season be eliminated in some portions of the subunit; and 4) Federal public lands be closed for moose hunting except by Unit 22A residents during the entire season. This proposal was adopted with some modifications by the Federal Subsistence Board at its May 2004 meeting. In July 2005, ADF&G issued Emergency Order 05-04-05 which closed the 2005/06 resident moose season within the central portion of Unit 22A, which includes the Unalakleet River drainage and all drainages flowing into Norton Sound north of the Golsovia River drainage and south of the Tagoomenik and Shaktoolik River drainages. There is no nonresident season within this area. In Aug. 2005, following a closure by the State, Special Action WSA05-03 was submitted and requested that a portion of Unit 22A, which included the Unalakleet River drainage and all drainages flowing into Norton Sound north of the Golsovia River drainage and south of the Tagoomenik and Shaktoolik River drainages, be closed to the taking of moose. In Aug. 2005, Special Action WSA05-03 was adopted by the Board and the moose season was closed.

At the Nov. 11–14, 2005 Alaska Board of Game meeting, the Board closed the resident moose season within the central portion of Unit 22A, which includes the Unalakleet River drainage and all drainages flowing into Norton Sound north of the Golsovia River drainage and south of the Tagoomenik and Shaktoolik River drainages.

### **Biological Background**

In Mar. 2005, ADF&G and BLM biologists estimated 123 moose in a 2400 mi<sup>2</sup> census area between the Golsovia and Tagoomenik River drainages including the Unalakleet River drainage (Persons 2005, pers. comm.). The estimated moose density of 0.05 moose per mi<sup>2</sup> is very low and remains unchanged from a 2003 census (Persons 2005, pers. comm.). Low recruitment rates (9 yearlings per 100 adults) suggest few moose are surviving to reproductive age (Persons 2005, pers. comm.). Moose densities in Unit 22A have typically been lower than in other parts of Unit 22. Decline has apparently occurred since 1989, when a smaller area (1,100 square miles) within the 2005 census area was estimated at 325 moose or 0.295 moose per mi<sup>2</sup> (Persons 2005, pers. comm.).

In Mar. 2003, a moose census of the Unalakleet River drainage in Unit 22A was completed by ADF&G and BLM using the spatial census technique (Persons 2003, pers. comm.). Gasaway censuses of this area were partially completed in 1989 and cancelled in 1994. In 2000, a spatial census was scheduled in Unit 22A, but it was cancelled due to poor weather and deteriorating snow conditions. Instead, recruitment surveys of the major drainages in Unit 22A were completed during Mar. 2000.

The 2003 estimate for the Unalakleet River drainage was 75 moose (Persons 2003, pers. comm.). The calf:adult ratio was 15 calves:100 adults (Persons 2003, pers. comm.). The increase in moose numbers estimated in 2005 is a result of expanding the census area by 400 mi<sup>2</sup> to include the Egavik River drainage and small coastal drainages flowing into Norton Sound. The density of moose remained unchanged. Although there are no estimates of moose numbers for the entire Unalakleet River drainage prior to 2003 for comparison, based on data from a portion of the census area in 1989 it appears that there has been a considerable decline in the moose population. In 1989, due to poor weather, a smaller area (1,100 mi<sup>2</sup>) was censused with an estimated 325 moose of which 16% were calves (Persons 2002). In 1994 adverse weather conditions curtailed the census before sufficient sample units could be counted to develop a statistically meaningful density estimate. However, based on a subjective evaluation of the results by participants in the 1989 and 1994 censuses, moose density was probably stable between 1989 and 1994 (Persons 2002). In 1994 there were 45 moose seen in 5 sample units totaling 72 mi<sup>2</sup> compared to 21

moose seen in 597 mi<sup>2</sup> of sample units in 2003 (Persons 2002). Based on this information it appears that there has been a substantial decline in moose numbers in the Unalakleet River drainage.

In 2003, recruitment surveys were flown in the Golsovia River drainage and on the mainstem of the Unalakleet, Shaktoolik and Ungalik River drainages for comparison to similar Unit 22A surveys in 2000 (**Table 1**). In every drainage, except the Golsovia, considerably fewer moose were seen in 2003 than in 2000. Similar snow depths, although differing among drainages, were present in 2003 compared to 2000. Moose tend to move to lower elevations and into the mainstem of the rivers as snow depth increases. Snow in the Shaktoolik and Ungalik River drainages appeared fairly deep, and it would be normal to expect greater numbers of moose on the mainstem of those rivers compared to other parts of the drainage. The very low number of moose seen during these surveys is additional cause for concern (Persons 2003, pers. comm.). Due to relatively little snow in the Unalakleet River drainage (except North River) moose would be expected to maintain a more dispersed distribution, with fewer moose concentrated along the mainstem. However, the census of the entire Unalakleet River drainage failed to find many moose anywhere in the drainage (Persons 2003, pers. comm.). In most drainages surveyed, in 2003, calf:adult ratios increased since 2000 and were fairly consistent with the Unalakleet River drainage census results.

**Table 1.** Results of recruitment surveys for Unit 22(A) (Persons 2003, pers. comm.).

Drainage	Year	# of Moose	# of Calves	% Calves
<b>Unalakleet, Main Stem</b>	2000	84	7	8%
	2003	19	3	16%
<b>Golsovia Drainage</b>	2000	15	4	27%
	2003	29	6	21%
<b>Shaktoolik, Main Stem</b>	2000	45	5	11%
	2003	13	2	15%
<b>Ungalik, Main Stem</b>	2000	29	1	3%
	2003	1	0	0%

Based on the low number of moose in the Unalakleet River drainage and the small number of moose found during recruitment surveys, the Unit 22A moose population is apparently substantially below the management goal of 600-800 moose. In recent years, State fish and game advisory committee members from Unit 22A and other Unit 22A residents have commented that moose numbers seem to be declining and have mentioned the absence of calves and yearlings. However, it is a commonly held opinion that there are more moose in Unit 22A in the fall than in the winter months and it is likely that seasonal movement into the Yukon and Anvik River drainages account, in part for this observation. It is likely that some moose observed in Unit 22A during the summer and fall may move to other units in the winter (Persons 2003, pers. comm.). The unusually light snow accumulation in the winter of 2002 may have encouraged a dispersed distribution and resulted in fewer moose wintering in the Unalakleet River drainage than normal. One would expect, however, a light snow year to have the opposite effect and result in fewer moose moving out of the drainage and into their typical wintering areas. Moose populations in adjacent areas along the Yukon are also reported to be in decline (Persons 2003, pers. comm.).

## Harvest History

Unit 22A harvest data from the ADF&G harvest database (ADF&G 2001a) provides a reasonably accurate summary for harvest by nonresident and nonlocal Alaskans, but local harvest is thought to be underreported. Little harvest information regarding moose harvests in Unit 22A is available from the ADF&G Community Profile Database (ADF&G 2001b); there is only one year of data available for Stebbins. According to ADF&G biologists, there is a tendency for the reported figures of moose taken in Unit 22 to be lower than the actual harvest and thus harvest estimates do not accurately reflect the total harvest in the unit (Persons 2003, pers. comm.). The most realistic moose harvest data available for Unit 22A comes from large mammal harvest surveys conducted by ADF&G and Kawerak in Shaktoolik in 1999, 2000 and 2003, in Unalakleet in 2002 and 2004, in Stebbins in 2002 and St. Michael in 2003.

Harvest in the northern portion of Unit 22A is by residents of the village of Shaktoolik. In 1999, Shaktoolik residents reported harvesting 2 moose (ADF&G 2001b), however, the village harvest surveys found that 19 moose were actually harvested (Persons 2003, pers. comm.). In 2000, no harvests were recorded by ADF&G permit reports (ADF&G 2001b), but the village harvest surveys found that 14 moose were harvested (Persons 2003, pers. comm.). In 2003 Shaktoolik residents reported harvesting 2 moose, and the village harvest survey recorded a harvest of 10 moose. Most of the Shaktoolik harvest occurs in August. Before 1999, there was almost no nonresident harvest in this area. Although the number of nonresident hunters in the area peaked in 2002, harvest averaged only 1 moose per year from 1999–2002, and no nonresident harvest has occurred since 2002 (Persons 2005, pers. comm.).

In 2002, 13 moose were reported harvested by residents of Unalakleet (ADF&G 2001b), while a village harvest survey in Unalakleet found an additional 15 moose taken and not reported (Persons 2003, pers. comm.). In 2004, 4 moose harvests were reported on harvest tickets and an additional 3 moose were reported taken from Central Unit 22A during the village harvest survey. The actual harvest may typically be more than double what is reported by harvest ticket. The village harvest survey found 81% of the harvest was in September and is thought to be typical (Persons 2003, pers. comm.).

The southern portion of Unit 22A includes harvests by residents of St. Michael and Stebbins. Much of the harvest is unreported on harvest tickets. In 2002, two moose were reported harvested by Stebbins (ADF&G 2001b), but an additional 18 moose were reported in a Stebbins harvest survey (Persons 2003, pers. comm.). In 2003, two moose were reported harvested by St. Michael residents and an additional three were reported in a St. Michael harvest survey. Since 2000, 62% of the known harvest by residents of Stebbins and St. Michael has occurred in December or January. The preferred harvest period is during the winter season because access to moose habitat in the area is difficult before freeze up. Harvest during the fall season is very low.

Most of the nonresident harvest occurs in the Golsovia River drainage where currently there is little known harvest by Unit 22A residents. However, there is an expectation that Unalakleet residents may shift some hunting activity to this area (ADF&G 2001b; ADCED 2001).

## Current Events Involving Species

Unalakleet residents are very concerned about declining moose numbers in their area and have been experiencing poor moose hunting. At a June 2005 Southern Norton Sound Fish and Game Advisory Committee meeting, ADF&G staff, Committee members, and Unalakleet residents discussed options for reducing hunting pressure and further protecting the declining moose population (Persons 2005, pers. comm.). The Advisory Committee developed an Alaska Board of Game proposal asking for a four-year moratorium on moose hunting in Central Unit 22A, and asked both ADF&G and Federal managers

to issue emergency orders and special actions closing the fall 2005 moose season. The State issued Emergency Order 05-04-05 and the Board of Game put the closure into permanent regulation at their Nov. 2005 meeting. During the week of July 5–12, 2005, the BLM subsistence biologist was in Unalakleet and consulted with a local Federal Subsistence Regional Advisory Council member and others. The BLM subsistence biologist reported that there is wide support for the moratorium, as this closure is being called locally, although it may not be unanimous. The local Federal Subsistence Regional Advisory Council member also suggested that the closure/moratorium should be subject to review in two years, just in case the moose population shows more rapid recovery, rather than standing for four years without an opportunity to review (Brelsford 2005, pers. comm.).

The Seward Peninsula Subsistence Regional Advisory Council Chair was included in discussions concerning the special action from the time of the Southern Norton Sound Fish and Game Advisory Committee action and subsequent consultations in Unalakleet. The Chair indicated recognition of the biological necessity and support for adopting the special action (Cross 2005, per. comm.).

At the Oct. 13, 2005, meeting of the Seward Peninsula Subsistence Regional Advisory Council, the Unalakleet moose situation was once again addressed. There was testimony that the moose population is very low and that something drastic should be done to aid in moose conservation in that area. The Council voted unanimously to submit a proposal to place WSA05-03 closure language into permanent regulation, and that if the moose population recovers to a point where harvest can occur, the issue can be addressed at that time.

At the Nov. 11–14, 2005 Alaska Board of Game meeting, the Board closed the resident moose season within the central portion of Unit 22A, which includes the Unalakleet River drainage and all drainages flowing into Norton Sound north of the Golsovia River drainage and south of the Tagoomenik and Shaktoolik River drainages.

### **Effects of the Proposal**

This proposal is more restrictive than the current regulation and would eliminate the season in a portion of Unit 22A, including the Unalakleet River drainage and all drainages flowing into Norton Sound north of the Golsovia drainage and south of the Tagoomenik and Shaktoolik River drainages. Since previous management actions have been unsuccessful in stopping the moose population decline, more drastic measures are required to help conserve the moose population in Unit 22A. The combination of a low moose density, declining population trend and low numbers of yearling moose requires eliminating moose harvest to allow for conservation of the herd. Recently, caribou have been moving into Unit 22A, which should help to offset the loss of harvest opportunity for moose in this area. Eliminating the moose harvest would also align State and Federal regulations.

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<i>WP06-40 Executive Summary</i>	
<b>General Description</b>	Requests that the harvest dates for moose in Unit 22D be changed to Sept. 1–Sept. 14 and that the quota numbers be removed from regulation. Also requests that the following language be added to regulations for two of the hunt areas: “Quotas and any needed season changes will be announced by the Field Office manager of the BLM, in consultation with NPS and ADF&G.” Would place changes made by special action into permanent regulation. <i>Submitted by the Seward Peninsula Subsistence Subsistence Regional Advisory Council.</i>
<b>Proposed Regulation</b>	<b>Unit 22–Moose</b>  [See proposed regulatory language in analysis.]
<b>Seward Peninsula Regional Council Recommendation</b>	<b>Support with modification.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support with modification.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support.</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATION WP06-40

### SEWARD PENINSULA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support with modification** as presented by staff. The Seward Peninsula Subsistence Regional Advisory Council feels the proposal is important as it provides a uniform moose season along the road accessible area in Unit 22, which should help to prevent over harvest in an area where serious concerns about the declining moose population exist. This proposal would also align Federal regulations with recent changes made in State regulations.

The modified proposed regulation should read:

*Unit 22B, west of the Darby Mountains—1 bull by State registration permit. The combined State/Federal harvest may not exceed 23 moose. Quotas and any needed **closures** season changes will be announced by the area Field Office manager of the BLM, in consultation with NPS, and ADF&G. Federal public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations.*

~~Aug. 10–Sept. 23~~  
**Sept. 1–Sept. 14**

Unit 22D, that portion within the Kougarok, Kuzitrin, and Pilgrim River drainages—1 bull by ~~Federal State~~ registration permit. ~~The combined State/Federal harvest may not exceed 33 moose.~~ **Quotas and any needed closures will be announced by the area Field Office manager of the BLM, in consultation with NPS, and ADF&G.** Federal public lands are closed to the taking of moose except by residents of Units 22D and 22C hunting under these regulations. ~~Aug. 10–Sept. 23~~  
**Sept. 1–Sept. 14**

Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek—1 bull by ~~Federal State~~ registration permit. ~~The combined State/Federal harvest may not exceed 8 moose.~~ **Quotas and any needed closures will be announced by the area Field Office manager of the BLM, in consultation with NPS, and ADF&G.** ~~Aug. 20–Sept. 30~~  
**Sept. 1–Sept. 14**

Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek—1 bull by Federal registration permit. ~~The combined State/Federal harvest in Aug./Sept. and Dec. may not exceed 8 moose.~~ **Quotas and any needed closures will be announced by the area Field Office manager of the BLM, in consultation with NPS, and ADF&G.** Federal public lands are closed to the taking of moose except by residents of Units 22C and 22D. ~~Dec. 1–Dec. 31~~

### INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-40

**Support with modification**, as recommended by the Seward Peninsula Subsistence Regional Advisory Council, to: 1) change the Federal registration permit requirement to State registration permits; 2) change the regulatory language from “season changes” to “closures”; and 3) change the Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek, winter (Dec. 1–31) season language, to remove the quota and reflect the changes made in the other Units.

The modified regulation should read:

Unit 22B, west of the Darby Mountains—1 bull by State registration permit. ~~The combined State/Federal harvest may not exceed 23 moose.~~ **Quotas and any needed closures season changes will be announced by the Anchorage BLM Field Office manager, in consultation with NPS, and ADF&G.** Federal public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations. ~~Aug. 10–Sept. 23~~  
**Sept. 1–Sept. 14**

Unit 22D, that portion within the Kougarok, Kuzitrin, and Pilgrim River drainages—1 bull by ~~Federal State~~ registration permit. ~~The combined State/Federal harvest may not exceed 33 moose.~~ **Quotas and any needed closures will be announced by the Anchorage BLM Field Office manager, in consultation with NPS, and ADF&G.** Federal public lands are closed to the taking of moose except by residents of Units 22D and 22C hunting under these regulations. ~~Aug. 10–Sept. 23~~  
**Sept. 1–Sept. 14**

*Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek—1 bull by Federal State registration permit. ~~The combined State/Federal harvest may not exceed 8 moose.~~ **Quotas and any needed closures will be announced by the Anchorage Field Office manager, in consultation with NPS, and ADF&G.*** ~~Aug. 20–Sept. 30~~  
**Sept. 1–Sept. 14**

*Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek—1 bull by Federal registration permit. ~~The combined State/Federal harvest in Aug./Sept. and Dec. may not exceed 8 moose.~~ **Quotas and any needed closures will be announced by the Anchorage BLM Field Office manager, in consultation with NPS, and ADF&G.** Federal public lands are closed to the taking of moose except by residents of Units 22C and 22D.* *Dec. 1–Dec. 31*

### **Justification**

By shortening the season to the proposed two-week period and establishing a uniform season in all road accessible areas, another over harvest situation may be avoided and hunting pressure may be reduced in the areas where serious concerns about declining moose populations exist. This proposal should allow some moose harvest while maintaining enough moose in the population to help with recruitment and recovery.

Since the harvest season will be identical, the use of one permitting system will aid timely harvest reporting. This should also help to minimize the possibility of over harvest as all reporting will go to one agency allowing more timely decisions to be made. Changing the language from season changes to closures reflects the original intent of the proposal, to allow the season to be closed when the harvest quota is reached. Removing the quota language and adding the closure language to the winter season in Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek eliminates the unforeseen problems that may arise if changes are made to the fall season in that Unit. This proposal would also align State and Federal regulations.

## **WRITTEN PUBLIC COMMENTS WP06-40**

**Support.** Ensuring a limited take of any wildlife species is best pursued through a numerical quota developed through sound science. Proposal #40 refines the existing use of quotas in Unit 22 to allow the field managers to respond more quickly to population data that would influence a total harvest “not to exceed” number. This ability to quickly adjust a total harvest quota when new information is learned is a good thing. Use of quotas should be carefully considered in other places as well. With a quota in place, managers could incorporate a longer time period in which a quota can be reached. In some instances, this could allow for a more culturally sensitive and traditional approach to the hunt.

*–Alaska Regional Office, National Parks Conservation Association*

**STAFF ANALYSIS  
WP06-40**

**ISSUES**

Proposal WP06-40, submitted by the Seward Peninsula Subsistence Regional Subsistence Advisory Council, requests that the harvest dates for moose in Unit 22D be changed from Aug. 20–Sept. 30 to Sept. 1–14 and that the quota numbers be removed from regulation. This proposal is similar to WSA05-01 and would place changes made by special action into permanent regulation. However, the Council also requests that the following language be added to regulations for two of the hunt areas: “Quotas and any needed season changes will be announced by the Field Office manager of the BLM, in consultation with NPS and ADF&G.”

**DISCUSSION**

In 2002, in response to declining moose populations, the Federal Subsistence Board acted, in coordination with ADF&G, to establish registration moose hunts in the heavily hunted, road accessible areas of western Unit 22B, the Kuzitrin River drainage of Unit 22D, and in Unit 22D Southwest. At the time these registration hunts were implemented, different harvest quotas and seasons were established based on differing biological situations and harvest patterns in each area. However, hunting pressure has been high and the joint State and Federal harvest quotas were exceeded despite using emergency orders and special actions to close seasons well in advance of published season dates. Over harvest occurred in the Kuzitrin River drainage of Unit 22D in 2003 and 2004, and in western Unit 22B in 2004. When the seasons were closed early by emergency order and special action in 2003 and 2004, hunters shifted their hunting activity to open season areas along the Nome road system, where the moose population cannot support additional hunting pressure. In May 2005, ADF&G issued an emergency order changing the State fall moose hunting seasons in Unit 22D to Sept. 1–14. This emergency order caused State and Federal harvest regulations to diverge, which could have led to a shift in harvest pressure to Federal public lands that can not support the additional pressure. However, in June 2005, WSA05-01 was submitted and adopted by the Federal Subsistence Board changing the harvest season in Unit 22D to Sept. 1–14.

In Nov. 2005, the Alaska Board of Game adopted the Sept. 1–14 season into permanent regulation. By shortening the season to the proposed two-week period and establishing a uniform season in all road-accessible areas, a potential over harvest situation may be avoided and hunting pressure reduced in the areas where serious concerns about declining moose populations exist. This proposal would also align State and Federal regulations.

**Existing Federal Regulations**

<p><i>Unit 22B, west of the Darby Mountains—1 bull by State registration permit. The combined State/Federal harvest may not exceed 23 moose. Quotas and any needed season changes will be announced by the area Field Office manager of the BLM, in consultation with NPS, and ADF&amp;G. Federal public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations.</i></p>	<p><i>Aug. 10–Sept. 23</i></p>
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Unit 22D, that portion within the Kougarok, Kuzitrin, and Pilgrim River drainages—1 bull by Federal registration permit. The combined State/Federal harvest may not exceed 33 moose. Federal public lands are closed to the taking of moose except by residents of Units 22D and 22C hunting under these regulations. Aug. 20–Sept. 30

Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek—1 bull by Federal registration permit. The combined State/Federal harvest may not exceed 8 moose. Aug. 20–Sept. 30

Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek—1 bull by Federal registration permit. The combined State/Federal harvest in Aug./Sept. and Dec may not exceed 8 moose. Federal public lands are closed to the taking of moose except by residents of Units 22C and 22D. Dec. 1–Dec. 31

### Proposed Federal Regulations

Unit 22, west of the Darby Mountains—1 bull by State registration permit. ~~The combined State/Federal harvest may not exceed 23 moose.~~ Quotas and any needed season changes will be announced by the area Field Office manager of the BLM, in consultation with NPS, and ADF&G. Federal public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations. ~~Aug. 10–Sept. 23~~  
**Sept. 1–Sept. 14**

Unit 22D, that portion within the Kougarok, Kuzitrin, and Pilgrim River drainages—1 bull by Federal registration permit. ~~The combined State/Federal harvest may not exceed 33 moose.~~ **Quotas and any needed season changes will be announced by the area Field Office manager of the BLM, in consultation with NPS, and ADF&G.** Federal public lands are closed to the taking of moose except by residents of Units 22D and 22C hunting under these regulations. ~~Aug. 10–Sept. 23~~  
**Sept. 1–Sept. 14**

Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek—1 bull by Federal registration permit. ~~The combined State/Federal harvest may not exceed 8 moose.~~ **Quotas and any needed season changes will be announced by the area Field Office manager of the BLM, in consultation with NPS, and ADF&G.** Aug. 20–Sept. 30  
**Sept. 1–Sept. 14**

Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek—1 bull by Federal registration permit. The combined State/Federal harvest in Aug./Sept. and Dec. may not exceed 8 moose. Federal public lands are closed to the taking of moose except by residents of Units 22C and 22D. Dec. 1–Dec. 31

## Existing State Regulations

<b>Species/bag limits Moose</b>	<b>Open season</b>
<i>Unit 22(D), that portion within the Kougarok, Kuzitrin and Pilgrim River drainages</i>	
<b>Resident Hunters</b>	<i>Sept. 1–Sept. 14</i>
<i>1 bull by registration permit only; or 1 antlered bull by registration permit only; during the period Jan. 1–Jan. 31, a season may be announced by emergency order</i>	<i>Jan. 1–Jan. 31 (To be announced)</i>
<b>Nonresident Hunters</b>	<i>No open season</i>
<i>Unit 22(D) Southwest, that portion west of the Tisuk River drainage, west of the west bank of the unnamed creek originating at the unit boundary opposite the headwaters of McAdam's Creek to its confluence with Canyon Creek, and west of the west bank of Canyon Creek to its confluence with Tuksuk Channel</i>	
<b>Resident Hunters</b>	<i>Sept. 1–Sept. 14</i>
<i>1 bull by registration permit only; or 1 antlered bull by registration permit only; during the period Jan. 1–Jan. 31, a season may be announced by emergency order</i>	<i>Jan. 1–Jan. 31 (To be announced)</i>
<b>Nonresident Hunters</b>	<i>No open season</i>

## Extent of Federal Public Lands

Federal public lands comprise approximately 16% Unit 22D and consist of 11% NPS and 5% BLM lands. (See **Unit 22 map**.)

## Customary and Traditional Use Determination

All rural residents of Unit 22 have a positive customary and traditional use determination for moose in Unit 22.

## Regulatory History

The Federal subsistence moose harvest in Unit 22D, for that portion within the Kuzitrin drainage, was restricted to antlered bulls in 1998 by the Federal Subsistence Board, due to a declining local moose population and heavy hunting pressure. The Federal Subsistence Board took action on two special action requests in 2001 (WSA01-09, WSA01-11), closing Federal public lands and modifying the seasons and harvest limits for the 2001 fall and winter seasons. These special actions were prompted, in part, by an ADF&G emergency order issued on July 3, 2001. In 2002, the Federal Subsistence Board adopted proposal WP02-34 to change the Federal subsistence moose hunting regulations in Unit 22 by defining new hunt areas, setting the current fall season to Sept. 1–30, setting the moose harvest limit, and establishing the combined State/Federal moose harvest quotas for the newly defined areas. In May 2005, ADF&G issued an emergency order changing the State fall moose hunting seasons in Unit 22D to Sept. 1–14 to help conserve the declining moose population. In June 2005, Special Action WSA05-01 requested that the harvest season for moose in Unit 22D be changed from Aug. 20–Sept. 30 to Sept. 1–14. This special action was adopted in June 2005 by the Federal Subsistence Board.

During the Nov. 2005 Alaska Board of Game meeting, the Board adopted the Sept. 1–14 season for Unit 22D into permanent regulation.

### **Biological Background**

Moose are thought to have started moving to the Seward Peninsula in the late 1930s, and by the late 1960s had become an established resident species. Numbers increased during the 1970s and 1980s (Persons 1998). The Unit 22 overall moose population ranged from 7,000 to 10,000 during the late 1980s. Declines caused by winter mortality and lower calf recruitment reduced the population to 5,000 to 7,000 animals during the 1990s.

ADF&G's management objective for moose in Unit 22D is 2,300-2,500 animals, with a minimum bull:cow ratio of 30:100 (Persons 2005, pers. comm.). The most recent census in 2002 estimated 1,595 moose in Unit 22D. Aerial moose censuses were conducted by ADF&G on the Kuzitrin, Kougarok and Pilgrim river drainages in 1988, 1993, and 1997 (Nelson 1995, Persons 1998). Aerial moose censuses revealed population estimates for the survey area of 1,096 in 1993, and approximately 1,251 in 1997, both of which represent more than a 35% decline from the 1988 moose survey of approximately 1,935 animals (Nelson 1995). The State closed the antlerless moose season for the Kuzitrin River drainage, along with several other area drainages, in 1997 to facilitate population recovery in the area. Based on aerial surveys conducted by ADF&G annually since 1998, the area population decline is continuing in the Kuzitrin River drainages with low calf survival and recruitment believed to be due primarily to predation (Persons 2005, pers. comm.). A Nov. 2000 ADF&G aerial composition survey found that the bull:cow ratio continues to be low at 16 bulls:100 cows (Persons 2005, pers. comm.). In addition, both hunter success and the overall harvest dropped in 2000, with concern cited as to a scarcity of mature bulls in the population.

In 2003 and 2004, fall composition surveys were conducted in the Kuzitrin drainage. The surveys found a much improved bull:cow ratio of 26:100 in 2003 and 30:100 in 2004, which ADF&G attributes to the reduction in moose harvest since the 33 bull harvest quota was adopted in 2002 (Persons 2005, pers. comm.). ADF&G has also observed an increase in the number of medium and large bulls. The calf:cow ratio, however, is still a concern; it was 15:100 in 2003 and 9:100 in 2004 (Persons 2005, pers. comm.). Based on these low ratios, recruitment is probably too low to maintain the population size (Persons 2005, pers. comm.). An accurate population estimate is not available at this time; however, a Unit 22D census is scheduled for March 2006.

Based on aerial surveys for the American and Agiapuk River drainages (Unit 22D remainder), there was a 35% population decline between 1988 and 1993. However, in 1997 the area population had stabilized at 578 moose with 22% calf recruitment (Persons 2005, pers. comm.). A fall 2000 ADF&G composition survey found 23 calves:100 cows and the bull:cow ratio met the management goal of 30 bulls:100 cows. At its Nov. 2001 meeting, the Alaska Board of Game decided to also restrict the seasons in this portion of Unit 22D, despite a relatively healthier moose population. The fall season was closed Sept. 15–30, to match the other portions of Unit 22D, and to prevent focusing hunting efforts on the American and Agiapuk River drainages when all the other areas would have been closed.

### **Harvest History**

Although moose have been present in Unit 22 for approximately 60 years, they rapidly became an extremely important food source for many Seward Peninsula residents, with high demand by hunters throughout the unit (Persons 2000). Gravel roads and navigable rivers provide easy access to suitable moose habitat. The annual harvest in Unit 22 overall has ranged from a low of 44 moose taken in 1972

to a high of 408 taken in 1986, and back down to <200 taken in the late 1990s (Persons 2000). Unit residents usually take at least 70% of the reported harvest annually. Most hunter effort over the years has occurred during August, September, and October, when access by road and river has been most favorable. However, the use of ATV's and other off-road vehicles is becoming more popular.

Residents of Unit 22 account for 77% of the reported moose harvest in Unit 22D since 1983 (ADF&G 2000). The reported moose harvest in Unit 22D declined from 126-196 taken in the mid-1980s, to 65-91 taken in the late 1990s (ADF&G 2000). Recent restrictions have reduced harvest further to 52 moose in 2004. Specifically, for the Kougarok, Kuzitrin, and Pilgrim river drainages, over the past five years, 87% of the reported moose harvest was taken by Unit 22 residents (Persons 2005, pers. comm.). For the portion of Unit 22D west of the Tisuk River and Canyon Creek, 90% of the reported moose harvest was taken by Unit 22 residents (Persons 2005, pers comm.).

In 2002, the fall registration hunt in the Kuzitrin drainage portion of Unit 22D had a harvest quota of 33 bulls, with 31 bulls actually harvested (Persons 2005, pers. comm.). In 2003, although the harvest quota was 33 bulls, the quota was exceeded with 37 bulls harvested (Persons 2005, pers. comm.). In 2004, the fall hunt was closed by emergency order on Sept. 10. The harvest quota was 33 bulls, however, the quota was once again exceeded with 40 bulls harvested (Persons 2005, pers. comm.).

Over the last few years, hunting pressure has been high and the joint State/Federal harvest quotas have been exceeded, despite using emergency orders and special actions to close seasons well in advance of published season dates. Over harvest occurred in the Kuzitrin River drainage of Unit 22D in 2003 and 2004, and in western Unit 22B in 2004. When the seasons were closed early by emergency orders/special actions in 2003 and 2004, hunters shifted their hunting activity to open season areas along the Nome road system that could not tolerate the additional hunting pressure.

These proposed changes were enacted by emergency order and special action during the fall of 2005, and managers were pleased with the results. Hunters distributed themselves more evenly, with less shifting, across the hunt areas, which reduced harvest pressure in the most accessible areas. Managers were able to monitor the hunt more effectively and close seasons without exceeding harvest quotas. Although the public regrets the decreased opportunity for moose hunting in the Nome area, there seems to be general understanding of and support for a uniform two-week season along the road system, as long as moose numbers are down.

### **Effects of the Proposal**

Moose populations in the areas under consideration have been depressed in recent years, are below ADF&G's management objectives, and are therefore a conservation concern. By shortening the season to two weeks and establishing a uniform season in all road accessible areas in Unit 22, it is hoped that another over harvest situation can be avoided and hunting pressure reduced in the areas where serious concerns about declining moose populations exist. This proposal would allow some moose harvest, while maintaining the overall moose population, which should help with recruitment and recovery of the population to desired levels. This proposal would also align State and Federal regulations.

If this proposal were adopted, it should help eliminate over harvest in areas where the existing seasons are too long for the established harvest quotas. It will also help prevent hunters from shifting their efforts from closed areas to open areas along the road system that cannot withstand an increase in harvest. The shorter season will cause many hunters to compete for a limited number of moose.

Proposal WP06-40 also requests that the area field office manager of the BLM—after consultation with the NPS and the ADF&G—determine needed season changes, which would create a more flexible and responsive management system and benefit the health of the moose population. Although this is true, the intent of determining season changes was to allow the manager to close the moose season when the harvest quota is reached.

If this proposal is adopted, it would continue the use of Federal registration permits and could result in possible over harvest, as reporting would go to two separate agencies and could hinder timely decisions regarding season closures.

If this proposal is adopted, it could cause problems with the winter season in Unit 22D. Currently, the winter season is linked to the fall season in Unit 22D, that portion west of the Tisuk River drainage and Canyon Creek. The two seasons have a combined eight moose quota. Changing the season language to remove the quota during the fall season may be problematic, as the winter season quota will still be in effect.

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<i>WP06-41 Executive Summary</i>	
<b>General Description</b>	Requests the use of a designated hunter permit for muskoxen in Unit 22. <i>Submitted by the Seward Peninsula Muskoxen Cooperators Group.</i>
<b>Proposed Regulation</b>	<p><b>Unit 22–Muskox</b></p> <p><i>A Federally qualified subsistence user (recipient) may designate another Federally qualified subsistence user to take muskoxen on his or her behalf unless the recipient is a member of a community operating under a community harvest system. The designated hunter must get a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients in the course of a season*, but have no more than two harvest limits in his/her possession at any one time, except in Unit 22E where residents of Wales and Shishmaref acting as a designated hunter may hunt for any number of recipients, but have no more than four harvest limits in his/her possession at any one time.</i></p> <p>*Note: The proponent indicated that his initial proposal was written in error—the intent was to request that a designated hunter may hunt for any number of recipients, not to limit it to only one other recipient in the course of a season, as was printed in the proposal book.</p>
<b>Seward Peninsula Regional Council Recommendation</b>	<b>Support.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATION WP06-41

### SEWARD PENINSULA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support WP06-41.** Adopting a designated hunter system would produce a harvest system more in line with traditional harvest and sharing practices.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-41**

**Support** the proposal as recommended by the Seward Peninsula Subsistence Regional Advisory Council.

**Justification**

Adopting a designated hunter system would produce a harvest system more in line with traditional harvest and sharing practices. It would improve the efficiency of the hunt, decrease the cost of hunting, and provide more opportunity to meet subsistence needs from Federal public lands. There would be no impact to non-Federally qualified subsistence users, as Federal public lands in Unit 22 are closed to non-Federally qualified subsistence users. This would not affect other users hunting on State and private lands, since this change would take place on Federal public lands only. There are no conservation concerns, as the Federal/State quotas are managed with consideration to percentage of Federal public lands and the muskoxen herd size, and the total harvest is expected to remain within the allowable harvest quotas.

## STAFF ANALYSIS WP06-41

### ISSUES

Proposal WP06-41, submitted by the Seward Peninsula Muskoxen Cooperators Group, requests the use of a designated hunter permit for muskoxen in Unit 22.

### DISCUSSION

This proposal comes from the Seward Peninsula Muskoxen Cooperators Group (Cooperators), which includes a diverse cross-section of stakeholders, including representatives of hunt area villages and representatives from the Alaska Department of Fish and Game (ADF&G), Northern Norton Sound Fish and Game Advisory Committee, National Park Service (NPS), U.S. Fish and Wildlife Service (FWS), Kawerak, Inc., Northwest Arctic Subsistence Regional Advisory Council, Seward Peninsula Subsistence Regional Advisory Council, Reindeer Herder's Association, hunting guides in the region and nonconsumptive users such as wildlife viewers. At their June 2005 meeting, 40 people were in attendance. The Cooperators have worked for the past ten years to manage the muskoxen herd in the Seward Peninsula. They have effectively recommended management strategies that enabled the population to more than double, allowing significantly increased harvests. The Alaska Board of Game and the Federal Subsistence Board have consistently listened to the Cooperators' management recommendations and relied heavily on advice from this group (ADF&G 2005a:1).

The proposed regulation would allow the use of a designated hunter permit for muskoxen in Unit 22 by Federally qualified subsistence users. A Federally qualified subsistence user—the recipient of the permit—would designate another Federally qualified subsistence user to take muskoxen on his or her behalf, unless the recipient is a member of a community operating under a community harvest system. The designated hunter would be required to get a designated hunter permit and to return a completed harvest report. The designated hunter would be able to hunt for any number of recipients during the season, but would not be able to have more than two harvest limits in his/her possession at any one time. In Unit 22E, residents of Wales and Shishmaref may get a designated hunter permit for any number of recipients, but may have no more than four harvest limits in his/her possession at any one time.

The proponent differentiated between Unit 22E and the rest of Unit 22 because the muskoxen population continues to grow in Unit 22E, whereas it has leveled off somewhat in the other subunits. The overall growth rate of the entire muskoxen herd since it was introduced in 1970 has averaged 14%. Since 2000, however, the growth rate slowed to 5.5% a year. The largest increases in herd size occurred in Units 22E and 22B (ADF&G 2005a:2).

The distribution of Federal public lands to State lands is about 50/50 in Unit 22E, which is reflected by current Federal/State permit distribution for the 2005/06 season. In other subunits, the majority of lands are State lands and the majority of permits are State permits.

For the 2006/07 regulatory year, the Cooperators recommend that 25% of Unit 22B permits be allocated to the Federal program; none in Unit 22C, 14% in Unit 22D, 33% in Unit 22E, and 33% in southwest Unit 23. Federally qualified subsistence users in Unit 22E are in closer proximity to Federal public lands than the other subunits. Unit 22E presents a good opportunity to implement a regulation that more closely reflects traditional practices consistent with conservation and cooperative management objectives (ADF&G 2005a and b).

Proposal WP06-55 also requests a designated hunter permit for muskoxen, but that request is for Unit 23, south of Kotzebue Sound and west of and including the Buckland River drainage.

### Existing Federal Regulation

#### Unit 22—Muskox

There are no Federal designated hunting permits currently allowed in Unit 22 for muskoxen.

### Proposed Federal Regulation

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

\*Note: The proponent indicated that his initial proposal was written in error—the intent was to request that a designated hunter may hunt for any number of recipients, not to limit it to only one other recipient in the course of a season, as was printed in the proposal book.

### Existing State Regulation

In Jan. 2006, the Alaska Board of Game considered a proposal similar to WP06-41 that would have allowed for proxy hunting under State regulations for muskoxen in Unit 22. The Board voted to oppose adding muskoxen to the list of species that can be taken under the State's proxy hunting system.

### Extent of Federal Public Lands

Federal public lands comprise approximately 85% of Units 22B, 22D, and 22E and consist of 2% NPS and 19% BLM lands in Unit 22B; 11% NPS and 5% BLM lands in Unit 22D; and 49% NPS lands in Unit 22E managed as part of the Bering Land Bridge National Preserve. (See **Unit 22 Map**).

### Customary and Traditional Use Determinations

UNIT	CUSTOMARY AND TRADITIONAL USE DETERMINATION FOR MUSKOX
Unit 22B west of the Darby Mountains	Rural residents of Units 22B and 22C
Unit 22B remainder	Rural residents of Unit 22B
Unit 22D, that portion within the Kougarok, Kuzitrin, and Pilgrim River drainages	Rural residents of Units 22D (excluding St. Lawrence Island), 22C, and White Mountain
Unit 22D remainder	Rural residents of Unit 22D excluding St. Lawrence Island
Unit 22E	Rural residents of Unit 22E excluding Little Diomed Island

## Regulatory History

Federal subsistence management regulations allow for a designated hunter permit system (§Subpart A.6.a[2]). The Designated Hunter Task Force, comprised of Federal subsistence regional advisory council members, Federal agency staff, and ADF&G staff, was created to address how to implement the designated hunter permits. The Task Force submitted their report in Oct. 1994 (USFWS 1994). The Task Force report describes the designated hunter option as one that enables a designated hunter to harvest wildlife for one or more other qualified subsistence users who have the appropriate licenses, tags, and permits, but who do not wish, or are not able, to harvest the resource themselves. The Task Force report noted that the option to allow for a designated hunter permit addressed the subsistence need for efficient hunting practices, unencumbered sharing of harvested resources, and conservation of wildlife resources. The designated hunter option provides “the opportunity for qualified rural Alaska subsistence users to obtain subsistence resources without harvesting the resources themselves and facilitates the customary and traditional use of wildlife for sustenance, bartering, and for the continuation of traditional ceremonies (USFWS 1994:25).”

The Designated Hunter Task Force summarized the designated hunter option as follows:

- Provides for Federally qualified subsistence hunters to harvest subsistence resources for other subsistence users;
- Both hunters and non-hunting Federally qualified subsistence users must obtain licenses and required tags and permits;
- To designate a hunter, the person to whom the tags and permits were originally issued must print their name, sign, date, give the name of their community or area of residence, and enter the number of their current valid hunting license on each tag and permit;
- Tags and permits can be distributed among designated hunters;
- By using existing license, tags, and permits, no additional administration or harvest monitoring is required;
- Option is not affected by community size or character;
- Option will work with any species;
- Option will not accommodate party hunting (USFWS 1994:32).

After review of “The Report of the Designated Hunter Task Force, Oct. 1994,” the Federal Subsistence Board developed an administrative framework to implement three designated hunter proposals for Southeast Alaska in 1995. This work set the precedent for implementation of other designated hunter regulations. There is a designated hunter permit in place for muskoxen in Unit 26C. Unlike the State proxy hunter system where the requestor must be 65 years of age or older, 70% physically disabled, or blind, in the Federal system any Federally qualified subsistence user can designate another Federally qualified subsistence hunter to hunt for him or her with the appropriate license, tags, and permits.

Currently in Unit 22, muskox annual harvest quotas and any needed closures are announced by the superintendent of the Western Arctic National Parklands, in consultation with ADF&G and BLM. In 2005/06, the allowable harvests vary by subunit (**Tables 1 and 2**).

**Table 1.** Seward Peninsula 2005/06 muskoxen allowable harvest levels and permit numbers (Adkisson 2006, pers. comm.).

Unit	No. of Animals	Harvest Level	Allowable Harvest Based on Cooperators' Recommendation	Permits Available
22B	326	0.05	16	21
22C	220	0.03	7	7
22Dsw	158	0.05	8	11
22Drem	638	0.05	32	43
22E	863	0.08	69	92
23SW	182	0.05	9	12
<b>TOTAL</b>	<b>2,387</b>		<b>141</b>	<b>186</b>

<sup>1</sup>The number of animals is based on numbers from the 2005 count.

**Table 2.** State and Federal 2005/06 muskox permit allocation and summary of allowable harvest (Adkisson 2006, pers. comm.).

Unit	No. State Permits	No. Fed Permits	PERMIT TOTALS	Allowable Cow Harvest	Allowable Total Harvest
22B	15	6	<b>21</b>	0	16
22C	7	0	<b>7</b>	0	7
22Dsw	11	0	<b>11</b>	3 <sup>a</sup>	8
22Drem	37	6	<b>43</b>	13 <sup>a</sup>	32
22E	46	46	<b>92</b>	35 <sup>b</sup>	69
23SW	8	4	<b>12</b>	2 <sup>a</sup>	9
<b>TOTAL</b>	<b>124</b>	<b>62</b>	<b>186</b>	<b>53</b>	<b>141</b>

<sup>a</sup> The allowable cow harvest in hunt areas 22Dsw, 22D remainder and 23sw is based on 2%.

<sup>b</sup> The allowable cow harvest in hunt area 22E is based on 4%. The total number of State permits to be issued in Unit 22E include eight drawing permits and 38 Tier II permits. The total number of Federal permits to be issued in 22E includes one ceremonial permit to Wales.

## Cultural Information

Most muskoxen are taken in March, when access is best and the meat quality is good. Muskoxen are easier to hunt in many ways than most large mammals, because when they are threatened, they cluster together and stand their ground. Hunters can easily approach and take whichever animal they choose. The majority of hunters travel to the area in winter months by snowmachine. In summer months, they use boats and/or four-wheelers/atvs. Nome residents primarily use four-wheelers, followed by highway vehicles along the road system.

Sharing meat has been a long-standing tradition in Inupiaq culture. In particular, the elders, widows, disabled, and homes without hunters have needed to be cared for, and often the less successful hunters would also ask for a share of the hunt. Community solidarity depended on cooperative hunting as well as cooperative sharing of the meat (Spencer 1959; Spencer 1984).

Today these customs continue, but there have been some shifts. Where traditionally all able-bodied males hunted, today not everyone can hunt when necessary. There may be times when a hunter is unable to

hunt because of job constraints. Their jobs may require them to be out of town or they may be too busy to hunt. As a result, today there are other reasons besides being sick, elderly, or disabled in determining why one might want or need someone else to hunt under a designated hunter provision. Often someone might provide money for gas and supplies to their designated hunter. The institution of harvest limits and seasons have caused traditional hunting practices to shift (Armstrong 2005, pers. comm., Adkisson 2006, pers. comm.).

Muskox hunting in Unit 22 often requires traveling long distances by snowmachine. Muskoxen have become increasingly costly to access with the rising cost of fuel, thus it is even more cost efficient to have one hunter be designated to take more than one muskox. In traditional Inupiaq culture, hunters harvest only what they need and what they can properly care for, and then share the harvest with the community. If the hunter does not properly handle the meat or does not share the meat with the community, then the Inupiaq believe that it will hurt the hunter. The current hunt structure of individual permits is contrary to efficient and customary and traditional harvest practices (Armstrong 2005, pers. comm., Adkisson 2006, pers. comm.).

### **Effect of the Proposal**

If this proposal is adopted, allowing designated hunting for muskoxen should not have any significant effect on the muskoxen population, nor should it significantly change overall harvest patterns. Harvest success and the number of harvested animals are expected to only slightly increase, if at all; however, the total harvest will remain within the allowable harvest quotas. In Units 22B and 22D, no change is expected. For Unit 22E, current harvest allocation guidance from the Cooperators allows up to a total of 23 muskoxen that could be harvested by designated hunters from Wales and Shishmaref from a total allowable harvest of 69 muskoxen. The majority of harvested animals could still be taken by hunters hunting under a State permitting system where applicable. The individual harvest limit would remain at either one bull or one muskox, depending on the hunt area; the seasons and harvest quotas would not be affected.

Adopting a designated hunter system would benefit Federally qualified subsistence users by allowing a harvest system more in line with traditional harvest and sharing practices. It will improve the efficiency of the hunt, decrease the cost of hunting, and provide more opportunity to meet subsistence needs from Federal public lands.

In Unit 22E, up to four muskoxen could be taken by a Federally qualified designated hunter. There is a concern that this could cause some impact on the muskoxen population; however, the bulk of this harvest will still likely come from State managed lands under State regulations. There is the potential for taking multiple animals from a single group, rather than a single harvest multiple times from the same group, but the harvest quota is rather conservative (46 permits for 863 animals—see **Table 1**). Such a harvest is not anticipated to have an effect on the muskoxen population. **Table 1** provides the number of muskoxen in Unit 22 in 2005, the 2005 allowable harvest, the projected number of permits, and the permit allocation by hunt between the State and Federal programs. Except for 1995, the quota has never been reached. The success rate has varied from between 15% and 33% (Adkisson 2006, pers. comm.).

There would be no impact to non-Federally qualified subsistence users as Federal public lands in Unit 22 are closed to non-Federally qualified subsistence users. Since this change would take place on Federal public lands, it will not affect other users hunting on State and private lands. It should also be emphasized that the muskoxen hunt/harvest is a jointly managed by the State and Federal programs. Overall harvest quotas and permit allocations between the State and Federal programs generally follow the recommendations of the Seward Peninsula Muskoxen Cooperators Group and have been adopted by

the Alaska Board of Game and the Federal Subsistence Board. The ratio of State to Federal permits, as recommended by the Cooperators, is an allocation of harvest between the two programs. In hunt areas such as Unit 22B, 22D, and 23sw, where muskoxen numbers are lower, the percentage of Federal public lands are also lower and consequently the number of Federal permits is lower. The designated hunter provisions are more restrictive in these units to ensure that the harvest does not result in over harvest or exceed the allocation guidelines.

However, in Unit 22E where the muskoxen are most numerous, the percentage of Federal public lands is larger (State/Federal lands are about 50/50) and the animals are distributed fairly equally across the area, thus the Federal designated hunter provisions can afford to be more liberal. Additionally, in Unit 22E, following the recommendations of the Cooperators, only one third of the permits is allocated to the Federal program for the 2006/07 hunt, a decrease from 50% in 2005/06. Therefore, the proposal for allowing designated permits will enable Federally qualified subsistence users to more efficiently and perhaps more quickly fill their quota. However, with adequate reporting, any significant overage that could affect the State managed hunt can be prevented. If there are problems with the designated hunter provision, the proponents will promptly bring a new proposal to the Federal Subsistence Board. It should also be noted that under State laws and regulations, hunt areas in Units 22B, 22C, 22D, and 23sw are under Tier II and are closed to sport hunting. However, in Unit 22E the growth of the muskoxen population has enabled the State to move out of Tier II and into a Tier I registration hunt, thus expanding hunting opportunities on State managed land. Also in Unit 22E, there has been a limited State sport hunt on older bulls on State managed lands for the last several years. That opportunity continues and will be expanded in 2006 under recent actions taken by the Alaska Board of Game. This proposal will not affect the expanded opportunities in Unit 22E on State managed lands.

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<b>WP06-42 through WP06-52 Executive Summary</b>					
<b>General Description</b>	Requests customary and traditional use determinations for beaver, Arctic fox, red fox, hare, lynx, marten, wolverine, spruce grouse, ptarmigan (rock and willow), ground squirrel, and porcupine. <i>Submitted by Kawerak, Inc.</i>				
<b>Proposed Regulations</b>	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"><b>Unit 22</b></td> <td style="width: 50%; vertical-align: top;"><b>Customary and Traditional Use Determination</b></td> </tr> <tr> <td style="vertical-align: top;"><i>Beaver, Arctic fox, red fox, hare, lynx, marten, wolverine, grouse (spruce), ptarmigan (rock and willow), ground squirrel, and porcupine</i></td> <td style="vertical-align: top;"><i>All rural residents of Unit 22</i></td> </tr> </table>	<b>Unit 22</b>	<b>Customary and Traditional Use Determination</b>	<i>Beaver, Arctic fox, red fox, hare, lynx, marten, wolverine, grouse (spruce), ptarmigan (rock and willow), ground squirrel, and porcupine</i>	<i>All rural residents of Unit 22</i>
<b>Unit 22</b>	<b>Customary and Traditional Use Determination</b>				
<i>Beaver, Arctic fox, red fox, hare, lynx, marten, wolverine, grouse (spruce), ptarmigan (rock and willow), ground squirrel, and porcupine</i>	<i>All rural residents of Unit 22</i>				
<b>Seward Peninsula Regional Council Recommendation</b>	<b>Defer.</b>				
<b>Yukon-Kuskokwim Delta Regional Council Recommendation</b>	<b>Defer.</b>				
<b>Interagency Staff Committee Recommendation</b>	<b>Defer.</b>				
<b>ADF&amp;G Comments</b>	See note on page 7.				
<b>Written Public Comments</b>	<b>None.</b>				

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-42 TO 52**

**SEWARD PENINSULA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Defer** the proposal. More information needs to be gathered about the uses of the units surrounding Unit 22.

**YUKON-KUSKOKWIM DELTA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Defer** the proposal. The Yukon-Kuskokwim Delta Subsistence Regional Advisory Council recommends these proposals be deferred. Hunters from this area use these species in the Seward Peninsula area. There is a need to gather more information on this issue before a decision is made. These proposals should be deferred to give the adjacent Regional Advisory Councils and the public the opportunity to provide information regarding the uses of beaver, Arctic fox, red fox, hare, lynx, marten, wolverine, grouse, ptarmigan, ground squirrel, and porcupine by residents from the surrounding units in Unit 22. Deferring these proposals would also allow staff more time to gather information about the uses by people living outside of Unit 22.

**WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Defer** to the home region. Several Council members shared information that residents of Kaltag do travel and hunt in Unit 22. They hunt caribou, bear, and may have traplines into the unit. The Council recommended the Office of Subsistence Management work the community of Kaltag to find out whom from the Western Interior Region hunts in Unit 22. The Council understood that home region wants more information and is not trying to exclude subsistence users from neighboring regions.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-42 TO 52**

**Defer** the proposals as recommended by the Seward Peninsula, Yukon-Kuskokwim, and Western Interior Alaska Subsistence Regional Advisory Councils.

**Justification**

These proposals should be deferred to give the adjacent Regional Advisory Councils and the public the opportunity to provide information regarding the uses of beaver, Arctic fox, red fox, hare, lynx, marten, wolverine, grouse, ptarmigan, ground squirrel, and porcupine in Unit 22 by residents from the surrounding units in Unit 22. Deferring these proposals would also allow staff more time to gather and analyze information about the uses by people living outside of Unit 22.

**STAFF ANALYSIS  
WP06-42 through 52**

**ISSUES**

Proposals WP06-42 through 52, submitted by Kawerak, Inc. in Nome, request customary and traditional use determinations for beaver, Arctic fox, red fox, hare, lynx, marten, wolverine, spruce grouse, ptarmigan (rock and willow), ground squirrel, and porcupine. Proposals WP06-51 and 52 also requests year-round seasons and no harvest limits for ground squirrel and porcupine.

**DISCUSSION**

The Federal Subsistence Board has never made customary and traditional use determinations in Unit 22 for beaver (WP06-42), Arctic fox (WP06-43), red fox (WP06-44), hare (WP06-45), lynx (WP06-46), marten (WP06-47), wolverine (WP06-48), grouse (spruce) (WP06-49), ptarmigan (rock and willow) (WP06-50), ground squirrel (WP06-51), and porcupine (WP06-52) and adopted the determinations from the State. Beaver, Arctic fox, red fox, hare, lynx, marten, and wolverine have a determination of all rural residents because the determination was never made, thus all rural residents are eligible to take these resources under subsistence regulations in Unit 22. Grouse and ptarmigan had a determination made by the State that was adopted by the Federal Subsistence Board. That determination was broad in scope and included rural residents of Units 11, 13, 15, 16, 20D, 22, 23, and Chickaloon. All rural residents statewide have a customary and traditional use determination to harvest these species in Unit 22. Kawerak, Inc., would like specific determinations to be made for these species, so that in times of shortage, the users in the region would have priority for these species. Very little specific data are available for these species, thus the proposals have been combined into one analysis.

Proposals WP06-51 and 52 also requested an unlimited harvest and a year-round season for ground squirrels and porcupines. Ground squirrels and porcupines are considered “unclassified wildlife” and as such are not listed in the Federal regulations book. Any wildlife not listed in the Federal regulations book is considered “unclassified.” As “unclassified wildlife” they automatically have no harvest limits and no closed season. Thus, the proponent has requested a harvest limit and season for squirrels and porcupines that already exists. As a result, there will be no consideration of that portion of the proponent’s proposals that deal with seasons and harvest limits for porcupines and squirrels.

**Existing Federal Regulation**

**Unit 22**

*Beaver, Arctic fox, red fox, hare, lynx, marten, and wolverine  
Grouse (spruce) and ptarmigan (rock and willow)*

**Customary and Traditional Use Determination**

*All rural residents  
Rural residents of Units 11, 13, 15, 16, 20D, 22, 23, and Chickaloon*

## Proposed Federal Regulation

### Unit 22

*Beaver, Arctic fox, red fox, hare, lynx, marten, wolverine, grouse (spruce), ptarmigan (rock and willow), ground squirrel, and porcupine*

### Customary and Traditional Use Determination

*All rural residents of Unit 22*

## Extent of Federal Public Lands

Federal public lands comprise 32% of Unit 22 and consist of 18% BLM, 12% NPS, and 2% FWS lands. The NPS managed lands are part of the Bering Land Bridge National Preserve. The FWS lands are managed as a small portion of the Yukon Delta National Wildlife Refuge in Unit 22A (see **Unit 22 Map**).

## Regulatory History

The Federal Subsistence Board has never addressed customary and traditional use determinations for beaver, Arctic fox, red fox, hare, lynx, marten, wolverine, grouse (spruce), ptarmigan (rock and willow), ground squirrel, and porcupine in Unit 22. For all of these resources except squirrel and porcupine, the customary and traditional use determinations were adopted from the State regulations. When no customary and traditional use determination has been made, all rural residents statewide are eligible to harvest the resource. The Federal Subsistence Board determined in 1995 that certain wildlife, such as squirrels, would be considered “unclassified wildlife” and would not appear in the Federal regulations book. No determinations or regulations are in the Federal regulation book specifically for squirrel and porcupine, thus they are considered “unclassified wildlife.”

## 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 Federal Subsistence Board makes customary and traditional use determinations based on an 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)).

Long-term, consistent pattern of use

Beaver, Arctic fox, red fox, hare, lynx, marten, wolverine, Arctic ground squirrel, spruce grouse, ptarmigan (rock and willow), and porcupine are all known to have been hunted and trapped by the residents of Unit 22 customarily and traditionally for many centuries, although not all species are available throughout the unit (ADF&G 2001, Nelson 1899, Scott and Kephart 2002, Ray 1984). These resources are characters in many legends and comprise ancient and contemporary Native folklore (Kaplan 1988, Nelson 1899). Furbearers have characteristically been used in clothing and incorporated into Native art as symbols in drawings, etchings, figurines, masks, amulets, etc. (Ray 1984, Nelson 1899).

*Beaver:* Beaver are harvested by the residents of Shishmaref, Wales, Brevig Mission, Teller, Mary's Igloo, King Island, Nome, Solomon, Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, Saint Michael, and Stebbins. Beaver have only recently colonized the western Seward Peninsula in Unit 22E and are likely not harvested much in these areas (Gorn 2005, pers. comm.). Beaver are believed to be increasing in Unit 22E in the Serpentine River drainage (Scott and Kephart 2002). Beaver are not found on St. Lawrence Island (Ahmasuk 2005, pers. comm., ADF&G 2001). Ray (1975:75) indicated that the residents of "Atuik," near present day Stebbins traded beaver with the early Russian Explorer, Khromchenko, on the expedition of 1822. Nelson (1899) noted tools made from beaver teeth.

*Arctic Fox:* Arctic Fox are harvested by the residents of Shishmaref, Wales, Little Diomed, Gambell, Savoonga, Brevig Mission, Teller, Mary's Igloo, King Island, Nome, Solomon, Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik Unalakleet, Saint Michael and Stebbins (Ahmasuk 2005, pers. comm., ADF&G 2001). Arctic fox, like red fox, have characteristically been used in clothing and incorporated into Native art as a symbol in drawings, etchings, figurines, masks, amulets, etc. Popov (1761) reported that Arctic Fox were plentiful in the Seward Peninsula. The residents of Unit 22 depend upon several key marine mammal species including polar bear. It is well known that Arctic fox accompany polar bears into the marine environment to scavenge from its kills. As such, Native hunters and trappers were able to harvest the Arctic fox upon the frozen ocean as well as on land (Ahmasuk 2005, pers. comm.).

*Red Fox:* Red fox are harvested by residents of Shishmaref, Wales, Little Diomed, Gambell, Savoonga, Brevig Mission, Teller, Mary's Igloo, King Island, Nome, Solomon, Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, Saint Michael, and Stebbins (Ahmasuk 2005, pers. comm., ADF&G 2001). Red fox accompany polar bear and are resident on Saint Lawrence Island and the marine communities in Unit 22. Ray (1975:118) indicated that fox neck fur was used as ruffs and trimmings by the Eskimos prior to the Siberian fur trade.

*Hare:* Hare are harvested by the residents of Shishmaref, Wales, Little Diomed, Gambell, Savoonga, Brevig Mission, Teller, Mary's Igloo, King Island, Nome, Solomon, Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, Saint Michael, and Stebbins (Ahmasuk 2005, pers. comm., ADF&G 2001). Hare are not resident on Saint Lawrence nor Little Diomed Island, but they stray to the islands occasionally and are taken by residents occasionally. Hare have traditionally been used in clothing and incorporated into Native art as symbols in drawings, etchings, figurines, masks, amulets, etc. Ray (1975:49) indicated that the Eskimos of the Bering Strait traded "vests" of young caribou and [rabbit] Alpine hare, with agents of the *Billings Expedition* of 1778 to 1791.

*Lynx:* Lynx are harvested by the residents of Shishmaref, Wales, Brevig Mission, Teller, Mary's Igloo, King Island, Nome, Solomon, Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, Saint Michael, and Stebbins (Ahmasuk 2005, pers. comm., ADF&G 2001). The lynx population grows and declines in accordance to the size of the hare population, its major food source. In Unit 22A, lynx are common and increasing. In Unit 22B, lynx are increasing, although they are still somewhat scarce (Scott

and Kephart 2002). Lynx are not resident on Saint Lawrence nor Little Diomed Island. Ray (1975:54) described uses of lynx in clothing and in art.

*Marten:* Marten are harvested by residents in Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, Saint Michael, and Stebbins (Ahmasuk 2005, pers. comm., ADF&G 2001). Marten are not resident throughout all of Unit 22 and occur most frequently in the forested areas of the Seward Peninsula and eastern Norton Sound. Ray (1975:54) indicated that marten were traded and acquired by King Island Natives who got them from the mainland.

*Wolverine:* Wolverine are harvested by the residents of Shishmaref, Wales, Brevig Mission, Teller, Mary's Igloo, King Island, Nome, Solomon, Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, Saint Michael, and Stebbins (Ahmasuk 2005, pers. comm., ADF&G 2001). Wolverine are not resident on Saint Lawrence or Little Diomed Island, but should be included as they stray to the islands in enough frequency to warrant a customary and traditional use determination. Ray (1975:118) indicated that wolverine fur was used for trimming around the face as it does not freeze.

*Grouse:* Grouse are harvested by residents in Shishmaref, Wales, Brevig Mission, Teller, Mary's Igloo, King Island, Nome, Solomon, Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, Saint Michael, and Stebbins (Ahmasuk 2005, pers. comm., ADF&G 2001). Grouse are not resident on Saint Lawrence or Little Diomed Island. Trigg (unpublished) indicated that 186 spruce grouse were harvested by Eastern Norton Sound residents in 2002.

*Ptarmigan:* Ptarmigan are harvested by the residents of Shishmaref, Wales, Brevig Mission, Teller, Mary's Igloo, King Island, Nome, Solomon, Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, Saint Michael, and Stebbins (Ahmasuk 2005, pers. comm., ADF&G 2001). Ray (1975:146) indicated that the Eskimos from Kuksuktopaga at the time relied heavily on ptarmigan and a little oil (presumably seal oil). As with other wild birds, ptarmigan wing and leg bones comprised the raw materials for small hooks or darts, as those bones are lighter but tougher and harder than mammal bones (Nelson 1899). Harvest surveys did not specifically ask about ptarmigan use, thus evidence about ptarmigan harvest is sparse.

*Squirrel.* Squirrel are harvested by residents in Shishmaref, Wales, Brevig Mission, Teller, Mary's Igloo, King Island, Nome, Solomon, Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, Saint Michael, and Stebbins (Ahmasuk 2005, pers. comm., ADF&G 2001). Ray (1975:61) indicated that squirrels were customarily caught by hand by the Eskimos of the Bering Strait as explorers arrived in Alaska. Squirrel meat has long been a staple food resource.

*Porcupine.* Porcupine are harvested by Shishmaref, Wales, Brevig Mission, Teller, Mary's Igloo, King Island, Nome, Solomon, Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, Saint Michael, and Stebbins (Ahmasuk 2005, pers. comm., ADF&G 2001). Porcupine are not resident on Saint Lawrence or Little Diomed Island. Very little documented evidence exists to show porcupine use. Quills are used for beading purposes (Ahmasuk 2005, pers. comm.).

**Table 1** summarizes the communities known to harvest the resources under consideration in Proposals WP06-42-52. There also is some indication that some of these resources may be taken by Federally qualified rural residents living outside of Unit 22 from surrounding adjacent or near-by units (Units 18, 21E, 23, and 24), particularly those that might be trapping in Unit 22 or hunting caribou (Grishkowsky 2006).

**Table 1.** Summary table of Unit 22 residents’ uses of beaver, Arctic fox, red fox, hare, lynx, marten, wolverine, spruce grouse, ptarmigan (rock and willow), ground squirrel, and porcupine.

RESOURCE CUSTOMARILY AND TRADITIONALLY USED	COMMUNITY
beaver, lynx, wolverine, grouse (spruce), ptarmigan (rock and willow), ground squirrel, and porcupine	Shishmaref, Wales, Brevig Mission, Teller, Mary’s Igloo, King Island, Nome, Solomon, Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, Saint Michael, and Stebbins
hare, Arctic fox, red fox	Shishmaref, Wales, Brevig Mission, Teller, Mary’s Igloo, King Island, Nome, Solomon, Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, Saint Michael, and Stebbins Little Diomedede, Gambell, and Savoonga
marten	Council, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, Saint Michael, and Stebbins

Seasons of use

All of the furbearers in these proposals are harvested generally in the fall and winter months when the pelts are prime and most useful for clothing. The natural seasonal changes shaped much of the trapping traditions that are used for many furbearing animals. Numerous ingenious traditional devices meant to strangle, instantly kill, harvest by leg hold, or be ingested by the furbearing animal were devised for capture. Dog teams allowed easier access to distant lands where furbearers were the reason for many pre-historic, historic and contemporary trapping journeys and were relayed in oral traditions (Ahmasuk 2005, pers. comm., Nelson 1899).

*Beaver:* Beaver peltage remains sellable throughout the year but becomes most useful for garments in fall and winter months (Ahmasuk 2005, pers. comm.).

*Arctic fox:* Arctic fox are harvested November to April of each year (Ahmasuk 2005, pers. comm.).

*Red fox:* Red fox are harvested from November to April (Ahmasuk 2005, pers. comm.).

*Hare:* Hare populations can fluctuate widely and enjoy periods of great abundance and periods of low abundance. Despite those fluctuations no closed season and no limits are in place that provide for subsistence.

*Lynx:* Lynx are harvested from September to April (Ahmasuk 2005, pers. comm.).

*Marten:* Marten are harvested from November to April (Ahmasuk 2005, pers. comm.).

*Wolverine:* Wolverine are harvested from September to April (Ahmasuk 2005, pers. comm.).

*Grouse:* Grouse hunting occurs primarily in the fall. Trigg (unpublished) indicated that 177 were harvested in the fall and 9 harvested in the spring of 2002.

*Ptarmigan:* Ptarmigan typically inhabit every area of the Seward Peninsula and Norton Sound Region throughout the year. The eggs are harvested in the spring, and adult and juvenile birds are harvested in the fall and winter. It is likely that ptarmigan hunting occurred throughout the year with a very brief period in the summer when ptarmigan were not harvested. Ptarmigan are key bird harvests in the Bering Strait and Norton Sound region (Ahmasuk 2005, pers. comm.).

*Porcupine:* Little information is available as to when porcupine are harvested. It is likely that porcupine hunting likely occurred throughout the year with a very brief period in the summer when porcupine were not harvested (Ahmasuk 2005, pers. comm.).

#### Methods and means

*Furbearers:* Typical snares made from the leather or sinew of animals, baleen, or other fibrous materials were the materials for which to make snares and rarely lasted more than a season and were replaced often. Today, man-made materials such as single and multi-strand wire are available to construct snares and seldom need replacing except when lost and can be replaced for very little cost. In rural villages any available materials are used to construct tools for subsistence living as stores are distant and money is limited. Typical leg hold traps may be used or modern conibear type traps to trap furbearers as well (Ahmasuk 2005, pers. comm., Nelson 1899, Ray 1984).

*Ptarmigan:* Sling shots or bolas were used to harvest ptarmigan. It is difficult to determine, but it is likely snaring may have been the principle means to harvest ptarmigan. Shotguns or rifles are now used to harvest ptarmigan. Nets have also been used to harvest ptarmigan (Ahmasuk 2005, pers. comm.).

*Porcupine:* Porcupine is perhaps the one land mammal which requires so little in the form of tools and only the most basic weapons for harvest such as a stick or similar object for use as a club (Ahmasuk 2005, pers. comm.).

#### Areas of use

Beaver are plentiful and without question available within close proximity to villages and can become nuisance animals in small salmon streams as they can block salmon spawning streams and can also transmit giardia. As beaver have colonized western areas of the Seward Peninsula, beaver hunting and trapping has become much easier as beaver inhabit tidally influenced portions of rivers and make lodges in the river banks (Ahmasuk 2005, pers. comm.).

Arctic fox and hare are plentiful and without question available within close proximity to villages. Arctic fox can become nuisance animals near carcasses or municipal dumps. Hare experience periods of abundance and as populations grow or recede hunting and trapping activity responds to those fluctuations by adjusting activity and willingness (Ahmasuk 2005, pers. comm.).

Wolverine, lynx, and marten are elusive animals, but without question are available within close proximity to villages. Lynx experience periods of abundance and as populations grow or recede hunting and trapping activity responds to those fluctuations by adjusting activity and willingness (Ahmasuk 2005, pers. comm.).

Ptarmigan, ground squirrel, and porcupines are plentiful and without question available within close proximity to villages (Ahmasuk 2005, pers. comm.).

There is some anecdotal information regarding subsistence users from outside of Unit 22 coming into Unit 22 to harvest these resources (Grishowsky 2006), but there is little information regarding the areas of use in the literature or the harvest data bases.

#### Handling, preparing, preserving, and storing

Several traditional methods of preparation prevail to tan the hides of furbearers, but two figure prominently as traditional methods for skins. Hides were skinned either cased or open, fleshing with appropriate and locally made fleshing tools i.e. scraper, scraper board, stretched upon some sort of frame. All methods allowed the hide to dry for application of tannin. Two tannins also figured prominently; the use of brain (one brain can tan an entire hide of one animal) or urine was used to tan hides. From there the hides were scraped or worked over some object to “break” the fibers to make the common materials of hide with hair on for sewing into garments. Today those same methods are used with some refinements (Ahmasuk 2005, pers. comm.).

#### Handing down of knowledge

The teaching of young children is the best and perhaps the only way to recruit and train people into the subsistence way of life. Without transfer of knowledge of hunting, trapping, fishing, skinning, gathering, woodcraft, cooking, dog mushing, boating, and the environment, the Inupiaq culture would not have survived.

#### Sharing

Magdanz et al. (2005) observed that sharing is typified by “super hunting households” that harvest 70% of all subsistence resources in a village but only comprise 30% of all households. That ratio fluctuates from community to community. The super hunting households share generally via large family networks and usually are single male households or couples with no children who share with extended family members. In marine mammal hunting specific rituals for sharing are followed (Ahmasuk 2005, pers. comm.).

In the Seward Peninsula, all of the communities have a high dependence on subsistence resources and share the resources (ADF&G 2001).

#### Reliance upon a wide diversity of fish and wildlife resources

All of the communities within Unit 22 are subsistence based communities and depend heavily on a wide diversity of subsistence harvested resources which provide substantial cultural, economic, social, and nutritional elements to the communities in Unit 22. These resources include large and small marine mammals, large and small land animals, freshwater and marine fishes, migratory birds, marine invertebrates, greens, roots, and berries (ADF&G 2001).

#### **Effects of the Proposal**

Adopting these proposals would have no effect on subsistence users in Unit 22. All rural residents in Unit 22 are already eligible to harvest the resources in these proposals because there are either no determinations or very broad determinations, thus there would be no change to harvests for Unit 22 residents if these proposals were adopted. Adopting these proposals could have an effect on subsistence users in adjacent units because it would eliminate their ability to take the resources under consideration in Unit 22. Some people living in adjacent units may travel to Unit 22 to take caribou. As a result, some people from adjacent units may take some of the resources under consideration in this proposal

opportunistically. There also is some indication that some trappers from adjacent units may travel into Unit 22 to trap fur bearers. If these proposals were adopted as proposed, people in adjacent units would be excluded from taking these resources under Federal subsistence management regulations.

No effects are anticipated on nonsubsistence hunters from these proposals as the resources in these proposals are not sought after by nonsubsistence hunters.

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<b>WP06-53 Executive Summary</b>	
<b>General Description</b>	Requests that a motorized vehicle including ATV, snowmachine, and boat may be used to “take” a wolf in Unit 22. <i>Submitted by Seward Peninsula Subsistence Regional Advisory Council</i>
<b>Proposed Regulation</b>	<p><b>Unit 22–Wolf</b></p> <p style="text-align: center;"><i>No limit.</i> <span style="float: right;"><i>Nov. 1–Apr. 15</i></span></p> <p>§ __.26(b) <i>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:</i></p> <p style="text-align: center;">...</p> <p style="padding-left: 40px;">(4) <i>Taking wildlife from a motorized land or air vehicle when that vehicle is in motion or from a motor-drive boat when the boat’s progress from the motor’s power has not ceased;</i></p> <p style="padding-left: 40px;">(5) <i>Using a motorized vehicle to drive, herd, or molest wildlife;</i></p> <p>§ __.26(n)(22) iii (C) <i>A snowmachine may be used to position a hunter to select individual caribou for harvest provided that the animals are not shot from a moving snowmachine;</i></p> <p>§ __.13(a)(2) <i>Nothing in the regulations in this part shall enlarge or diminish the authority of any agency to issue regulations necessary for the proper management of public lands under their jurisdiction in accordance with ANILCA and other existing laws.</i></p> <p>§ __.25(a) <i>Definitions.</i></p> <p style="padding-left: 40px;"><i>Take or Taking means to fish, pursue, hunt, shoot, trap, net, capture, collect, kill, harm, or attempt to engage in any such conduct.</i></p> <p>§ __.26(n)(22) iii (E) <i>A motorized vehicle including ATV, snowmachine and boat may be used to take a wolf in Unit 22 provided that animals are not shot from a moving vehicle.</i></p>
<b>Seward Peninsula Regional Advisory Council</b>	<b>Support with modification.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Oppose.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATION  
WP06-53**

**SEWARD PENINSULA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support with modification.** The proposal, submitted by Seward Peninsula Subsistence Regional Advisory Council, requests that a motorized vehicle including ATV, snowmachine, and boat may be used to “take” a wolf in Unit 22. The definition of “Take” was discussed by the proponent and understood to mean directly killing the wolf with a motorized vehicle. The Council supports the proposal as modified to adopt the State’s new wolf language for Unit 22. The Council would like to align Federal regulation with the recent changes made by the Alaska Board of Game at its January 2006 meeting. The Council feels this will give Federally qualified subsistence users more opportunities to harvest wolves.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-53**

**Oppose** the proposal, contrary to the recommendation of the Seward Peninsula Subsistence Regional Advisory Council.

**Justification**

The substitute language offered by the Seward Peninsula Subsistence Regional Advisory Council is language recently adopted by the Alaska Board of Game to facilitate predator control of wolves and bears. That language provides an opportunity for hunters to use a boat, snowmachine and ATV when harvesting wolves without violating State wildlife harassment regulations, although such use would still violate Federal regulations which prohibit driving, herding and molesting of wildlife. Causing the wolf to flee when on a motorized vehicle crosses the line into the prohibited action. The Federal Subsistence Board’s regulation says, You may not use a motorized vehicles to drive, herd, or molest wildlife. The Board’s member agencies also have their own regulations prohibiting substantially the same activity. Therefore, adoption of this proposal or the Council’s recommendation would change the Federal Subsistence Board’s long standing prohibition against this activity. Even if the Board did make this change the activity would still be prohibited by individual agency regulations. In such instances agency regulations take precedence [50 CFR Part 100 § \_\_.13(a)(2)] over Federal Subsistence Board regulations.

The Interagency Staff Committee also points out that hunters can shoot wolves from boats, snowmachines and ATV as long as they are stationary, (forward progress as a result of the motor has ceased). Hunters can also use any of these motorized vehicles as platforms upon which they can lean or rest upon to shoot.

**WRITTEN PUBLIC COMMENTS  
WP06-53**

**Oppose.** Allows use of motorized vehicles to harvest wolves in Unit 22, Seward Peninsula. (1) There is no justification given for the need to liberalize subsistence wolf hunting in Unit 22. Existing seasons run from Nov 1– April 15, with unlimited bag limit. Sufficient opportunity exists at present through the methods of trapping and ground shooting to provide for subsistence opportunity to take wolves; (2) This proposal appears to be a predator control measure, not a subsistence proposal. At present, no authorization

exists for Federal subsistence predator control. Such action would have to go through a full NEPA review process, and is the responsibility of the individual land management agencies. Any action taken must then be consistent with each respective agency's policies and management objectives; (3) The use of motorized vehicles to take wildlife, even if later authorized by law, encourages and invites herding, driving and harassing wildlife, practices clearly prohibited by Federal subsistence regulations.

*–Defenders of Wildlife*

**STAFF ANALYSIS  
WP06-53**

**ISSUES**

Proposal WP06-53, submitted by Seward Peninsula Subsistence Regional Advisory Council, requests that a motorized vehicle including ATV, snowmachine, and boat may be used to “take” a wolf in Unit 22. The definition of “Take” was discussed by the proponent and understood to mean directly killing the wolf with a motorized vehicle.

**DISCUSSION**

This proposal would allow hunters the ability to hunt and harvest wolves with a motorized vehicle and is similar to Proposal 40 submitted to the Alaska Board of Game for its consideration during its Nov. 2005 meeting. The Alaska Board of Game, at its Nov. 2005 meeting, deferred Proposal 40 until Jan. 2006 and amended it to include all of Unit 22. During its Jan. 2006 meeting, the Alaska Board of Game modified the language of the deferred proposal and adopted the language found below under the Existing State Regulations.

**Existing Federal Regulation**

**Unit 22 Wolf Hunting**

*No limit.*

*Nov. 1–Apr. 15*

[There are no existing Federal subsistence management regulations providing for use of vehicles to **take** wolves.]

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

...

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

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

§ \_\_.26(n)(22) iii(C) *A snowmachine may be used to position a hunter to select individual caribou for harvest provided that the animals are not shot from a moving snowmachine;*

§ \_\_.13(a)(2) *Nothing in the regulations in this part shall enlarge or diminish the authority of any agency to issue regulations necessary for the proper management of public lands under their jurisdiction in accordance with ANILCA and other existing laws.*

§ \_\_.25(a) *Definitions.*

*Take or Taking means to fish, pursue, hunt, shoot, trap, net, capture, collect, kill, harm, or attempt to engage in any such conduct.*

**Proposed Federal Regulation**

**Unit 22 Wolf Hunting**

*No limit.*

*Nov. 1–Apr. 15*

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

...

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

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

§ \_\_.26(n)(22) iii (C) *A snowmachine may be used to position a hunter to select individual caribou for harvest provided that the animals are not shot from a moving snowmachine;*

§ \_\_.13(a)(2) *Nothing in the regulations in this part shall enlarge or diminish the authority of any agency to issue regulations necessary for the proper management of public lands under their jurisdiction in accordance with ANILCA and other existing laws.*

§ \_\_.25 (a) *Definitions.*

*Take or Taking means to fish, pursue, hunt, shoot, trap, net, capture, collect, kill, harm, or attempt to engage in any such conduct.*

**§ \_\_.26(n)(22) iii (E) *A motorized vehicle including ATV, snowmachine and boat may be used to take a wolf in Unit 22 provided that animals are not shot from a moving vehicle.***

**Existing State Regulations**

Note—these regulations were adopted by the Alaska Board of Game at its January 2006 meeting and will be effective starting on July 1, 2006.

*Unlawful methods of taking game; exceptions. The following methods of taking game are prohibited:*

...

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

(A) *motor-driven boat may be used as follows:*

(i) *in Units 23 and 26 to take caribou;*

(ii) *notwithstanding any other provision in this section, in Unit 22 to position hunters to select individual wolves for harvest.*

(iii) *under authority of a permit issued by the department*

(B) *motorized land vehicle may be used as follows;*

- (i) *in Units 22 and 23, snowmachine may be used to position hunters to select individual caribou for harvest, and caribou may be shot from a stationary snowmachine;*
  - (ii) *notwithstanding any other provision in this section, snowmachine may be used to position hunters to select individual wolves for harvest, and wolves may be shot from a stationary snowmachine.*
    - (a) *in wolf control implementation areas specified in 5 AAC 92.125;*
    - (b) *in Units 9(B), 9(C), 9(E), 17, 18, 19, and 22, except on any National Park Service or National Wildlife Refuge lands not approved by the Federal agencies;*
  - (iii) *notwithstanding any other provision in this section, in bear control implementation areas specified in 5 AAC 92.125, snowmachine may be used to position hunters to select individual bears for harvest, and bears may be shot from a stationary snowmachine;*
  - (iv) *notwithstanding any other provision in this section, in Units 9(B), 9(C), 9(E), 17, and 22 except on any National Park Service or National Wildlife Refuge lands not approved by the Federal agencies, ATV may be used to position hunters to select individual wolves for harvest, and wolves may be shot from a stationary ATV;*
  - (v) *under authority of a permit issued by the department.*
- (5) *except as otherwise specified, with the use of a motorized vehicle to harass game or for the purpose of driving, herding, or molesting game;*

### **Extent of Federal Public Lands**

Federal public lands comprise approximately 32% of Unit 22 and consist of 18.2% BLM, 11.5% NPS, and 2.1% FWS lands.

### **Customary and Traditional Use Determinations**

The rural residents of Units 21D (north and west of the Yukon River), 22, 23, and Kotlik have a positive customary and traditional use determination for wolf in Unit 22.

### **Regulatory History**

Current Federal subsistence management regulations, Methods and Means of Taking Wildlife, read: “*You may not... use a motorized vehicle to drive, herd, or molest wildlife.*” This regulation was put in place as a conservation measure to protect wildlife from unnecessary harassment or stress. Likewise, the Federal land management agencies all have separate Code of Federal Regulations (CFR) restrictions dealing with motorized vehicles, which include snowmachines. For national wildlife refuges, the regulation reads: “50 CFR Ch. 1, Subpart B—Subsistence Uses, §36.12(d) *Snowmobiles... traditionally employed by local rural residents engaged in subsistence uses shall be operated... (3) in such a manner as to prevent the herding, harassment, hazing or driving of wildlife for hunting or other purposes.*” For national parks, preserve and monuments, the regulation reads: “36 CFR Ch. 1, Subpart B, §13.46(d) *...snowmachines... traditionally employed by local rural residents engaged in subsistence uses shall be operated... (3) in such a manner as to prevent the herding, harassment, hazing or driving of wildlife for hunting or other purposes.*” For BLM lands, the regulation reads: “43 CFR Ch. II, Subpart 8341, Conditions of Use, §8341.1(f) (or 43 CFR Ch. II, §9268.3 [2] [C] [vii]) *No person shall operate an off-road vehicle on public lands:... (4) In a manner causing, or likely to cause significant, undue damage to or disturbance of the... wildlife.*”

## Biological Background

For much of this century wolves were scarce throughout Unit 22. From the late 1890s until statehood in 1959, wolf numbers were actively suppressed by predator control programs and bounties intended to protect reindeer herds (Gorn 2003). Wolf numbers in Unit 22 gradually increased and wolves expanded their range westward across the Seward Peninsula after government-sponsored predator control ended in the 1960s (Pegau 1971; Grauvogel 1979). As early as 1980, wolf sign had been reported in all major drainages in Unit 22, however reported sightings were generally of individual animals or small groups of 2 to 3 wolves (Gorn 2003). During this time period the Unit 22 wolf population was estimated at fewer than 100 wolves (Grauvogel 1980). Between 1980 and 1996 wolf numbers and pack sizes increased. Wolves became abundant in Units 22A and 22B where caribou from the Western Arctic Caribou Herd (WACH) wintered. As the WACH expanded its winter range westward in 1996 into Units 22D and 22E wolves followed.

ADF&G has no survey data or information to determine the exact wolf population in Unit 22 (Gorn 2003). Wolf abundance depends on the presence of the WACH in Unit 22, and increases during winter months (October–April) when caribou are present (Gorn 2003). Increasingly, wolves are becoming permanent residents of the unit.

Between 1999–2002, Unit 22 residents participated in the statewide trapper survey program. Questionnaires were sent to hunter/trappers who harvested furs in Unit 22 to better assess harvest and abundance of wolves and other furbearers. Respondents throughout Unit 22 reported that wolves were common and that numbers were increasing (Gorn 2003).

## Harvest History

Annual reported harvest has ranged from 24 to 63 wolves (**Table 1**). The high harvest in 1999–2000 season, was probably a result of high wolf abundance in the unit due to wintering caribou, and good snow conditions in spring 2000 that allowed hunters and trappers long periods of access to wolves (Gorn 2003). The majority of wolves harvested have been in Units 22A and 22B.

**Table 1.** Reported wolf harvest by unit, 1990–2002. (Gorn 2003).

Regulatory Year	Harvest Unit 22A	Harvest Unit 22B	Harvest Unit 22C	Harvest Unit 22D	Harvest Unit 22E	Total Wolf Harvest
1990/91	21	8	0	2	0	31
1991/92	43	9	0	2	0	54
1992/93	13	11	2	1	0	27
1993/94	23	11	0	0	0	34
1994/95	13	9	2	0	0	24
1995/96	15	16	1	0	0	32
1996/97	15	10	0	0	0	25
1997/98	19	9	1	0	0	29
1998/99	25	18	2	2	4	51
1999/00	18	32	0	3	10	63
2000/01	22	33	0	7	0	62
2001/02	5	24	2	1	0	32

The magnitude of unreported wolf harvest each year in Unit 22 is thought to be substantial and fur sealing data provides only a minimum estimate of harvest (Gorn 2003). Although fur sealing agents are available

in all Unit 22 villages, often hunter/trappers seal only those pelts that will be commercially tanned or sold to fur buyers (Gorn 2003). Many wolf hides are home tanned and used locally therefore many people see no reason to have them sealed (Persons 2000). In May 1999, 2000, and 2001, village based harvest surveys were completed in seven villages in Unit 22 to obtain better harvest information on wolves and other big game species. Results from harvest assessment surveys revealed an additional 27 wolves harvested during 1999–2001 that had not been sealed (Gorn 2003).

### **Current Events Involving Species**

At the Feb. 23–24, 2006, Seward Peninsula Subsistence Regional Advisory Council meeting, the Council recommended to support WP06-53 with modification to substitute the language adopted by the Alaska Board of Game at its Jan. 2006 meeting. The modified language would be similar to the regulations adopted by the Alaska Board of Game at its January 2006 meeting (see Existing State Regulations section of this analysis).

### **Effects of the Proposal**

If this proposal were adopted, it would make it legal to take wolves with a motorized vehicle in Unit 22 under Federal subsistence management regulations. However, Federal land management agencies in the unit all have separate CFR restrictions dealing with motorized vehicles that prohibit the harassment or disturbance of wildlife with a motor vehicle, which would include taking an animal with the vehicle. Therefore, adoption of this proposal would be in conflict with existing agency regulations, and agency regulations would take precedence [50 CFR Part 100 §\_\_\_.13(a)(2)].

The substitute language offered by the Seward Peninsula Subsistence Regional Advisory Council at their recent meeting in Nome is language recently adopted by the Alaska Board of Game to facilitate predator control of wolves and bear. The language provides an opportunity for hunters to use a snowmachine when harvesting wolves without violating State and Federal wildlife harassment regulations. However, on the practical side, it would be nearly impossible to exercise this opportunity given the wary nature of wolves. Such a regulation would provide a significant advantage to violators of regulations that prohibit harassment. Approaching wolves with a snowmachine, whether to position the hunter or to position the wolf, will likely result in the wolf fleeing to escape the hunter. Causing the wolf to flee when on a snowmachine meets the definition of harassment and is prohibited under both Federal subsistence management regulations and individual agency regulations.

In addition, adoption of the Seward Peninsula Subsistence Regional Advisory Council's proposed language into Federal subsistence management regulations, which contains the State's exemptions to the prohibition of using motor driven vehicles, provides no additional opportunities to Federally qualified subsistence hunters that they don't currently have, i.e., there is currently no prohibition to shooting wolves from a stationary snowmachine or ATV. The current prohibition is against harassment, an activity that is likely to take place prior to shooting from the stationary snowmachine. Adopting this new language does not remove the harassment regulation. It does, however, put the subsistence user in jeopardy of violating the existing harassment regulations.

Furthermore, no evidence has been provided supporting the need to modify Federal subsistence management regulations for the purpose of helping Federally qualified subsistence users to meet their needs for direct personal or family consumption of wolves, i.e. use of hides for clothing. The purpose of the Federal subsistence management regulations are to establish harvest seasons and dates, methods and means, harvest limits, and customary & traditional use determinations to provide for direct personal or

family consumption. Language proposed by the Council is more suitable for facilitating predator control, a responsibility of the State and individual agencies.

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*WP06-54 Executive Summary*

<b>General Description</b>	Eliminate both the harvest of moose calves and the two week seasonal closure in the Noatak River drainage. This proposal is a result of work done by the BLM, NPS, USFWS staff and the Council after the Federal Subsistence Board tabled proposal WP05-18 at its May 2005 meeting. <i>Submitted by the Northwest Arctic Subsistence Regional Advisory Council.</i>
<b>Proposed Regulation</b>	<p><b>Unit 23—Moose</b></p> <p><i>That portion north and west of and including the Singoalik River drainage, and all lands draining into the Kukpuk and Ipewik rivers—1 moose; no person may take a calf or a cow accompanied by a calf</i>      <i>July 1–Mar. 31</i></p> <p><i>That portion lying within the Noatak River drainage—1 moose; however, antlerless moose may be taken only from Nov. 1–Mar. 31; no person may take a calf or a cow accompanied by a calf</i>      <i>Aug. 1–Sept. 15</i> <i>Oct. 1–Mar. 31</i> <i>Aug. 1–Mar. 31</i></p> <p><i>Remainder of Unit 23—1 moose; no person may take a calf or a cow accompanied by a calf</i>      <i>Aug. 1–Mar. 31</i></p>
<b>Northwest Arctic Regional Council Recommendation</b>	<b>Support.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATION  
WP06-54**

**NORTHWEST ARCTIC SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support.**

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-54**

**Support** the proposal as recommended by the Northwest Arctic Subsistence Regional Advisory Council.

**Justification**

This regulation change should be made to help protect calves from harvest, which would also eliminate the possibility that the calf accompanying a cow could be shot first, thus allowing a person to harvest the cow that was previously accompanied by a calf. The moose population has declined because of low calf recruitment. Maximizing calf survival has a potential positive population growth effect. Eliminating the closed season in the Noatak drainage between Sept. 15 and Oct. 1 aligns with the State open season dates and provides a consistent open season across the unit.

**STAFF ANALYSIS  
WP06-54**

**ISSUES**

Proposal WP06-54, submitted by the Northwest Arctic Subsistence Regional Advisory Council (Council), requests that the harvest of moose calves be eliminated and the two week seasonal closure in the Noatak River drainage be eliminated. This proposal is a result of work done by the BLM, NPS, USFWS staff and the Council after the Federal Subsistence Board tabled proposal WP05-18 at its May 2005 meeting.

**DISCUSSION**

The proponent requests that this regulation change be made to help protect calves from harvest, which should help the overall moose population in the Unit. The moose population has declined because of a number of factors which may include: low calf recruitment, weather, habitat, and the overall mortality rate. Maximizing calf survival has a potential positive population growth effect. Eliminating the closure in the Noatak drainage between Sept. 15 and Oct. 1 aligns with the State open season dates and provides a consistent open season across the Unit.

**Existing Federal Regulation**

<i>Unit 23, that portion north and west of and including the Singoalik River drainage, and all lands draining into the Kukpuk and Ipewik rivers—1 moose; no person may take a cow accompanied by a calf</i>	<i>July 1–Mar. 31</i>
<i>Unit 23, that portion lying within the Noatak River drainage—1 moose; however, antlerless moose may be taken only from Nov. 1–Mar. 31; no person may take a cow accompanied by a calf</i>	<i>Aug. 1–Sept. 15 Oct. 1–Mar. 31</i>
<i>Remainder of Unit 23—1 moose; no person may take a cow accompanied by a calf</i>	<i>Aug. 1–Mar. 31</i>

**Proposed Federal Regulation**

<i>Unit 23, that portion north and west of and including the Singoalik River drainage, and all lands draining into the Kukpuk and Ipewik rivers—1 moose; no person may take <b>a calf or</b> a cow accompanied by a calf</i>	<i>July 1–Mar. 31</i>
<i>Unit 23, that portion lying within the Noatak River drainage—1 moose; however, antlerless moose may be taken only from Nov. 1–Mar. 31; no person may take <b>a calf or a</b> cow accompanied by a calf</i>	<i><del>Aug. 1–Sept. 15</del> <del>Oct. 1–Mar. 31</del> Aug 1–Mar. 31</i>
<i>Remainder of Unit 23—1 moose; no person may take <b>a calf or</b> a cow accompanied by a calf</i>	<i>Aug. 1–Mar. 31</i>

## Existing State Regulations

Species/bag limits–Moose	Permit/ticket required	Open season
<b>Unit 23</b> , north of and including Singoalik River Drainage: <b>Residents:</b> one bull by permit available in person at license vendors within Unit 23 villages June 1–July 15	<b>RM880</b>	July 1–Oct 31
<b>OR</b> one moose by permit; however no person may take a calf or a cow accompanied by a calf. Permit available in person at license vendors within Unit 23 villages June 1–July 15	<b>RM880</b>	Nov 1–Dec 31
<b>OR</b> one bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side	<b>Harvest</b>	Sept 1–Sept 20
<b>Nonresidents:</b> one bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side by permit	<b>DM871</b>	Sept 1–Sept 20
<b>Remainder of Unit 23: Residents:</b> one bull by permit available in person at license vendors within Unit 23 villages June 1–July 15	<b>RM880</b>	Aug 1–Oct 31
<b>OR</b> one moose by permit; however no person may take a calf or a cow accompanied by a calf. Permit available in person at license vendors within Unit 23 villages June 1–July 15	<b>RM880</b>	Nov 1–Dec 31
<b>OR</b> one bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side	<b>Harvest</b>	Sept 1–Sept 20
<b>Nonresidents:</b> one bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side by permit	<b>DM871-877</b>	Sept 1–Sept 20

## Extent of Federal Public Lands

Federal public lands comprise approximately 56% of Unit 23 and consist of 40% NPS, 7% FWS, and 9% BLM lands. (See **Unit 23 Map**).

## Customary and Traditional Use Determinations

All rural residents of Unit 23 have a positive customary and traditional use determination for moose in Unit 23.

## Regulatory History

Federal moose regulations for Unit 23 have remained unchanged since 1995. However, State moose hunting regulations have become more restrictive over the years to help protect the moose population and to address conflicts between local and non-local moose hunters. The most recent changes to State regulations occurred in 2003, when the Alaska Board of Game approved several regulatory changes (effective for 2004/05) for moose in Unit 23, which made it more difficult for nonlocal residents to harvest moose in the Unit. The Alaska Board of Game approved four registration hunts in the Unit, where the permits (RM880) were only available in person at license vendors in Unit 23 villages from June 1–July 15. This early availability of permits occurs before most of the seasons open, which precludes nonlocal hunters from just arriving in the area, picking up a registration permit and going out hunting. If a nonlocal hunter wanted to hunt in one of the registration permit hunts, the individual would have to make a special trip to one of the Unit 23 villages between June 1–July 15 to receive a registration permit and then return later when the moose season was open. These permits also help biologists track the harvest by

local residents. Residents without a registration permit are limited to harvesting only bulls with 50 inch antlers or four or more brow tines on at least one side.

At the May 3–4, 2005 Federal Subsistence Board meeting proposal WP05-18 was tabled based on recommendations from the Northwest Arctic Regional Council to more thoroughly address the moose management issues at the fall 2005 Council meeting. Proposal WP05-18, requested the Federal season for moose in most of Unit 23 be reduced from July 1 (or Aug. 1)–Mar. 31 to Aug. 1–Dec. 31 (a five month season), allowing antlerless moose to be harvested only in November and December. The Board stated that the Federal land management agencies in Unit 23 should provide an updated briefing about the moose population to the Council and the region's village organizations. The Council was to then consider what steps might be taken to conserve the moose population in the region.

### **Biological Background**

Moose recolonized Unit 23 most recently in the 1940s, as they expanded into coastal tundra regions throughout the State (Dau 1999). The Unit 23 moose population is thought to have peaked in the late 1980s.

Based on recent census results, in large areas of Unit 23 moose densities range between 0.1–0.3 moose mi<sup>2</sup> (Dau 2004, pers. comm.). This is lower than many other portions of Alaska (ADF&G 1998), but the comparison of moose densities among areas is confounded by lack of standardized methods to determine actual moose habitat (Shults 2005, pers. comm.). Survey results show that there are small pockets of high quality moose habitat that may have one moose/mi<sup>2</sup>. ADF&G and Federal agencies have been conducting rigorous population abundance surveys in Unit 23 since 1993 and over 20 censuses have been completed across the Unit. Most census areas have been surveyed at least two times (Shults 2005, pers. comm.).

Area biologists and many public reports suggest moose populations have declined throughout Unit 23. This decline appears to have been most rapid and pronounced in the Noatak drainage in 1992 and more recently on the Seward Peninsula. Moose density has declined almost 50% in the Unit 22 portion of the Seward Peninsula since about 1990 (Dau 2002).

The Selawik National Wildlife Refuge, with help from ADF&G, BLM and NPS, censused moose in the Tagagawik River drainage in Mar. 2001. The census area was 1,692 mi<sup>2</sup> and included the Tagagawik River headwaters to approximately five miles above its junction with the Selawik River, the Selawik Hills, and Selawik National Wildlife Refuge lands west of the Tagagawik River. The estimated moose population in this area is approximately 1,374 animals. A total of 1,061 moose were observed in the areas censused (972 adults and 89 calves). The calf/adult ratio was 10 calves per 100 adults (Ayres 2003, pers. comm.).

The Tagagawik River drainage was also surveyed in 1997, however a smaller area was covered. To allow for comparison, the same area was surveyed in 2001. The sizes of the areas surveyed were very similar and the total number of moose estimated was similar (**Table 1**). The number of moose/mi<sup>2</sup> surveyed was also very similar, at 1.4–1.5 (**Table 1**). The largest difference between the 1997 and 2001 surveys was the number of calves per 100 adult moose. In 1997 there were 21 calves per 100 adult moose and in 2001 there were only 10 calves per 100 adult moose (**Table 1**). This is more than a 50% decrease in recruitment in a four year period.

**Table 1.** 1997 and 2001 Moose Census Results (Selawik NWR Annual Narrative 2001)

	<b>1997</b>	<b>2001</b>
<b>Census Area</b>	778 mi <sup>2</sup>	741 mi <sup>2</sup>
<b>Estimate of Total Moose</b>	1283 (+/- 16%)	1245 (+/- 11%)
<b>Moose per square mile</b>	1.4	1.5
<b>Calves per 100 Adult Moose</b>	21	10

Based on survey/census data for the Selawik River, the population has been relatively stable for the last four to six years (Ayres 2003, pers. comm.). The winter conditions that lead to the dramatic decline of moose in the Noatak River in 1988–91 were not as severe in the Selawik River. Based on data from Selawik National Wildlife Refuge's telemetry project and census data, calf recruitment is extremely low along the Selawik River, however overall mortality for adult moose is also low in that area (Ayres 2003, pers. comm.). The low calf recruitment is attributed to bear predation on calves in the spring and low adult mortality is attributed to limited predation on adults during the winter. Past research found that wolves in the Selawik area were drawn south with migrating caribou in fall and then returned to den in the summer (Ballard, et al. 1997). With caribou as an alternate prey, winter wolf predation on moose in the Selawik area may be lower than other drainages to the north (Ayres 2003, pers comm.).

Based on the ADF&Gs area biologist's observations and observations by local residents, moose have reportedly been declining in the upper Kobuk drainage since the early 1990s and calf recruitment has also been low in that area (Dau 2002).

The mean 1997–2001 spring calf:adult ratio in the Noatak River drainage was 9 calves per 100 adults (Dau 2002). This is consistent with observations and reports from many local residents and some long-term commercial operators that recruitment rates have been low in this portion of the unit, however they appear to be stabilizing.

Observations of radio-collared cows in previous studies confirm that birth rates appear to be high (>90%) and twins have often been observed (<49%) (Shults 2005, pers. comm.). During capture operations in the lower Noatak drainage, cow moose were in excellent body condition, which is consistent with high birth rates (Dau 2002). Habitat is in good condition and does not appear to be limiting the moose population. Based on observations of calves of radio-collared cow moose (1999–2002) both brown bears and wolves were found to be equally effective in killing newborn calves and were probably substantially contributing to low recruitment in Unit 23 (Shults 2005, pers. comm.).

Based on fall censuses bull:cow ratios are above or near the population objective of 40:100 throughout Unit 23 (Dau 2002). The fall bull:cow ratio for the Noatak was estimated to be 78 bulls:100 cows, but was biased high due to sampling variance (Shults 2005, pers. comm.). The fall 2001 ratio for the Noatak was more precise and was 43 bulls:100 cows (Shults 2005, pers. comm.).

## Harvest

The number of moose reported taken along the Selawik River has gradually increased from approximately 20 per year in 1985 to slightly over 40 per year in the late 1990s (Dau 1999). Reported moose harvests along the Kobuk River have also increased in the past decade, while harvests along the Noatak River have declined. Aircraft use has accounted for 50%-75% of the moose taken annually in Unit 23 since 1985, followed by boat and snowmachine use (Dau 1999). The total reported annual moose from State harvest tickets for Unit 23 between 1995 and 2004 has ranged between 139-180 animals (**Table 2**).

**Table 2.** Reported harvest of moose, from State harvest tickets, in Unit 23, 1995 – 2004 (Dau 2004).

Year	Moose harvested
1995-96	173
1996-97	161
1997-98	162
1999-00	156
2000-01	139
2001-02	168
2002-03	160
2003-04	180

Based on community-based harvest assessments, approximately 335 moose were harvested annually by unit residents between 1999–2001. Residents of Kotzebue account for the largest percentage of this harvest (Dau 2002). This is substantially higher than the number of moose unit residents reported taking through the harvest ticket system. Although moose harvest ticket data appears to capture <10% of the actual harvest by unit residents in the smaller communities, it probably reflects temporal trends in local harvests reasonably well (Dau 2002). ADF&G believes the accuracy of harvest ticket data is much better for nonlocal hunters than for local hunters.

If caribou availability decreases through shifts in distribution or population decline, harvest of moose by local residents will almost certainly increase. Most unit residents explain the 1979–1994 declines in local moose harvest as a function of increased availability of caribou during that time (Dau 2002).

Georgette et al. (2004) reported that in the Northwest Alaska communities surveyed, bull moose represented nearly all of the moose harvested and that overall the harvested moose whose sex was known were 94% bulls. Moose harvests ranged from August through January, however 76% took place in August and September with another 17% occurring in December (Georgette et al. 2004). The number of moose harvested for the Northwest communities surveyed is displayed in **Table 3**.

## Current Events Involving the Species

The Kobuk Valley National Park Subsistence Resource Commission met on Mar. 2, 2005 and considered Proposal WP05-18. The members present included representatives from the villages of Ambler, Kiana, Kobuk, Kotzebue, Noorvik and Shungnak. They expressed several concerns about the proposal including the potential impacts to village users, that they felt insufficient biological information was presented, and more outreach with potentially affected villages needed to be done. As a result, they voted unanimously to oppose the proposal as written and to convey their comments to the Regional Advisory Council. During the Mar. 8, 2005 Northwest Arctic Subsistence Regional Advisory Council meeting, there was extensive discussion, public input and council deliberations on the proposed changes to the moose season and harvest limits for Unit 23 (WP05-18). There was some public input that suggested that there is a need

**Table 3.** Moose harvest, Northwest Alaska, by Community, 1998-2003 (Georgette et al. 2004).

Community Unit 23	Harvest year	Community Population (in survey year)	Percentage of Households:					Number harvested
			Using Moose	Attempting to harvest Moose	Harvesting Moose	Receiving Moose	Giving Moose	
Kiana	1999	398	30	13	8	22	6	8
Noatak	1999	423	18	4	3	14	4	4
Noatak	2001-02	455	22	8	3	20	5	3
Noorvik	2002	677	68	44	28	54	29	56
Selawik	1999	767	55	33	29	41	38	64
Shungnak	1998-99	255	50	32	30	20	28	21

for better moose survey/census numbers and that the proposal should not be supported until better data is available. Federal staff explained that moose surveys will be conducted in the near future for a large portion of Unit 23 and the updated data would be made available to the Council. Some Council members voiced apprehension that there had not been any meetings held in the villages that would be the most affected by the proposed shorter moose seasons, to hear their concerns. After extensive deliberations, the Council voted to table the proposal with the caveat that the Federal and State agencies work with the villages that would be impacted the most to come up with another proposal that would help protect the moose population, while minimizing impacts to Federally qualified subsistence users.

After the Board tabled proposal WP05-18, the BLM, NPS, FWS staff met to discuss the current Federal subsistence moose regulations in Unit 23. The agencies reexamined the available biological data and developed several alternatives that were presented to a joint meeting of the Cape Krusenstern National Monument and the Kobuk Valley National Park Subsistence Resource Commission on Oct. 5, 2005 and the Northwest Arctic Subsistence Regional Advisory Council at their Oct. 7, 2005 meeting. The membership of the Subsistence Resource Commissions included representatives from the villages of Ambler, Kiana, Kivalina, Kobuk, Kotzebue, Noorvik, Shungnak, and ties to Buckland, Deering, and Selawik. They agreed with the elimination of the two week mid-season closure in the Noatak drainage, and protecting calves. However, they felt the recommendations by the agencies to implement a series of moose management areas was too radical and might work against the villages. They also felt that the biological information did not support additional season restrictions on Federally qualified subsistence users. However, they failed to take formal action on developing a proposal. The results of the joint meeting were conveyed to the Northwest Arctic Subsistence Regional Advisory Council. At the meeting the Council listened to the agencies recommendations and public comments on the moose proposal. The Council decided to eliminate calf harvest and the two week closure in the Noatak River drainage, and not to reduce the length of season in Unit 23 remainder.

### Effects of the Proposal

Unit 23 moose populations have been declining. If this proposal is adopted, the impact on the moose population should be positive. Since the population is at a low level, eliminating potential calf harvest could help the recruitment rate, which should have a positive effect on the moose population. Since caribou are a targeted meat source in September, eliminating the two week closure in the Noatak River drainage at the end of September should have a minimal impact on the moose population.

Impact to subsistence users should be minimal as most subsistence users would not take a calf. However, this proposal does eliminate the possibility that the calf accompanying a cow could be shot first, thus allowing a person to harvest the cow that was previously accompanied by a calf. Eliminating the two week closure in September within the Noatak River drainage allows for more subsistence opportunity and provides a consistent open season across the Unit.

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<b><i>WP06-55 Executive Summary</i></b>	
<b>General Description</b>	Requests the use of a designated hunter permit for muskoxen in Unit 23—south of Kotzebue Sound and west of and including the Buckland River drainage. <i>Submitted by the Seward Peninsula Muskoxen Cooperators Group.</i>
<b>Proposed Regulation</b>	<p><b>Muskoxen</b></p> <p><i>Unit 23—south of Kotzebue Sound and west of and including the Buckland River drainage.</i></p> <p><i>A Federally qualified subsistence user (recipient) may designate another Federally qualified subsistence user to take muskoxen on his or her behalf unless the recipient is a member of a community operating under a community harvest system. The designated hunter must get a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients, but have no more than two harvest limits in his/her possession at any one time.</i></p>
<b>Northwest Arctic Regional Council Recommendation</b>	<b>Support.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATION  
WP06-55**

**NORTHWEST ARCTIC SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support.** The Northwest Arctic Subsistence Regional Advisory Council supports this proposal. Adopting a designated hunter system would produce a harvest system more in line with traditional harvest and sharing practices. It would improve the efficiency of the hunt, decrease the cost of hunting, and provide more opportunity to meet subsistence needs from Federal public lands. There would be no impact to non-Federally qualified subsistence users as Federal public lands in Unit 23 Southwest are closed to non-Federally qualified subsistence users. This would not affect other users hunting on State and private lands since this change would take place on Federal public lands. There are no conservation concerns as the Federal/State quotas are managed with consideration to percentage of Federal public lands and the muskoxen herd size, and the total harvest is expected to remain within the allowable harvest quotas.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-55**

**Support** the proposal as recommended by the Northwest Arctic Subsistence Regional Advisory Council.

**Justification**

Adopting a designated hunter system would produce a harvest system more in line with traditional harvest and sharing practices. It would improve the efficiency of the hunt, decrease the cost of hunting, and provide more opportunity to meet subsistence needs from Federal public lands. There would be no impact to non-Federally qualified subsistence users as Federal public lands in Unit 23 Southwest are closed to non-Federally qualified subsistence users. This would not affect other users hunting on State and private lands since this change would take place on Federal public lands. There are no conservation concerns as the Federal/State quotas are managed with consideration to percentage of Federal public lands and the muskoxen herd size, and the total harvest is expected to remain within the allowable harvest quotas.

## STAFF ANALYSIS WP06-55

### ISSUES

Proposal WP06-55, submitted by the Seward Peninsula Muskoxen Cooperators Group, requests the use of a designated hunter permit for muskoxen in Unit 23—south of Kotzebue Sound and west of and including the Buckland River drainage.

### DISCUSSION

This proposal comes from the Seward Peninsula Muskoxen Cooperators Group (Cooperators), which includes a diverse cross-section of stakeholders including representatives of hunt area villages and representatives from the Alaska Department of Fish and Game (ADF&G), Northern Norton Sound Fish and Game Advisory Committee, National Park Service (NPS), U.S. Fish and Wildlife Service (FWS), Bureau of Land Management (BLM), Kawerak, Inc., Northwest Alaska Subsistence Regional Advisory Council, Seward Peninsula Subsistence Regional Advisory Council, Reindeer Herder's Association, hunting guides in the region and nonconsumptive users such as wildlife viewers. At their June 2005 meeting, 40 people were in attendance. The Cooperators have worked cooperatively for the past ten years to manage the muskoxen herd in the Seward Peninsula. They have effectively recommended management strategies that have enabled the population to more than double, allowing significantly increased harvests. The Alaska Board of Game and the Federal Subsistence Board have consistently listened to the Cooperators' management recommendations and relied heavily on advice from this group (ADF&G 2005a:1).

The proposed regulation would allow the use of a designated hunter permit for muskoxen in Unit 23—south of Kotzebue Sound and west of and including the Buckland River drainage, hereafter referred to as Unit 23 Southwest—by qualified individuals. A Federally qualified subsistence user—the recipient of the permit—would designate another Federally qualified subsistence user to take muskoxen on his or her behalf unless the recipient is a member of a community operating under a community harvest system. The designated hunter would be required to get a designated hunter permit and would be required to return a completed harvest report. The designated hunter would be able to hunt for any number of recipients during the season, but would not be able to have more than two harvest limits in his/her possession at any one time.

The overall growth rate of the entire muskox herd since introduction of the herd in 1970 has averaged 14%, but since 2000, the growth rate has slowed to 5.5% a year. The majority of lands in the southwest portion of Unit 23 are State lands and the majority of permits are State permits. The muskoxen in the southwest portion of Unit 23 are not abundant on Federal public lands and are not in close proximity to the subsistence users in the area, thus this proposal affords a good opportunity to implement a regulation that more closely reflects traditional practices consistent with conservation and cooperative management objectives (ADF&G 2005a and b; Adkisson 2006, pers. comm.).

Proposal WP06-41 also requests a designated hunter permit for muskoxen, but in Unit 22.

## Existing Federal Regulation

### Unit 23—Muskox

There are no Federal designated hunting permits currently allowed for muskoxen in Unit 23—south of Kotzebue Sound and west of and including the Buckland River drainage.

## Proposed Federal Regulation

*Unit 23—south of Kotzebue Sound and west of and including the Buckland River drainage. A Federally qualified subsistence user (recipient) may designate another Federally qualified subsistence user to take muskoxen on his or her behalf unless the recipient is a member of a community operating under a community harvest system. The designated hunter must get a designated hunter permit and must return a completed harvest report. The designated hunter may hunt for any number of recipients, but have no more than two harvest limits in his/her possession at any one time.*

## Existing State Regulation

In Jan. 2006, the Alaska Board of Game considered a proposal similar to WP06-55 that would have allowed for proxy hunting under State regulations for muskoxen in Unit 23 Southwest. The Board voted to oppose adding muskoxen to the list of species that can be taken under the State's proxy hunting system.

## Extent of Federal Public Lands

Federal public lands are limited in Unit 23 Southwest to NPS administered lands in the eastern corner of the Bering Land Bridge National Preserve and some BLM administered lands near Buckland (See **Unit 23 Map**).

## Customary and Traditional Use Determinations

All rural residents south of Kotzebue Sound and west of and including the Buckland River drainage have a positive customary and traditional use determination for muskoxen in Unit 23 Southwest. The communities affected are Deering and Buckland.

## Regulatory History

Federal subsistence management regulations allow for a designated hunter permit system (§Subpart A.6.a[2]). The Designated Hunter Task Force, comprised of Federal subsistence regional advisory council members, Federal agency staff, and ADF&G staff, was created to address how to implement the designated hunter permits. The Task Force submitted their report in Oct. 1994 (USFWS 1994). The Task Force report describes the designated hunter option as one that enables a designated hunter to harvest wildlife for one or more other qualified subsistence users who have the appropriate licenses, tags, and permits, but who do not wish, or are not able, to harvest the resource themselves. The Task Force report noted that the option to allow for a designated hunter permit addressed the subsistence need for efficient hunting practices, unencumbered sharing of harvested resources, and conservation of wildlife resources. The designated hunter option provides “the opportunity for qualified rural Alaska subsistence users to obtain subsistence resources without harvesting the resources themselves and facilitates the customary and traditional use of wildlife for sustenance, bartering, and for the continuation of traditional ceremonies (USFWS 1994:25).”

The Designated Hunter Task Force summarized the designated hunter option as follows:

- Provides for Federally qualified subsistence hunters to harvest subsistence resources for other subsistence users;
- Both hunters and non-hunting Federally qualified subsistence users must obtain licenses and required tags and permits;
- To designate a hunter, the person to whom the tags and permits were originally issued must print their name, sign, date, give the name of their community or area of residence, and enter the number of their current valid hunting license on each tag and permit;
- Tags and permits can be distributed among designated hunters;
- By using existing license, tags, and permits, no additional administration or harvest monitoring is required;
- Option is not affected by community size or character;
- Option will work with any species;
- Option will not accommodate party hunting (USFWS 1994:32).

After review of “The Report of the Designated Hunter Task Force, Oct. 1994,” the Board developed an administrative framework to implement three designated hunter proposals for Southeast Alaska in 1995. This work set the precedent for implementation of other designated hunter regulations. There is a designated hunter permit in place for muskoxen in Unit 26C. Unlike the State proxy hunter system where the requestor must be 65 years of age or older, 70% physically disabled, or blind; in the Federal system any Federally qualified subsistence user can designate another Federally qualified subsistence hunter to hunt for him or her with the appropriate license, tags, and permits.

Currently, in Unit 23 Southwest, the muskox annual harvest quota and any needed closures are announced

**Table 1.** Seward Peninsula 2005/2006 muskoxen allowable harvest levels and permit numbers (Adkisson 2006, pers. comm.).

Unit	No. of Animals	Harvest Level	Allowable Harvest Based on Cooperators' Recommendation	Permits Available
22B	326	0.05	16	21
22C	220	0.03	7	7
22Dsw	158	0.05	8	11
22Drem	638	0.05	32	43
22E	863	0.08	69	92
23SW	182	0.05	9	12
<b>TOTAL</b>	<b>2387</b>		<b>141</b>	<b>186</b>

<sup>1</sup> The number of animals is based on numbers from the 2005 count.

by the superintendent of the Western Arctic National Parklands, in consultation with ADF&G and BLM. In 2005/06, the allowable harvest was nine, which was about 5% of the population of 182 animals in Unit 23 Southwest. Of the 12 permits, four Federal permits and eight State permits were issued. The allowable

**Table 2.** State and Federal 2005/2006 muskox permit allocation and summary of allowable harvest (Adkisson 2006, pers. comm).

Unit	No. State Permits	No. Fed Permits	PERMIT TOTALS	Allowable Cow Harvest	Allowable Total Harvest
22B	15	6	21	0	16
22C	7	0	7	0	7
22Dsw	11	0	11	3 <sup>a</sup>	8
22Drem	37	6	43	13 <sup>a</sup>	32
22E	46	46	92	35 <sup>b</sup>	69
23SW	8	4	12	2 <sup>a</sup>	9
<b>TOTAL</b>	124	62	<b>186</b>	53	141

<sup>a</sup> The allowable cow harvest in hunt areas 22Dsw, 22D remainder and 23sw is based on 2%.

<sup>b</sup> The allowable cow harvest in hunt area 22E is based on 4%. The total number of State permits to be issued in 22E include 8 drawing permits and 38 Tier II permits. The total number of Federal permits to be issued in 22E includes 1 ceremonial permit to Wales.

harvest quota for Unit 23 Southwest has never been reached (**Tables 1 and 2**; Adkisson 2006, pers. comm.).

### Cultural Information

Most muskoxen are taken in March, when access is best and the meat quality is good. Muskoxen are easier to hunt in many ways than most large mammals, because when they are threatened, they cluster together and stand their ground. Hunters can easily approach and take whichever animal they choose. The majority of hunters travel to the area in winter months by snowmachine. In summer months, they use boats and/or four-wheelers/atvs. Nome residents primarily use four-wheelers, followed by highway vehicles along the road system.

Sharing meat has been a long-standing tradition in Inupiaq culture. In particular, the elders, widows, disabled, and homes without hunters have needed to be cared for, and often the less successful hunters would also ask for a share of the hunt. Community solidarity depended on cooperative hunting as well as cooperative sharing of the meat (Spencer 1959; Spencer 1984).

Today these customs continue, but there have been some shifts. Where traditionally all able-bodied males hunted, today not everyone can hunt when necessary. There may be times when a hunter is unable to hunt because of job constraints. Their jobs may require them to be out of town or they may be too busy to hunt. As a result, today there are other reasons besides being sick, elderly, or disabled in determining why one might want or need someone else to hunt under a designated hunter provision. Often someone might provide money for gas and supplies to their designated hunter. The institution of harvest limits and seasons have caused traditional hunting practices to shift (Armstrong 2005, pers. comm., Adkisson 2006, pers. comm.).

Muskox hunting in Unit 23 Southwest often requires traveling long distances by snowmachine, particularly since Federal public lands where muskoxen are present are not in close proximity to Deering and Buckland. Muskoxen have become increasingly costly to access with the rising cost of fuel, thus it is even more cost efficient to have one hunter be designated to take more than one muskox. In traditional Inupiaq culture, hunters harvest only what they need and what they can properly care for, and then share the harvest with the community. If the hunter does not properly handle the meat or does not share the meat with the community, then the Inupiaq believe that it will hurt the hunter. The current hunt structure

of individual permits is contrary to efficient and customary and traditional harvest practices (Armstrong 2005, pers. comm., Adkisson 2006, pers. comm.).

### **Effect of the Proposal**

If this proposal is adopted, allowing designated hunting for muskoxen should not have any significant effect on the muskoxen population nor should it significantly change overall harvest patterns. Harvest success and the number of harvested animals are expected to only slightly increase, if at all; however, the total harvest will remain within the allowable harvest quotas. The majority of harvested animals could still be taken by hunters hunting under a State permitting system where applicable. The individual harvest limit would remain at either one bull or one muskox, depending on the season; the seasons and harvest quotas would not be affected.

Adopting a designated hunter system would benefit the subsistence users by allowing a harvest system more in line with traditional harvest and sharing practices. It will improve the efficiency of the hunt, decrease the cost of hunting, and will provide more opportunity to meet subsistence needs from Federal public lands.

Some concern has been expressed that the designated hunter system could cause some impact on the muskoxen population, however, the bulk of the harvest will likely still come from State managed lands under State regulations. There is the potential for taking multiple animals from a single group rather than a single harvest multiple times from the same group, but the harvest quota is rather conservative (9 out of 182 animals) and such a harvest is not anticipated to have an effect on the muskox population. Except for 1995, the quota has never been reached. The success rate has varied from between 15% and 33% (Adkisson 2006, pers. comm.).

**Table 1** provides the number of muskoxen in the Seward Peninsula in Units 22 and 23 Southwest in 2005, the 2005 allowable harvest, the projected number of permits, and the permit allocation by hunt between the State and Federal programs. Except for 1995, the quota has never been reached. The success rate has varied from between 15% and 33% (Adkisson 2006, pers. comm.).

There would be no impact to non-Federally qualified subsistence users as Federal public lands in Unit 23 Southwest are closed to non-Federally qualified subsistence users. Since this change would take place on Federal public lands, it will not affect other users hunting on State and private lands. It should also be emphasized that the muskoxen hunt/harvest is a jointly managed by the State and Federal programs. Overall harvest quotas and permit allocations between the State and Federal programs generally follow the recommendations of the Seward Peninsula Muskoxen Cooperators Group and have been adopted by the Alaska Board of Game and Federal Subsistence Board. The ratio of State to Federal permits, as recommended by the Cooperators, is an allocation of harvest between the two programs. In hunt areas such as Unit 23 Southwest, where muskoxen numbers are lower, the percentage of Federal public lands are also lower and consequently the number of Federal permits is lower. The designated hunter provisions are more restrictive in these units in order to ensure that the harvest does not result in over harvest or exceed the allocation guidelines.

Adopting a designated hunter system would enable Federally qualified users to more efficiently and perhaps more quickly fill their quota. However, with adequate reporting, any significant overage that could affect the State managed hunt can be prevented. If there are problems with the designated hunter provision, the proponents will promptly bring a new proposal to the Federal Subsistence Board. It should also be noted that under State laws and regulations, the hunt area in Unit 23 Southwest is under Tier II and is closed to sport hunting.

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*WP06-56 Executive Summary*

**Eastern Interior Region Proposals**

<b>General Description</b>	Requests the creation of Federal registration permits for all species for which a State registration permit is required for Federally qualified subsistence hunters in the Eastern Interior Alaska Region—Units 12, 20, and 25. <i>Submitted by Craig Fleener of Fort Yukon</i>
<b>Proposed Regulation</b>	<p><i>Unit 20E—1 caribou by joint State/Federal registration permit only. . . . [See complete description in analysis.]</i> <span style="float: right;"><i>Aug. 10–Sept. 30</i> <i>Nov. 1–Feb. 28</i></span></p> <p><i>Unit 20F, east of the Dalton Highway and south of the Yukon River—1 caribou; however, cow caribou may be taken only from Nov. 1–Mar. 31. During the Nov. 1–Mar. 31 season a State Federal registration permit is required.</i> <span style="float: right;"><i>Aug. 10–Sept. 20</i> <i>Nov. 1–Mar. 31</i></span></p> <p><i>Unit 25C, that portion west of the east bank of the mainstem of Preacher Creek to its confluence with American Creek, then west of the east bank of American Creek—1 caribou; however cow caribou may be taken only from Nov. 1–Mar. 31. However, during the Nov. 1–Mar. 31 season, a State Federal registration permit is required.</i> <span style="float: right;"><i>Aug. 10–Sept. 20</i> <i>Nov. 1–Mar. 31</i></span></p> <p><i>Unit 25C remainder—1 caribou by joint State/Federal registration permit only. . . . [See complete description in analysis.]</i> <span style="float: right;"><i>Aug. 10–Sept. 30</i> <i>Nov. 1–Feb. 28</i></span></p>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATION  
WP06-56**

**EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose.** Passage of this proposal would make permitting more difficult. All agencies are presently working together which has benefited the users. The Eastern Interior Alaska Subsistence Regional Advisory Council is not in favor of filling out additional paperwork and be required to have multiple permits. There remains concerns about the recent Alaska Board of Game action to black list subsistence hunters who fail to report their harvest. Their action was insensitive and an attack on subsistence users.

The Council does not want to take away hunting privileges and make subsistence users outlaws. Hunting is vitally important and we should not be punishing people who need food for their table. The Board of Game's action will result in excluding hunters still hunting without a permit. It will result in unreported harvests.

## INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-56

**Oppose** the proposal as recommended by the Eastern Interior Alaska Subsistence Regional Advisory Council.

### **Justification**

Adoption of this proposal would cause an undue burden on the subsistence user to obtain both a Federal and State permit. Dual permits may also result in double harvest reporting and delays providing timely harvest information to both Federal and State wildlife biologists because of the inherent delays associated with separate harvest reporting systems.

The Fortymile Caribou Management Plan was a cooperative effort to help the herd reestablish its traditional range with the least amount of confusion to hunters, while providing a meaningful subsistence priority to qualified subsistence users. Requiring two permits would result in regulatory complexity for subsistence hunters, possibly resulting in citations.

Adoption of this proposal would not resolve the proponent's main issue, as there is an existing Federal general provision that requires similar reporting compliance of Federally qualified subsistence users and similar consequences for compliance failure.

## WRITTEN PUBLIC COMMENTS WP06-56

**Support.** Subsistence regulations should be culturally sensitive and not include unnecessary administrative actions, such as sealing. Proposal #56 would allow those hunting caribou in units 20 and 25 to continue to do so under a Federal permit after the State implements its "failure to report penalty." The threat of becoming a criminal because you don't report but still need to feed your family will only serve to antagonize local residents. What is needed is a culturally sensitive method of collecting wildlife harvest data. Whatever that method is, it will only succeed when there is mutual trust between the government and local residents. The State's proposal "failure to report penalty," unfortunately, does not build that needed trust. Proposal #56 recognizes the cultural nuances of harvest reporting.

*—Alaska Regional Office, National Parks Conservation Association*

## STAFF ANALYSIS

### WP06-56

#### ISSUES

Proposal WP06-56, submitted by Craig Fleener of Fort Yukon, requests the creation of Federal registration permits for all species for which a State registration permit is required for Federally qualified subsistence hunters in the Eastern Interior Alaska Region—Units 12, 20, and 25.

#### DISCUSSION

The proponent stated that he submitted this proposal because, “The recent action of the Alaska Board of Game to implement a failure to report penalty on State registration permits, or black list, threatens the conservation of wildlife species important to subsistence users in Eastern Interior, and creates an unacceptable burden on subsistence hunters. Those on the black list will lose eligibility for future registration hunts for failing to report on the previous year’s drawing or Tier II permits.” The proponent also stated that “black listing” hunters “will result in lower permit reporting and will drive traditional subsistence harvesting activities and users to be illegal.”

Low harvest and permit reporting compliance is a real concern for Federal and State wildlife managers, as well as the users involved. For example, for the interior regions of Alaska, ADF&G records show that up to 20% of the permits issued are not reported (WIRAC 2006).

In Unit 12, there are no Federal hunts that require State registration permits. In Unit 20, there are two Federal caribou hunts that require a joint State/Federal registration permit in Subunit 20E and a portion of Subunit 20F. In Unit 25, two Federal caribou hunts require a State registration permit, both in Subunit 25C.

It should be noted that there is an existing Federal general provision, which requires similar reporting compliance of Federally qualified subsistence users and similar consequences for compliance failure. §\_\_\_\_.25(h)(5) of the Federal subsistence management regulations states: *“If a permit requires you to return harvest information necessary for management and conservation purposes, and you fail to comply with such reporting requirements, you are ineligible to receive a subsistence permit for that activity during the following calendar year, unless you demonstrate that failure to report was due to loss in the mail, accident, sickness, or other unavoidable circumstances.”*

#### Existing Federal Regulations

##### Units 12, 20 and 25–Caribou

Unit 12–No existing Federal hunts use State registration permits.

- 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 ratio for the two herds. The season closures will be announced by the Northern Field Office manager, Bureau of Land Management, after consultation with the National Park Service and Alaska Department of Fish and Game.* Aug. 10–Sept. 30  
Nov. 1–Feb. 28
- Unit 20F, east of the Dalton Highway and south of the Yukon River—1 caribou; however, cow caribou may be taken only from Nov. 1–Mar. 31. During the Nov. 1–Mar. 31 season a State registration permit is required.* Aug. 10–Sept. 20  
Nov. 1–Mar. 31
- Unit 25C, that portion west of the east bank of the mainstem of Preacher Creek to its confluence with American Creek, then west of the east bank of American Creek—1 caribou; however cow caribou may be taken only from Nov. 1–Mar. 31. However, during the Nov. 1–Mar. 31 season, a State registration permit is required.* Aug. 10–Sept. 20  
Nov. 1–Mar. 31
- 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. The season closures will be announced by the Northern Field Office manager, Bureau of Land Management, after consultation with the National Park Service and Alaska Department of Fish and Game.* Aug. 10–Sept. 30  
Nov. 1–Feb. 28

No other hunts in Units 20 or 25 use State registration permits.

## **Proposed Federal Regulations**

### **Units 20 and 25—Caribou**

Unit 12—No existing Federal hunts use State registration permits.

- 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 ratio for the two herds. The season closures will be announced by the Northern Field Office manager, Bureau of Land Management, after consultation with the National Park Service and Alaska Department of Fish and Game.* Aug. 10–Sept. 30  
Nov. 1–Feb. 28

<i>Unit 20F, east of the Dalton Highway and south of the Yukon River—1 caribou; however, cow caribou may be taken only from Nov. 1–Mar. 31. During the Nov. 1–Mar. 31 season a <b>State Federal</b> registration permit is required.</i>	<i>Aug. 10–Sept. 20 Nov. 1–Mar. 31</i>
<i>Unit 25C, that portion west of the east bank of the mainstem of Preacher Creek to its confluence with American Creek, then west of the east bank of American Creek—1 caribou; however cow caribou may be taken only from Nov. 1–Mar. 31. However, during the Nov. 1–Mar. 31 season, a <b>State Federal</b> registration permit is required.</i>	<i>Aug. 10–Sept. 20 Nov. 1–Mar. 31</i>
<i>Unit 25C remainder—1 caribou by <del>joint State/Federal</del> registration permit only. Up to 600 caribou may be taken under a State/Federal harvest quota. The season closures will be announced by the Northern Field Office manager, Bureau of Land Management, after consultation with the National Park Service and Alaska Department of Fish and Game.</i>	<i>Aug. 10–Sept. 30 Nov. 1–Feb. 28</i>

No other Federal hunts in Units 20 or 25 use State registration permits.

### **Extent of Federal Public Lands**

In Unit 20E, Federal public lands account for 24% of the total unit with 4% BLM and 20% NPS lands.

In Unit 20F, Federal public lands account for 4% of the total unit with 15% BLM and less than 1% FWS lands.

In Unit 25C, Federal public lands account for 74% of the total unit, with 64% BLM, 9% NPS, and 1% FWS lands.

See **Maps section** for details.

### **Customary and Traditional Use Determinations**

The customary and traditional use determination for caribou in Unit 20E includes rural residents of Units 12 (north of Wrangell-St. Elias National Preserve), 20D and 20E; in Unit 20F, rural residents of 20F, 25D, and Manley; and in Unit 25C, no positive customary and traditional use determination for caribou has been made. Therefore, all rural residents are allowed to hunt.

### **Effects of the Proposal**

This proposal would require Federally qualified subsistence users to have a Federal registration permit to hunt caribou in Units 20E, portions of 20F and 25C, in addition to having a State registration permit, when hunting on non-Federal lands. Dual permits would be needed because of the mixture of Federal, State, and private lands within these units.

One contributing factor to the success of managing the Fortymile Caribou Herd has been the coordinated harvest reporting efforts between the State and Federal agencies. Because the herd's harvest allocation is spread over Units 20B, 20D, 20E and 25C, an effective harvest reporting system is necessary to keep

within harvest guidelines. Establishment of a dual reporting system could create delays in compiling and monitoring harvest totals for each of the affected subunits.

Requiring two permits would result in regulatory complexity for subsistence hunters, possibly resulting in citations from Federal and/or State law enforcement personnel.

Adoption of this proposal would not resolve the proponent's main issue, as § \_\_\_\_.25(h)(5) requires similar reporting compliance of Federally qualified subsistence users and similar consequences for compliance failure.

While recognizing the proponent's concern that implementation of the State's "failure to report penalty" for issued permits could result in non-compliance with the permit system, the Federal Subsistence Management Program encourages the proponent to work with the local hunters, local tribes, local advisory committees and the Eastern Interior Alaska Regional Council to find ways to improve compliance with current reporting requirements.

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<i>WP06-57 Executive Summary</i>	
<b>General Description</b>	Eliminate the Federal regulatory closure restriction for sheep hunting in the Arctic Village Sheep Management Area in Unit 25A during the Aug. 10–Apr. 30 season. <i>Submitted by the Alaska Department of Fish and Game (ADF&amp;G).</i>
<b>Proposed Regulation</b>	<b>Unit 25A–Sheep</b> <i>Units 25A Arctic Village Sheep Management Area—2 rams by Federal registration permit only. Aug. 10–Apr. 30</i> <i>Federal Public lands are closed to the taking of sheep except by rural Alaska residents of Arctic Village, Venetie, Fort Yukon, Kaktovik, and Chalkyitsik hunting under these regulations.</i>
<b>North Slope Regional Council Recommendation</b>	<b>Defer.</b>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support with modification.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATIONS WP06-57

### EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Oppose.** The Eastern Interior Alaska Subsistence Regional Advisory Council needs sheep population surveys before considering reopening the closure to non-Federally qualified hunters. The people of the Arctic Village are totally dependent on the land for food for their nutritional and cultural needs. The managers cannot only depend on harvest tickets for harvest information. There is a problem with transporters throughout the region. Transporters bring people up to this area and they do not clean up after themselves. The Council heard testimony from Arctic Village residents during the meeting that sheep have been harvested but not reported by subsistence users in this area. There is a need for a meeting with the people of Arctic Village and a need for more work on this issue before the area is opened to non-Federally qualified sheep hunters. There was no biological reason given to support this proposal. Here is an opportunity for the people in area to work with nonsubsistence users before submitting a proposal.

## NORTH SLOPE SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Defer action.** The North Slope Subsistence Regional Advisory Council voted to defer a decision on this proposal to get more information on sheep population and more harvest information. The Council would feel very uncomfortable making a decision that might be detrimental when there's a lack of information.

### INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-57

**Support with modification,** contrary to the recommendations of the Eastern Interior Alaska and North Slope Subsistence Regional Advisory Councils, to allow non-Federally qualified users to hunt sheep in the drainages of Red Sheep Creek and Cane Creek, and to defer action on the proposal with respect to the remainder of the Arctic Village Sheep Management Area.

The modified regulation should read:

#### Unit 25A

*Arctic Village Sheep Management Area—2 rams by Federal registration permit only. Public lands **excluding the drainages of Red Sheep Creek and Cane Creek** are closed to the taking of sheep except by rural Alaska residents of Arctic Village, Venetie, Fort Yukon, Kaktovik, and Chalkyitsik hunting under these regulations. Aug. 10–Apr. 30*

#### Justification

Section 815(3) authorizes restrictions on the taking of fish and wildlife for nonsubsistence uses on the public lands only if necessary for the conservation of healthy populations of fish and wildlife, to continue subsistence uses of such populations, for reasons of public safety or administration, or pursuant to other applicable law. No information has been brought forward to indicate that maintaining a closure to nonsubsistence hunting of sheep in the Red Sheep Creek and Cane Creek drainages within the Arctic Village Sheep Management Area is necessary for conservation of a healthy sheep population nor that allowing nonsubsistence use of sheep in these drainages would prevent continued subsistence use of sheep. Although surveys of sheep have not been conducted in the management area since its establishment in 1991, there was not a conservation concern for the sheep in the Red Sheep Creek and Cane Creek drainages in 1995 when these drainages were added to the management area. The sheep population in these drainages is thought to have increased since 1995, based on observed increases in sheep numbers in other eastern Brooks Range sheep populations. Allowing sheep hunting by non-Federally qualified hunters in these drainages would not adversely affect the sheep population because these hunters would be limited to taking one full curl ram in the fall season when most, if not all, nonlocal sheep hunting in the eastern Brooks Range occurs. During the winter season restrictions on both the use of aircraft and motorized access from the Dalton Highway essentially preclude harvest by nonlocal hunters.

Allowing hunting by non-Federally qualified hunters in the Red Sheep Creek and Cane Creek drainages would not significantly reduce harvest opportunities for Arctic Village residents. Although some Arctic Village residents have testified that they are uncomfortable hunting in the same area where nonsubsistence hunters are hunting, that nonsubsistence hunters in general waste meat and leave garbage in the field,

and that use of aircraft associated with nonsubsistence hunting disturbs sheep and other wildlife, the sheep population in these drainages can support harvest by both subsistence and nonsubsistence hunters. Currently, despite the closure to nonsubsistence hunters and a more liberal Federal harvest limit during the fall than that provided under State regulations in adjacent areas, there is relatively little hunting effort by Arctic Village residents in these drainages and very few sheep have been reported taken there. By allowing hunting in these drainages under State regulations, the few Arctic Village residents who hunt the area would continue to benefit from the more liberal Federal harvest limit in the fall and would benefit from a more liberal State harvest limit during the winter.

Deferral of the proposal with respect to the remaining, much larger closure area of the original Arctic Village Sheep Management Area is recommended for conservation reasons because there is greater uncertainty regarding the status of the sheep population there and potentially greater impacts of a liberalized winter season harvest limit in this more accessible portion of the management area. The area has lower quality sheep habitat than sheep ranges to the north, and in 1991 the density of sheep in the area was very low, which prompted the establishment of the original management area closure and a more conservative annual harvest limit. Surveys of the sheep population and an updated Arctic Village harvest assessment are needed to determine if the sheep population can support the more liberal State winter season harvest limit of three sheep that would be in effect with a rescission of the closure. Deferral for up to two years is recommended to enable the needed sheep surveys and harvest assessment to be completed.

**STAFF ANALYSIS  
WP06-57**

**ISSUES**

Proposal WP06-57, submitted by the Alaska Department of Fish and Game (ADF&G), would eliminate the Federal regulatory closure restriction for sheep hunting in the Arctic Village Sheep Management Area (Management Area) in Unit 25A (**Map 1**) during the Aug. 10–Apr. 30 season.

**DISCUSSION**

Section 815(3) of ANILCA authorizes a restriction on the taking of fish and wildlife for nonsubsistence uses on the public lands (other than national parks and park monuments) unless necessary for the conservation of healthy populations of fish and wildlife, for the reasons set forth in section 816, to continue subsistence uses of such populations, or pursuant to other applicable law. The proponent feels that without evidence of any significant use by local subsistence hunters, the necessity of the closure to continue subsistence use of sheep in the area cannot be used to justify maintaining the closure. Federal closure regulations for the Management Area have been in existence since the 1991/92 regulatory year. The management area was expanded in 1995 to include the Cane Creek and Red Sheep Creek drainages.

**Existing Federal Regulations–Sheep**

<i>Units 25A Arctic Village Sheep Management Area—2 rams by Federal registration permit only. Public lands are closed to the taking of sheep except by rural Alaska residents of Arctic Village, Venetie, Fort Yukon, Kaktovik, and Chalkyitsik hunting under these regulations.</i>	<i>Aug. 10–Apr. 30</i>
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**Proposed Federal Regulations–Sheep**

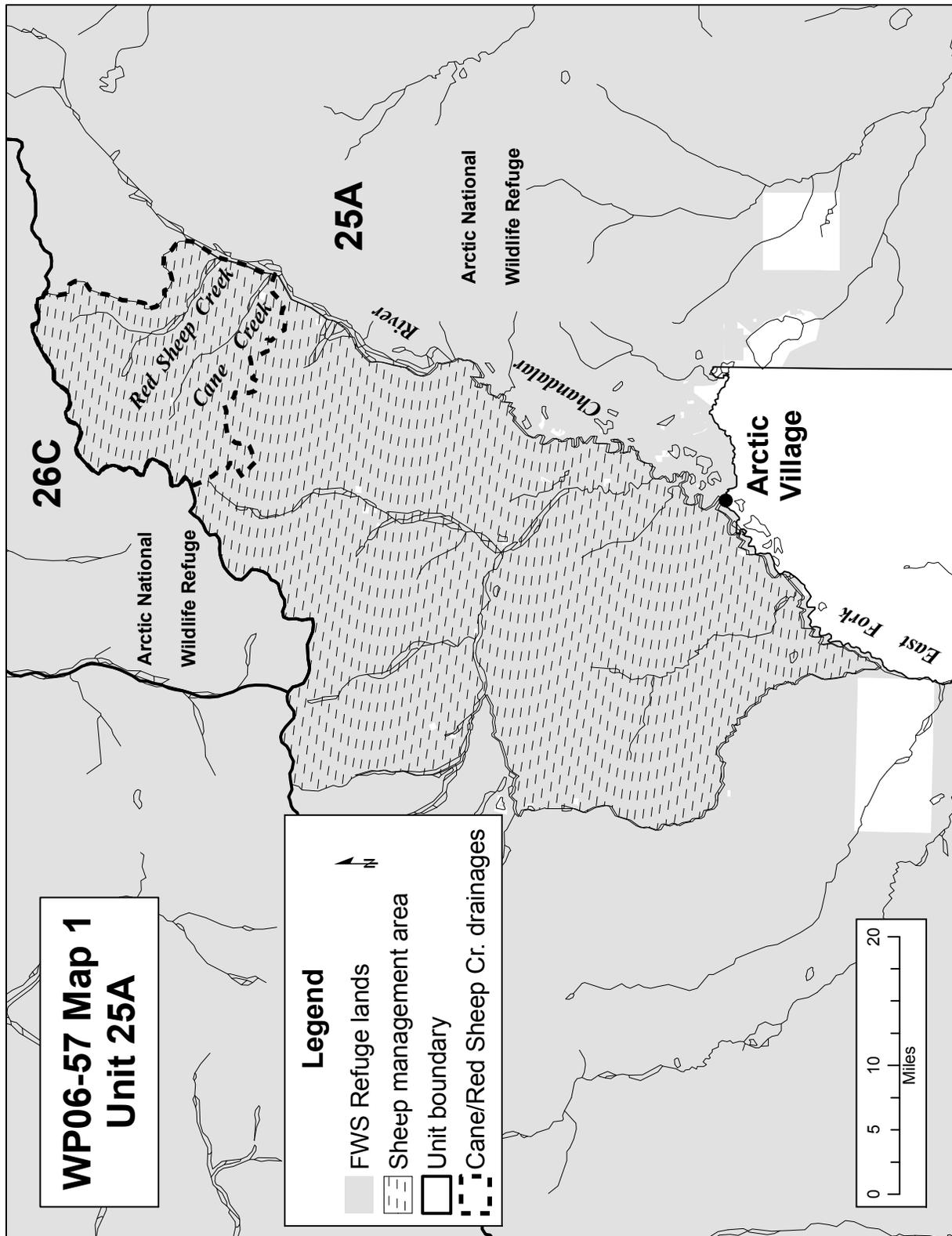
<i>Units 25A Arctic Village Sheep Management Area—2 rams by Federal registration permit only. <del>Public lands are closed to the taking of sheep except by rural Alaska residents of Arctic Village, Venetie, Fort Yukon, Kaktovik, and Chalkyitsik hunting under these regulations.</del></i>	<i>Aug. 10–Apr. 30</i>
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**Existing State Regulations–Sheep**

<i>Unit 25A, east of the Middle Fork Chandalar River:</i>	<i>Aug. 10–Sept. 20</i>
<i>Residents: One ram with full-curl horn or larger .....Harvest</i>	<i>Oct. 1–April 30</i>
<i>OR</i>	
<i>Three sheep by permit available online at <a href="http://hunt.alaska.gov">hunt.alaska.gov</a> or in person in Fairbanks, Ft. Yukon and Kaktovik beginning Sept. 23. The use of aircraft for access to hunt sheep and to transport harvested sheep is prohibited in this hunt, except into and out of the Arctic Village and Kaktovik airports.</i>	
<i>No motorized access from the Dalton Highway.</i>	

**Extent of Federal public lands**

Federal public lands account for 76% of Unit 25A (74% FWS and 2%BLM lands) (See **Unit 25 map**).



## Customary and Traditional Use Determination

Residents of Arctic Village, Chalkyitsik, Fort Yukon, Kaktovik, and Venetie have a positive customary and traditional use determination for sheep in Unit 25A.

## Regulatory History

The current access restriction has been in Federal subsistence management regulations since the 1991/92 regulatory year. The initial closure was proposed by the Arctic National Wildlife Refuge to address concerns regarding low number of sheep in the area, and to provide for continued subsistence use of sheep in the area. In Mar. 1991, two proposals came before the Board to establish the closure area: Proposal P91-100A, submitted by the Arctic National Wildlife Refuge, and Proposal P91-75, submitted by the Yukon Flats Local Fish and Game Advisory Committee, which requested that the Board include the drainages of Cane Creek and Red Sheep Creek to the closure restrictions for the Management Area. The Board adopted Proposal P91-100A, which did not include Cane Creek and Red Sheep Creek, and took no action on Proposal P91-75. Also in 1991, Proposal P91-21, submitted by Brooks Range Arctic Hunts requested that the Board remove the closure restriction to allow for the harvest of sheep by non-Federally qualified subsistence users in the closure area. The Board rejected the proposal at its June 5, 1991, meeting.

In 1993, proposal P93-58, submitted by the Arctic Village Council, again requested the Board to include the drainages of Cane Creek and Red Sheep Creek within the Management Area. The Board rejected the proposal on the basis that the drainages of Cane Creek and Red Sheep Creek supported adequate numbers of sheep to provide for both subsistence and nonsubsistence harvest.

Proposal P95-54, submitted by the Arctic Village Council in Oct. 1995, again requested the Board to include the drainages of Cane Creek and Red Sheep Creek within the Management Area. A representative of Arctic Village testified to the Board that Red Sheep Creek and Cane Creek drainages contain Native allotments and traditional cultural sites and are key sheep hunting areas for the village. The Board was told by the proponents that the issue was one of local hunter displacement caused by considerable air traffic that deterred the sheep from utilizing lower elevations where Arctic Village hunters could gain access to them. Arctic Village residents also stated that local hunters could not compete with non-local hunters using more sophisticated equipment such as more powerful scopes and the use of aircraft to track sheep. The Board recognized that the issue was not one of resource abundance, as staff reported the population could support both subsistence and nonsubsistence harvests. After the Board considered and dismissed different compromise solutions, it adopted the proposal with a commitment to review the issue the following year. Following that Board's decision, the Alaska Department of Fish and Game submitted a request for reconsideration. The Board upheld its 1995 decision.

In 1996, the ADF&G submitted Proposal P96-55 that requested the Board exclude Red Sheep Creek and Cane Creek from the Management Area. The analysis of P96-55 included the results of a refuge monitoring project of more than a 30-day period during the previous sheep hunting season, when forty-two aircraft events by guides based in Red Sheep Creek, who were guiding hunts in drainages east of Red Sheep Creek, were observed by refuge staff. The Board rejected that proposal, expressing disappointment with the absence of dialogue over the past year between the State, Federal staff and Arctic Village.

## **Current Events Involving Species**

A review analysis of the Federal closure of the Unit 25A sheep regulations for the Management Area was conducted by OSM staff in 2005. The closure was evaluated by three criteria: 1) How the current resource abundance is related to the management objectives for the species, 2) the current resource population trend, and 3) the current hunter harvest trend and/or hunter effort. OSM staff reached a preliminary conclusion that there is no current need for the regulatory closure based on results from the review analysis and recommended to the affected Councils to initiate a proposal to modify or eliminate the closure. OSM staff presented the review analysis at the fall 2005 Council meetings. The North Slope and Eastern Interior Alaska Subsistence Regional Advisory Councils recommended maintaining the closure after reviewing the closure analysis at their fall 2005 meetings. The Councils felt that the presentations and the information presented in the closure review analysis did not support the need to eliminate the closure.

## **State Management Objectives—Sheep**

The current management objectives for the Unit 25A sheep population are to manage for full-curl- or larger-horned rams and for population growth.

## **Population Status**

Sheep population surveys have not been conducted in the Management Area since 1991, consequently estimates of sheep abundance are not available. Also, information concerning the sheep populations of the eastern Brooks Range is limited. Some sheep surveys have been conducted in the Eastern Brook Range. Those surveys indicate that sheep populations in the area have recovered somewhat from population declines in the early 1990s, but remain below numbers observed in the 1980s. Current sheep populations are considered to be relatively stable (Stephenson 2006 pers. comm.). Based on the estimate that few, if any, sheep have been harvested by Federally qualified subsistence users in the Management Area, it can be assumed that the sheep population within the affected area is regulated by climatic conditions, habitat, and natural mortality.

## **Harvest**

Little harvest information is available for the Management Area. Federal permits have been available since 1995/96 regulatory year. OSM records indicate that, from 2000 to present, six hunters obtained permits (Federal hunt S596), an average of one per year. However, no harvest reports have been returned during the period. To assist in the regulatory closure review, the Arctic National Wildlife Refuge has taken a recent initiative to collect sheep harvest information from households in Arctic Village (Wertz 2005, pers. comm.). Results of the harvest survey are not available at this time, however, several Federally qualified subsistence users testified at the Eastern Interior Alaska Subsistence Regional Advisory Council meeting on March 22, 2006, that they have taken sheep in this area.

## **Effects of the proposal**

If adopted, proposal WP06-57 would eliminate the Federal closure regulations for the Management Area. Federally qualified subsistence hunters would be able to harvest two rams of any size Aug. 10–Apr. 30, and additional sheep Oct. 1–Apr. 30 under State regulations, for a combined total of up to three sheep. Nonsubsistence hunters would be able to harvest one full-curl ram Aug. 10–Sept. 20 season, and additional sheep Oct. 1–Apr. 30, for a combined total of up to three sheep. All hunters taking sheep under State regulations Oct. 1–Apr. 30, would be prohibited from using aircraft to hunt sheep. Areas adjacent

to the Management Area are lightly to moderately utilized by non-Federally qualified subsistence users that hunt sheep under State regulations. Adoption of the proposed regulatory change is not expected to have adverse impacts on the communities that have a positive customary and traditional use determination for sheep in the Management Area, as no harvest has been reported for the affected area by these communities.

At the March, 2006 meeting of the Eastern Interior Subsistence Regional Advisory Council, testimony on sheep harvest in the closure area was given by residents of Arctic Village. Arctic Village residents also stated that more information on sheep harvest and use needs to be collected before action is taken that would eliminate the closure.

#### **LITERATURE CITED**

ADF&G 2005. Harvest ticket database. Microcomputer database. ADF&G Division of Subsistence, Anchorage, AK.

FWS. 2005. Harvest database. Microcomputer database. Office of Subsistence Management, FWS. Anchorage, AK.

Stephenson, B. 2006. Area wildlife biologist. Personal communication. ADF&G Division of Wildlife Conservation, Fairbanks, AK.

Wertz T. 2005. Personal communication. FWS Arctic National Wildlife Refuge, Fairbanks, AK.

<i>WP06-58 Executive Summary</i>	
<b>General Description</b>	Expand the positive customary and traditional use determination for moose in portions of Unit 12 to include all residents of Unit 13C. <i>Submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council.</i>
<b>Proposed Regulation</b>	<p><b>Unit 12—Moose</b></p> <p><b>Customary and Traditional Use Determination</b></p> <p><i>Unit 12, that portion east of the Nabesna River and Nabesna Glacier, south of the Winter Trail from Pickerel Lake to the Canadian Border:</i>      <i>Residents of Units 12, 13C, <del>Chistochina,</del> and Healy Lake.</i></p> <p><i>Unit 12 remainder</i>      <i>Residents of Units 12, 13C, <del>Chistochina,</del> Dot Lake, <del>and Healy Lake,</del> and <del>Mentasta Lake.</del></i></p>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Support.</b>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Defer</b> to the Eastern Interior Alaska Subsistence Regional Advisory Council.
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Oppose—2</b> <b>Split vote—1</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATIONS WP06-58

### EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support.** The Eastern Interior Alaska Subsistence Regional Advisory Council recognized that moose are clearly an important subsistence resource for residents of Unit 13C and there is evidence for these communities using moose in portions of Unit 12. The Council needs to protect similarly situated users. The Council has always tried to be inclusive when addressing customary and traditional use determination proposals. People live in communities as well as along the road.

## SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Defer** to the Eastern Interior Alaska Subsistence Regional Advisory Council. Communities wanting Customary and Traditional Use Determinations should submit their own proposals. The Southcentral Alaska Subsistence Regional Advisory Council stated that proposals should come from the users. The Southcentral Council commented that debate should be heard among residents living in the area for the Eastern Interior Council to hear thorough public testimony.

### INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-58

**Support** the proposal as recommended by the Eastern Interior Alaska Subsistence Regional Advisory Council.

#### Justification

Moose are clearly an important subsistence resource for residents of Unit 13C, and there is evidence for these communities using moose in portions of Unit 12, namely 12 “A”, for which they currently are included in the positive customary and traditional use determination, and 12 “B” and 12 “C” for which there is some support for a pattern of use.

### WRITTEN PUBLIC COMMENTS WP06-58

**Oppose.** We do not support WP06-58 to revise the customary and traditional use determination to include [residents of] Unit 13(C). This subunit is the Ahtna People’s customary and traditional use area.

–*Ahtna Tene Nene’ Subsistence Committee*

**Oppose.** We do not support this proposal. We would like to have it read Mentasta Lake and Chistochina instead of Unit 13C. The communities of Mentasta and Chistochina have traditionally used this area and to include all of Unit 13C would include others with no use.

–*The Mentasta Traditional Council*

There was a split vote on this proposal. Those who supported the proposal noted that people living in Unit 13C have well documented ties to the region at issue. They recommended that rather than using the term Unit 13C, the regulation should list the designated resident zone communities (Chistochina, Mentasta, Gakona, and Slana. Those who opposed the proposal were concerned that not all the communities and areas in Unit 13C have demonstrated to have a customary and traditional use of moose throughout Unit 12.

–*Wrangell-St. Elias National Park & Preserve Subsistence Resource Commission*

**STAFF ANALYSIS  
WP06-58**

**ISSUES**

Proposal WP06-58, submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council, requests that the positive customary and traditional use determination for moose in portions of Unit 12 be expanded to include all residents of Unit 13C.

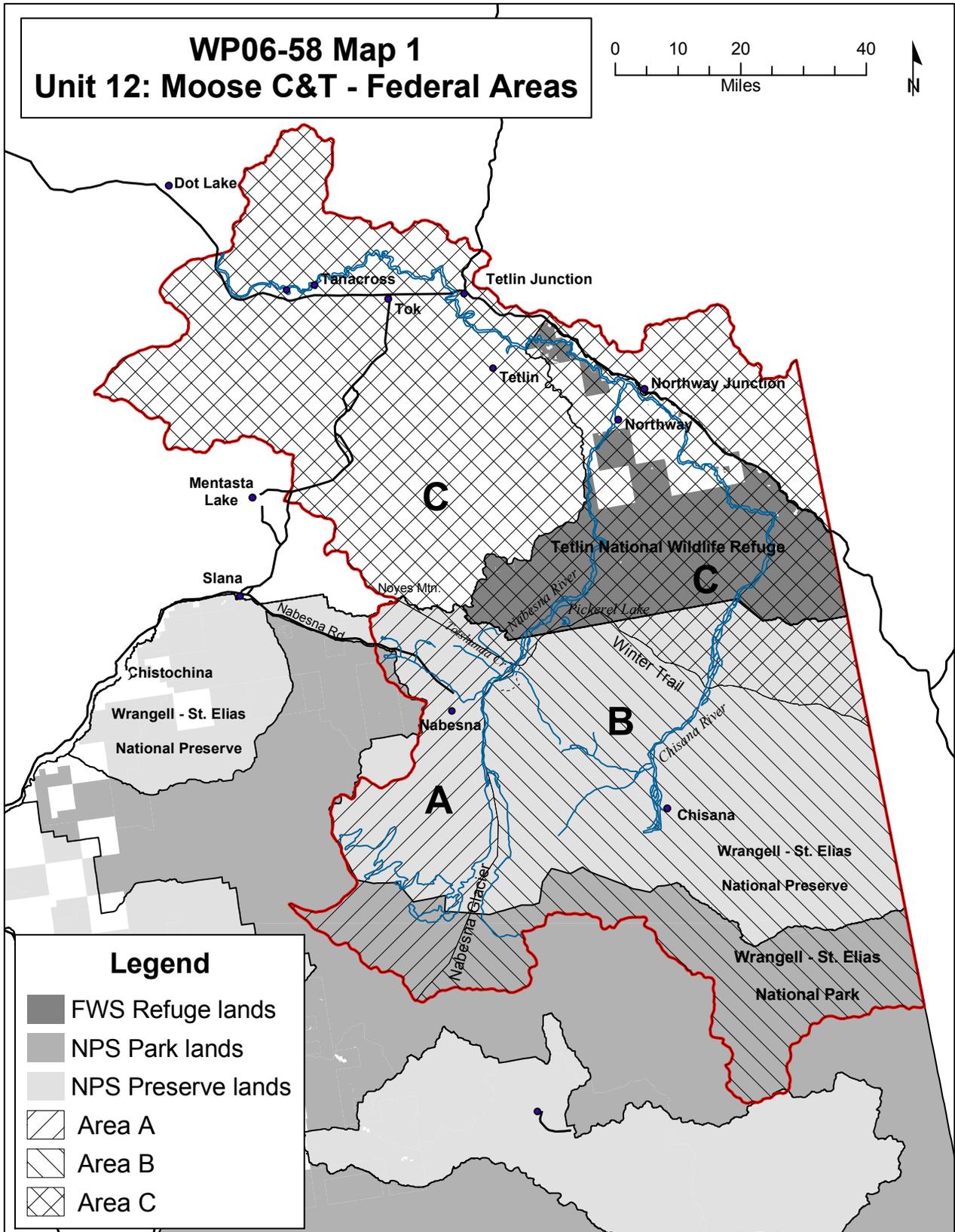
**DISCUSSION**

The Eastern Interior Alaska Subsistence Regional Advisory Council (Council) requests that the positive customary and traditional use determination for moose in portions of Unit 12 be expanded to include all residents of Unit 13C. The Council states that it supports a more comprehensive customary and traditional use determination for Unit 12 because of the proximity of the Unit 13C residents to Unit 12 as well as knowledge that Unit 13C residents have a traditional pattern of hunting moose within Unit 12 (EI RAC 2005a: 75; 2005b: 90). All residents of Unit 13C are included in the customary and traditional use determination for moose in the portion of Unit 12 labeled as "A" in the regulatory descriptions below. Mentasta Lake is also included in the portion of Unit 12 described as "C" below, but not the portion of Unit 12 described as "B." Gakona and Slana, as well as the people living along the road system, are only included in the customary and traditional use finding for the portion of Unit 12 described as "A", but not for portions "B" nor "C" as described below. The proponents are requesting a positive determination for all residents of Unit 13C for moose in the portions of Unit 12 described as "B" and "C" below (**Map 1**).

**Existing Federal Regulation****Unit 12–Moose****Customary and Traditional Use Determination**

(The areas are labeled "A," "B," and "C" for this analysis only)

- |   |  |
|---|--|
| <b>A.</b> <i>Unit 12, that portion west of the Nabesna River and Nabesna Glacier, south of a line from Noyes Mountain to the confluence of Totschunda Creek with the Nabesna River.</i> | <i>Residents of Unit 11 north of 62nd parallel, Units 12, 13A, 13B, 13C, 13D, and the residents of Chickaloon, Dot Lake, and Healy Lake.</i> |
| <b>B.</b> <i>Unit 12, that portion east of the Nabesna River and Nabesna Glacier, south of the Winter Trail from Pickerel Lake to the Canadian Border.</i>                              | <i>Residents of Unit 12, Chistochina, and Healy Lake.</i>  |
| <b>C.</b> <i>Unit 12 remainder</i>  | <i>Residents of Unit 12, Chistochina, Dot Lake, Healy Lake, and Mentasta Lake.</i>   |



## Proposed Federal Regulation

### Unit 12–Moose

#### Customary and Traditional Use Determination

(The areas are labeled “A,” “B,” and “C” for this analysis only)

**A.** *Unit 12, that portion west of the Nabesna River and Nabesna Glacier, south of a line from Noyes Mountain to the confluence of Totschunda Creek with the Nabesna River.* Residents of Unit 11 north of 62nd parallel, Units 12, 13A, 13B, 13C, 13D, and the residents of Chickaloon, Dot Lake, and Healy Lake.

**B.** *Unit 12, that portion east of the Nabesna River and Nabesna Glacier, south of the Winter Trail from Pickerel Lake to the Canadian Border.* Residents of Units 12, 13C, ~~Chistochina,~~ and Healy Lake.

**C.** *Unit 12 remainder* Residents of Units 12, 13C, ~~Chistochina,~~ Dot Lake, ~~and Healy Lake,~~ ~~and Mentasta Lake.~~

### Extent of Federal Public Lands

Federal public lands in Unit 12 are comprised of Wrangell-St. Elias National Park/Preserve (48%) and the Tetlin National Wildlife Refuge (11%) (**Map 1**).

### Regulatory History

The customary and traditional use determination for moose in Unit 12 is essentially the same as originally adopted by the Federal Subsistence Board in 1992 from State of Alaska determinations. The State recognized the customary and traditional use of moose in all of Unit 12 by residents of Unit 12. To address use by residents of other units, three areas within Unit 12 were identified: 1989 State regulations referred to these areas as “South,” “East,” and “North” respectively (Alaska Regulations 1989:5AAC 99.025). For the purpose of this analysis, these three areas are labeled “A,” “B,” and “C” in the regulatory language above and are depicted in Map 1. In the “South” or “A” portion of Unit 12, which encompasses the Nabesna Road area, residents of Unit 12 were recognized as having positive customary and traditional use, as were residents of Unit 11 north of the 62nd parallel (approximately at the junction of the Unit 11 boundary with Klawasi River), residents of Units 13A, 13B, 13C, 13D, and residents of Dot Lake and Chickaloon. In the “North” or “C” portion of Unit 12, residents of Unit 12, and residents of Dot Lake and Mentasta Lake were recognized as having customary and traditional use of moose. In the “East” or “B” portion of Unit 12, residents of Unit 12 were the only customary and traditional users (of moose) recognized until 1998, when the Federal Subsistence Board added the residents of Healy Lake to all of Unit 12 (FSB 1998). At its May 2005 meeting, the Federal Subsistence Board added residents of Chistochina to the customary and traditional use finding for all portions of Unit 12 (through proposal WP05-21).

### Community Characteristics

As noted above, the community of Mentasta Lake is included in the customary and traditional use finding for moose in the “A” and “C” portions of Unit 12, but not in the “B” portion. Gakona and Slana are also

included in the customary and traditional use finding for moose “A” portion of Unit 12, but not in the “B” or “C” portions of Unit 12. People residing along the Glenn Highway and the Tok Cutoff Road are also not included in the customary and traditional use finding for moose in the “B” and “C” portions of Unit 12.

The community of Mentasta Lake is located 6 miles off the Tok Cutoff, about 38 miles south of Tok (ADCED 2005). As noted by Stratton and Georgette (1984:161), Mentasta Lake, which is located on the boundary of the Upper Tanana and Ahtna territory, was historically the northernmost of all Ahtna villages. Mentasta (and Chistochina) was historically an Upper Ahtna community, and many of its residents have strong family ties to communities along the Nabesna Road (e.g., Twin Lakes, Suslota, Batzulnetas) and to Chisana (in the so-called “B” portion of unit 12) (Cellarius, pers. comm. 2006).

The community of Slana is a dispersed settlement located at the junction of the Tok Cutoff and Nabesna Roads, northeast of Glennallen and southwest of Tok (ADCED 2005; Stratton and Georgette 1984:148). Originally the site of an Ahtna village, construction of the telegraph line and associated army road in 1902 brought non-Natives into the Slana area (Stratton and Georgette 1984:148). Subsequent to that, a trading post was built and Slana became an important trading center for Upper Ahtna and Upper Tanana Indians (Stratton and Georgette 1983:148). The population of Slana grew significantly in the 1980s when the Federal government offered homesteads for settlement (ADCED 2005). The 2000 population estimate for Slana was 124 (ADCED 2005).

South of Slana is Gakona, which is located at the confluence of the Copper and Gakona rivers, at mile 2 of the Tok Cutoff Road to the Glenn Highway (ADCED 2005). Historically in the middle or central Ahtna territory, the site of Gakona was occupied seasonally as a wood and fish camp by Ahtna Indians prior to the establishment of a trading post and post office in 1905 (Reckord 1983:128; Stratton and Georgette 1984:90). The 2000 census reported that Gakona had 215 residents (ADCED 2005).

The Glenn Highway and Tok Cutoff Road are both home to scattered individuals, most of whom typically live several miles from their nearest neighbors (Reckord 1983:256). In the early 1980s, the population consisted largely of retirees, homesteaders and guides (Reckord 1983:256); many of these residents had lived in the area for 20–30 years (at that time) and the area had reportedly grown up around them.

The area was traditionally the home of the Ahtna and Upper Tanana Athabascans, and much of the area is laced with traditional trails which connected the Tanana and Copper River basins, which served as important venues for Upper Tanana and Copper River Ahtna interchange and travel (Reckord 1983; Wheeler and Ganley 1991). Resources in the area are utilized by descendants of these indigenous populations, as well as more recent immigrants.

### **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 an 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 area encompassed by Unit 13C, and specifically the communities of Mentasta Lake, Slana, and Gakona, was historically occupied and used by Ahtna and Upper Tanana Athabascans, ancestors of some of the residents of the area today. As noted above, the community of Mentasta Lake is located on the boundary of the Upper Tanana and Ahtna territory, and was historically the northernmost of all Ahtna villages (Stratton and Georgette 1984:161). Today, many of its residents have strong family ties to communities along the Nabesna Road (e.g., Twin Lakes, Suslota, Batzulnetas) and to Chisana (in the so-called “B” portion of Unit 12) (Cellarius 2006, pers. comm.). Gakona was historically in middle Ahtna territory. The historic importance of moose to the people of this general area was well documented by explorers, travelers and anthropologists working throughout the region. For example, based on extensive travels throughout the Copper River region, the explorer Lt. Allen (1887:129) claimed that, “...fish, rabbit, moose, sheep, caribou, bear, goat, porcupine, beaver, lynx, muskrat, goose, duck, and grouse constitute the mass of their food.” Further, Beck, who traveled throughout both the Upper Tanana region and the Copper River region to assess the merits of building schools in specific areas, noted the dependence of local residents on moose, claiming that “... in the fall they hunt caribou and moose for their winter meat supply...” (Beck 1930:31). Finally, McKennan (1959), an anthropologist working primarily with Upper Tanana in the early part of the 20th century, noted the importance of moose to the people with whom he worked. It is important to note that McKennan conducted his fieldwork in and focused on the Nabesna/Chisana area, an area that is functionally the Ahtna/Upper Tanana crossroads, and is squarely in the area referred to as Unit 12 “B” in this analysis (thus indicating long-term use of this particular area).

Today, residents of the communities of Mentasta Lake, Slana, and Gakona, continue to rely on moose as a mainstay of subsistence. In her 1983 study of subsistence in the Wrangell-St. Elias National Park and Preserve, Reckord (1983:154) notes that “...moose are highly valued...” In their 1983 survey of fish and game use by the residents of 22 communities in the Copper River basin, Stratton and Georgette (1984:166) ranked Mentasta Lake 12th overall in terms of mean household harvest of all resources. Moose were a substantial component of the mean household harvest, comprising about 40 percent (158 pounds) of the mean household harvest of 393 pounds (Stratton and Georgette 1984:165-166). Further, while only 32% of the households in Mentasta Lake harvested moose, 90% of the households in Mentasta used moose (187 mean pounds of moose used per household).

In their study, Stratton and Georgette (1984:150) also state that Slana households were “... among the most successful harvesters of wild resources in the Copper River basin.” It was further noted that in the study year, 44% of households harvested moose, for 231 mean pounds used (Stratton and Georgette 1984:151). Stratton and Georgette (1984:152) also note that moose was the “... most widely pursued big game animal.” In the same study, Gakona residents ranked 6th among the 22 communities in its per capita harvest, with 13% of households harvesting moose, for an estimated 93 mean pounds used (Stratton and Georgette 1984:92-93). While not well documented, that use likely extended throughout portions of Unit 12, including “B” and “C.” Reckord (1983:257) noted that for those individuals living along the Tok Cutoff Road, moose is the preferred species on everyone’s hunting list.

Documentation of all permits issued and successful harvests for moose throughout the State by Mentasta Lake, Slana, and Gakona residents is available for the period 1983 to 2002. During this period, 115 permits were used by Mentasta Lake residents to hunt moose statewide. About half (56) of these permits were hunted in Unit 13C, and about 20% were hunted in Unit 13B (26) and Unit 12 (21) each. During the same period, 1127 permits were used by Slana residents to hunt moose statewide. About half (511) of these permits were hunted in Unit 11, and about 25% (345) were hunted in Unit 13C. About 10% (91) were hunted in Unit 12, 22 of them successfully. During the same time period (1983–2002), 2135 permits were used by Gakona residents to hunt moose statewide. Most of these (1817 or 85%) were used to hunt moose in Unit 13, 77 (4%) were used in Unit 12, 21 successfully (ADF&G 2004).

Historically, moose were harvested throughout the year. de Laguna and McClellan (1981:649) note that “After guns were obtained, moose were most successfully hunted in April, when the thawed snow froze at night to a crust that hampered the animals, but not the man on snowshoes.” In contemporary times, however, the primary season of harvest is September with occasional harvests at other times of the year (ADF&G 2004; Reckord 1983).

In the past, Ahtna were known to hunt with their dogs, as described by Allen (1887:149), “... On the Copper and Tanana Rivers, caribou as well as moose are hunted when the snow is deep and hard, with the aid of dogs, when they are brought to bay and killed at short distances.” Modes of transportation in historic times included foot travel and carrying goods on human backs, dog travel, small skin boats, rafts and hand pulled sleds. Allen (1887) referred to the fact that Ahtna kept an average of three dogs, which were used for packing and hunting. One account (Justin 1992, pers. comm.) indicates that horses were used as far back as the 1890s by Ahtna (who got them from miners) in the Chisana and Nabesna areas (Unit 12 “B”).

Of the technologies utilized to access moose today, cars and trucks are generally the most common. Other technologies include boats (both motorized and canoes), snow machines, ATVs, or airplanes. Stratton and Georgette (1984) and Reckord (1983) also report the use of horses. Reckord (1983:154) notes that “The Natives [from Mentasta Lake] hunt on foot and carry as light a gun as possible, usually a .30-caliber rifle... When one is on foot, tracking is difficult and often takes several days. In a vehicle, once a moose is sighted he can be virtually outrun by some machines.” The 1982/1983 household surveys described Mentasta Lake residents as hunting locally on foot or with highway vehicles (Stratton and Georgette 1984:166). The same study reported Gakona residents using highway vehicles, or hunting on foot: one person used an airplane (Stratton and Georgette 1984:94). Slana residents reported using airplanes, highway vehicles, all terrain vehicles, and horses (Stratton and Georgette 1984:153). Reckord (1983:63) notes that for modern day moose hunting, “...transportation is one of the main factors in success.” She goes on to note that “...Plying the roads, in a custom called “road hunting” is presently the most prevalent hunting strategy in the region among both Natives and Whites” (Reckord 1983:64).

The permit database shows that of the 46 successful hunts by Mentasta, Slana, and Gakona in Unit 12 for the period 1983–2002, hunters used airplanes, horses, off road vehicles, and highway vehicles (ADF&G 2004). Available permit information for residents of Mentasta, Slana, and Gakona for the period 1983–2002 shows the harvest of moose in the “A” portion of Unit 12, where the communities have a positive customary and traditional use determination (ADF&G 2004). The permit database also indicates some hunting in the “B” and “C” portions of Unit 12 by residents of Mentasta, Slana and Gakona (ADF&G 2004). Mapping of community resource harvest areas for Mentasta Lake, Slana and Gakona residents undertaken in conjunction with the 1983 household surveys showed that residents of Slana used the Nabesna River drainage beyond the “A” portion, north to Pickerel Lake and east of the Nabesna River (ADF&G 1985a). Data gathered in the mapping study represented use of these areas from 1964 to 1984.

Mapped areas for Mentasta Lake indicated limited use of the “B” portion of Unit 12 ((ADF&G 1985b). For Mentasta Lake residents, Reckord (1983:154) noted that “...moose are highly valued and are often taken along the roads or near watering places that are traditionally scouted for game. The area between Mentasta and Slana along the highway and into the Mentasta Mountains is considered to be a very good moose hunting area.” Mapped areas for Gakona also indicated limited use on the “B” portion of Unit 12 (ADF&G 1985c). Reckord (1983:128-129) noted that “... favored hunting locations are those used traditionally by the ancestors of Gakona people...” She described these areas, and most are in Units 11 and 13. Slana residents favored hunting locations were reportedly in Unit 12 “A” and parts of 12 “B.”

In terms of the area utilized by those individuals living along the Tok Cutoff road, Reckord (1983:257) notes that “... virtually every drainage coming into the Copper River on both sides is hunted.” Reckord also notes that preferred hunting areas include areas that are in portions of Unit 12 “A” and 12 “B.”

One of the first accounts of Ahtna food preparation was provided by Allen (1887:129) who claimed that “They [Ahtna] have no process of curing save that by drying in the sun... It is of little importance to them whether or not their meat be cooked, and in boiling it is seldom cooked through.” Historically, dry meat was the most common means of preserving moose (as well as caribou) meat. In an interview with Katie John, a renown Upper Ahtna elder, born in Slana near Mentasta and residing at Mentasta Lake, the historic processing method for moose (and other) meat was described (as part of the seasonal round):

... Then they move out around September. Then they go out get moose, caribou, sheep, bear, marmot, porcupine, and they all dry, everything they dry, smoke it with the fire, no sun dry. They don't use sun too much for drying things. The meat they put it all away... they get those birch bark and they put it inside and they sew it together and they make package. And then they bring it back home when they move back and they just bring it back like that and they put it in the cache (Katie John, page 2, Interview in Ahtna 1988).

While dry meat is still made today by both Ahtna and Upper Tanana, meat is most commonly frozen (cf. Mishler et al. 1988). Dry meat continues to be a prized food item, however, often saved for potlatch or for distribution in special events.

The most common methods of cooking moose today are by boiling or frying. Aside from the meat, internal organs (i.e., heart, liver, kidneys) are commonly consumed by Native users, and less commonly by non-Native users. Moose bones are commonly used to make soup. Also, bones are sometimes cooked and the marrow scraped out to eat. The marrow is considered to be a delicacy by older Ahtna and Upper Tanana Athabascans (McKenna 1959; Reckord 1983).

As is noted by McKenna (1959) and Reckord (1983) moose skins were used historically to make clothing, blankets, packs, tents, and bags. Katie John (ADN 2006) also discusses tanning moose skins and making them into moccasins and gloves for the kids.

According to Reckord, meat preparation methods vary. For those individuals living without electricity, “old-time” modes of food production such as salting, jerking and smoking are common (Reckord 1983:197)... Reckord (1983:257-258) also notes that:

... many people have a difficult time storing their moose until winter comes and the meat can be kept in above-ground caches. Space is available for rent at the restaurants and lodges with private electrical plants, but the space available is limited and one must be on good terms with the lodge owner in order to use the facilities. Other people must can their meat or leave it with relatives in Anchorage until winter.

Ahtna and Upper Tanana Athabascans practice a complex system of beliefs and rituals, which guide their resource use practices (de Laguna 1969, Mishler et al. 1988). Some aspects are best described by Mishler et al. (1988:b-17):

Today, as in former times, Upper Tanana Indians have been governed by a strong sense of taboo, generally known as Injiih, and which the Ahtna refer to as En'gii. Injiih is a set of behaviors which by tradition are generally frowned upon and discouraged. It is Injiih, for example, to let wild animals suffer, or to taunt them and play with them, and the single word "Injiih" is openly spoken to remind people that they are endangering themselves and others by what they are doing. It is generally believed that if any animal, fish, or bird is mistreated or not respected, its descendants will not return to the area and hard times will follow for everyone.

In addition to these traditional belief systems, it is common for one generation to pass on detailed knowledge of local place names and subsistence techniques to younger generations. Also, Native organizations such as Ahtna, Inc., Ahtna Heritage Foundation, and the Mount Sanford Tribal Consortium have provided cultural or spirit camps where hunting and fishing skills are taught. The Federal Subsistence Board has approved issued cultural harvest permits for harvests in conjunction with these activities.

In general, the passing down of subsistence harvesting knowledge, skills, and associated values from one generation to the next and the sharing of this knowledge among all the residents of Copper Basin and Upper Tanana communities is common. For both Natives and non-Natives, contemporary hunting parties are often made up of relatives and sometimes of groups of peers. As noted by Reckord (1983), recent migrants to the area tend to learn locations and methods from their peers.

Traditional methods of sharing involve potlatches, kinship connections, and trading networks between communities. A number of studies have documented the historical and contemporary sharing of fish and game resources and fish and game use areas within and between the Upper Tanana and Ahtna regions (cf. Fall, Stratton and Walker 1992; Halpin 1987; Marcotte et al. 1991; Mishler et al. 1988; Reckord 1983; Stratton 1983; Stratton and Georgette 1984). While these reports tend to focus on sharing solely as a means of economic exchange, this sharing cannot be considered outside of its social, economic, and political context (cf. Wheeler and Ganley 1991).

The potlatch is one event within which extensive sharing occurs between the Ahtna and Upper Tanana. Held to recognize a death or commemorate a significant event in a person's life, a potlatch can also "... heal a tear in the social fabric..." (Simeone 1995:xvii). Mishler et al. (1988:b-17) provides the following descriptions of the potlatch and its central role in the sharing process:

It is a moral and perhaps a religious imperative that Ahtna and Tanacross villagers honor their deceased relatives with a funeral potlatch and a memorial potlatch. In this way, the bereaved family pays back the opposite clan members for taking over the stressful duties of dressing the body, digging the grave and erecting a grave fence or a grave house. The bereaved family shows its love and gratitude by giving gifts and by feasting those who help them. The family would lose face if it did not serve a variety of wild game, berries and roots.... Subsistence thereby plays a central role in the maintenance of Indian ceremonial and religious life.

Reckord (1983:196) mentions that sharing among non-Natives includes a range of activities such as providing transportation or sharing meat. Reckord (1983:207) further notes that "... generosity typifies many interactions. People who have meat and cannot use it all are happy to share it with those who do not have this food source." She goes on to claim that "... the sharing of food is a central feature of social

life...” (Reckord 1983:207).

Data from household surveys which document receiving and giving of all subsistence resources are shown in **Table 2**; data for the use of moose are provided in **Table 1**. The use by households in Mentasta, Slana, and Gakona follows the pattern where more households use the resource than harvest it and there is a higher level of receiving than giving.

**Table 1.** Household survey data on the use of moose (ADF&G 2001)

Community	% Households					Pounds per HH	Pounds Per Capita	% Total
	using	trying	harvesting	receiving	giving			
Northway	93.3	82.2	33.3	75.6	20.0	268.75	74.65	26.85%
Tetlin	89.7	59.3	34.5	84.8	34.5	253.55	63.50	29.69%
Tanacross	81.5	66.7	29.6	63.0	22.2	238.89	87.16	34.88%
Tok	62.8	48.6	23.8	39.0	15.0	144.06	48.90	32.77%
Dot Lake	73.3	46.7	20.0	66.7	20.0	129.00	39.49	34.15%
Chisana	33.3	50.0	0.0	33.3	16.7	0.00	0.00	0.00%
Chistochina	53.6	60.7	28.6	25.0	21.4	144.64	53.30	20.38%
<i>Communities in the C&amp;T request</i>								
Mentasta	62.5	45.8	16.7	50.0	12.5	75.00	24.33	19.39%
Slana	59.1	59.1	40.9	22.7	27.3	184	80.99	32.44%
Gakona	53.5	54.9	14.3	40.6	14.4	64.3	21.54	22.59%

The communities of Mentasta, Slana and Gakona harvest a wide diversity of resources, including salmon, non-salmon fish, land mammals (i.e., black and brown bear, moose, caribou), migratory waterfowl, other birds, furbearers, berries, greens, and wood. The 1987 household surveys of the communities with customary and traditional use for moose in the “B” and/or “C” portions of Unit 12 showed a range of household use of all subsistence resources from 94.1% to 100%; Mentasta and Slana household use was about 95 percent and Gakona was 92.7%, within or just under this range (**Table 2**). The estimated per capita harvest of all subsistence resources in these communities ranged from 277 to 1,001 pounds per year, while the per capita harvest in Mentasta, Slana and Gakona ranged from 284.5 to 567 pounds per capita. Reckord (1983) describes the range of resources utilized by residents of the three communities, and individuals living along the road systems.

**Table 2.** Household survey data on the use of all resources (ADF&G 2001)

Community	% Households					Average Pounds/ HH
	using	trying	harvesting	receiving	giving	
Northway	100.0	95.6	95.6	93.3	60.0	1001
Tetlin	100.0	89.7	89.7	89.7	79.3	854
Chisana	100.0	100.0	100.0	83.3	66.7	277
Dot Lake	100.0	100.0	100.0	86.7	60.0	378
Tanacross	96.3	96.3	96.3	96.3	63.0	685
Tok	94.1	87.7	84.2	79.7	28.8	440
Chistochina	100.0	100.0	100.0	75.0	64.3	710
<i>Communities in the C&amp;T Request</i>						
Mentasta	95.8	91.7	91.7	83.3	58.3	387
Slana	95.5	95.5	95.5	72.7	77.3	567.4
Gakona	92.7	100	85.5	82.6	52.1	284.51

## Effects of the Proposal

Adoption of proposal WP06-58 would recognize the remaining residents of 13C as customary and traditional users of moose in the remaining portions of Unit 12, “B”—east of the Nabesna River and Nabesna Glacier, south of the Winter Trail from Pickerel Lake to the Canadian Border and “C”—the remainder of Unit 12. This recognition should not have an impact on other users or the resource.

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<i>WP06-59 Executive Summary</i>	
<b>General Description</b>	Change Unit 12 moose regulations to make them easier to understand and reduce the potential for confusion. The proponent states that no substantive change is intended in seasons, harvest limits or customary and traditional use determinations. <i>Submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council.</i>
<b>Proposed Regulation</b>	[See proposed regulations in analysis.]
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Support.</b>
<b>Southcentral Alaska Regional Advisory Council Recommendation</b>	<b>Defer to home region.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support-4</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATIONS WP06-59

### EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support.** The Eastern Interior Alaska Subsistence Regional Advisory Council has always demonstrated that it seeks to reduce regulatory confusion for the users, and passage of this proposal achieves that. Based on the written comments received, the public has weighed in support of this proposal.

### SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Defer to home region.** The Southcentral Alaska Subsistence Regional Advisory Council listened to public testimony to support the proposed changes. The current regulation description is confusing and public testimony heard support to clarify the areas of use and the realignment will be beneficial to the subsistence users.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-59**

**Support** the proposal, with additional administrative clarification to simplify the regulatory language, keeping just three management areas.

The proposed regulation should read:

<b>Unit 12—Moose Customary &amp; Traditional Use Determination</b>	<b>Harvest Limits</b>	<b>Open Seasons</b>
<del>Unit 12 remainder</del> <b>That portion within the Tetlin National Wildlife Refuge and those lands within the Wrangell-St. Elias National Preserve north and east of a line formed by the Pickerel Lake Winter Trail from the Canadian border to Pickerel Lake</b> —Rural residents of Unit 12, Chistochina, Dot Lake, Mentasta Lake, and Healy Lake.	Unit 12, that portion within the Tetlin National Wildlife Refuge and those lands within the Wrangell-St. Elias National Preserve north and east of a line formed by the Pickerel Lake Winter Trail from the Canadian border to <b>Pickerel Lake</b> — <i>the southern boundary of the Tetlin National Wildlife Refuge</i> 1 antlered bull. The November season is open by Federal registration permit only.	Aug. 24–Aug. 28 Sept. 8–Sept. 17 Nov. 20–Nov. 30
Unit 12, that portion <b>lying east of the Nabesna River, east of the Nabesna and Glacier, and south of the Winter Trail running southeast from Pickerel Lake to the Canadian Border</b> —Rural residents of Unit 12, Chistochina, and Healy Lake.	Unit 12, that portion lying east of the Nabesna River, east of the Nabesna Glacier, and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border—1 antlered bull.	Aug. 24–Sept. 30
<del>Unit 12, that portion west of the Nabesna River and Glacier, and south of a line from Noyes Mountain southeast to the confluence of Totshunda Creek and Nabesna River</del> —Unit 12 remainder—Rural residents of Units 11 (north of the 62nd parallel), 12, 13A, 13B, 13C, 13D, Chickaloon, Dot Lake, and Healy Lake.	Unit 12 remainder—1 antlered bull; however, during the Aug. 15–Aug. 28 season, only bulls with spike fork antlers may be taken.	Aug. 15–Aug. 28 Sept. 1–Sept. 17

**Justification**

Public comments received on this proposal from local subsistence users have all indicated that the proposed customary and traditional use determination change is inconsequential, and that the changes in regulatory language necessary to accomplish this request is of no concern or otherwise objectionable by subsistence users.

**WRITTEN PUBLIC COMMENTS**  
**WP06-59**

**Support.** Traditionally all of Unit 12 is Ahtna's customary and traditional use area. [H]owever we support WP06-59 to revise customary and traditional use in a portion on Unit 12 to make the description more accurate and easier to understand and for management purposes.

*–Ahtna Tene Nene' Subsistence Committee*

**Support.** We support this proposal.

*–The Mentasta Traditional Council*

**Support.** Wrangell-St. Elias National Park Subsistence Resource Commission unanimously supports the proposal as written. The proposed Customary & Traditional Use Determinations change is inconsequential; no one at the meeting testified that the small C&T change necessary to accomplish this proposal is of concern or otherwise objectionable. Indeed, defining the C&T area with the proposed geographically based boundary (the park boundary follows the mountain crest) is quite reasonable. It is much easier to understand than the current imaginary line. Without a geographical boundary, how are people supposed to know where they are? In addition, making the proposed changes will be a much more effective way to deal with the confusion caused by the existing regulation than the alternatives proposed in the staff analysis. We heard from park staff that they have already tried some of the educational alternatives proposed, with little if any success.

*–Wrangell-St. Elias National Park & Preserve Subsistence Resource Commission*

**Support.** The Refuge concurs with the proposal. They do believe the proposed alternate of clearer regulatory language and maps may help alleviate some of the confusion but they have questions about who would be responsible for the development and distribution of the maps. If individual agencies and landowners are to be responsible for the maps, there exists the possibility that the maps would be inconsistent with each other and an additional burden on the stations. The Refuge's main concern is to have regulatory boundaries that are identifiable on the ground and more easily interpreted by the affected users. There is a great source of confusion for local users with the existing regulations as evident by the numerous questions the Refuge receives each year. Aligning the C&T determination and the hunt boundaries would alleviate much of the confusion that currently exists. The Refuge the proposal would affect a current C&T determination, but the amount of area affected is small and located in a fairly remote area. They believe very few users would be directly affected.

*–Tetlin National Wildlife Refuge*

**STAFF ANALYSIS  
WP06-59**

**ISSUES**

Proposal WP06-59, submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council, requests that Unit 12 moose regulations be changed to make them easier to understand and thereby reduce the potential for confusion. The proponent states that no substantive change is intended in seasons, harvest limits or customary and traditional use determinations.

**DISCUSSION**

The proponent explains that there is confusion with the existing regulations because the Unit is subdivided one way for the purpose of describing customary and traditional use determinations and yet another way displaying the harvest limits and open seasons. Each of the two descriptions of subunits utilizes a “remainder”. The “remainder” area for customary and traditional use is not the same area as the “remainder” area for harvest limits and open seasons.

**Existing Federal regulation**

**Unit 12–Moose**

<b>Customary &amp; Traditional Use Determination (See Map 1)</b>	<b>Harvest Limits (See Map 2)</b>	<b>Open Seasons</b>
<p><b>A</b> Unit 12, that portion west of the Nabesna River and Glacier, south of a line from Noyes Mountain southeast to the confluence of Totschunda Creek and Nabesna River—Rural residents of Units 11 (north of 62nd parallel), 12, 13A, 13B, 13C, 13D, Chickaloon, Dot Lake, and Healy Lake.</p>	<p><b>1</b> Unit 12, that portion within the Tetlin National Wildlife Refuge and those lands within the Wrangell-St. Elias National Preserve north and east of a line formed by the Pickerel Lake Winter Trail from the Canadian border to the southern boundary of the Tetlin National Wildlife Refuge—1 antlered bull. The November season is open by Federal registration permit only.</p>	<p>Aug. 24–Aug. 28 Sept. 8–Sept. 17 Nov. 20–Nov. 30</p>
<p><b>B</b> Unit 12, that portion east of the Nabesna River and Glacier, south of the Winter Trail from Pickerel Lake to the Canadian Border—Rural residents of Unit 12, Chistochina, and Healy Lake.</p>	<p><b>2</b> Unit 12, that portion lying east of the Nabesna River, east of the Nabesna Glacier, and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border—1 antlered bull.</p>	<p>Aug. 24–Sept. 30</p>
<p><b>C</b> Unit 12 remainder—Rural residents of Unit 12, Chistochina, Dot Lake, Mentasta Lake, and Healy Lake.</p>	<p><b>3</b> Unit 12 remainder—1 antlered bull; however, during the Aug. 15–Aug. 28 season, only bulls with spike fork antlers may be taken.</p>	<p>Aug. 15–Aug. 28 Sept. 1–Sept. 17</p>

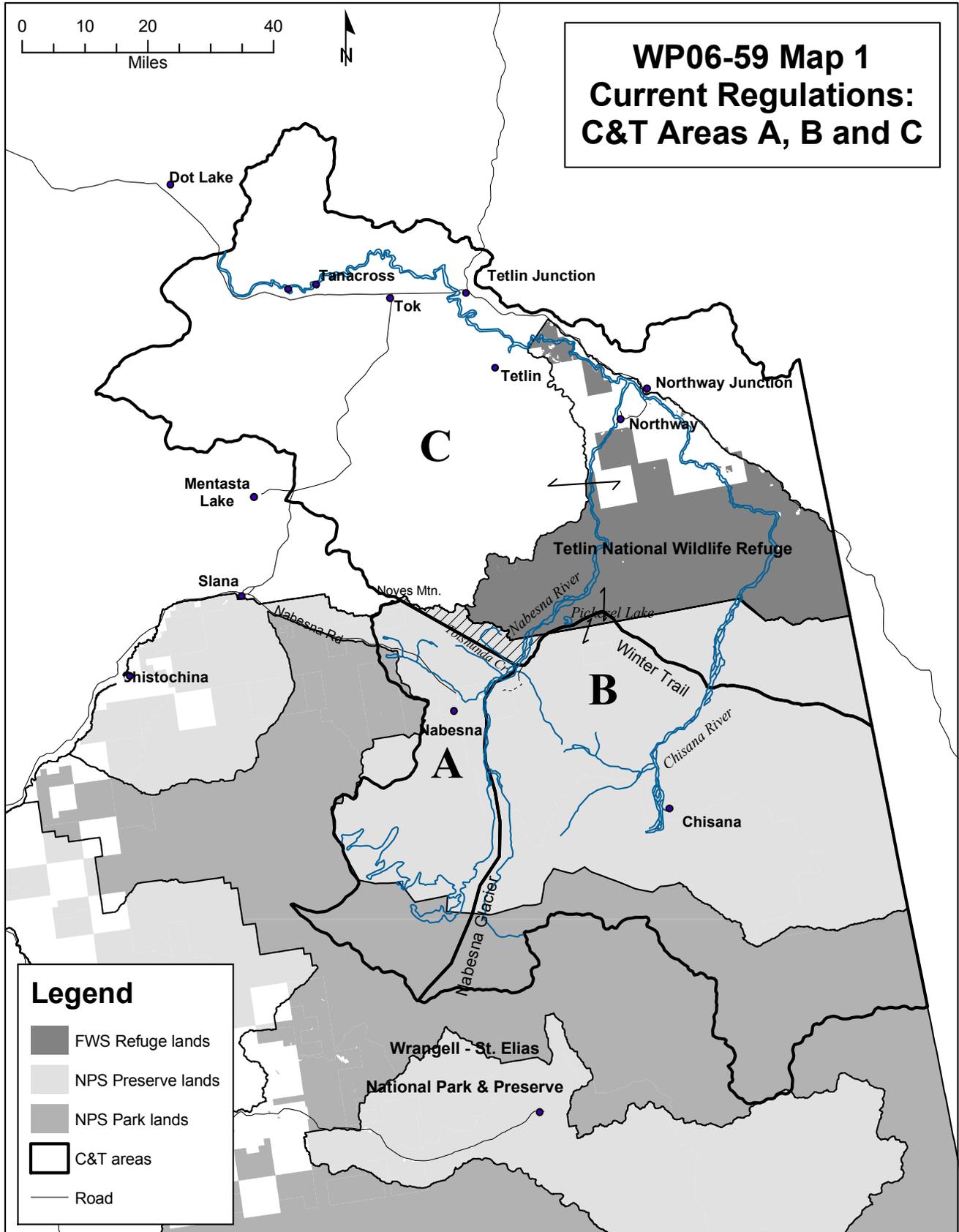
**Proposed Federal regulation (See Map 3)**

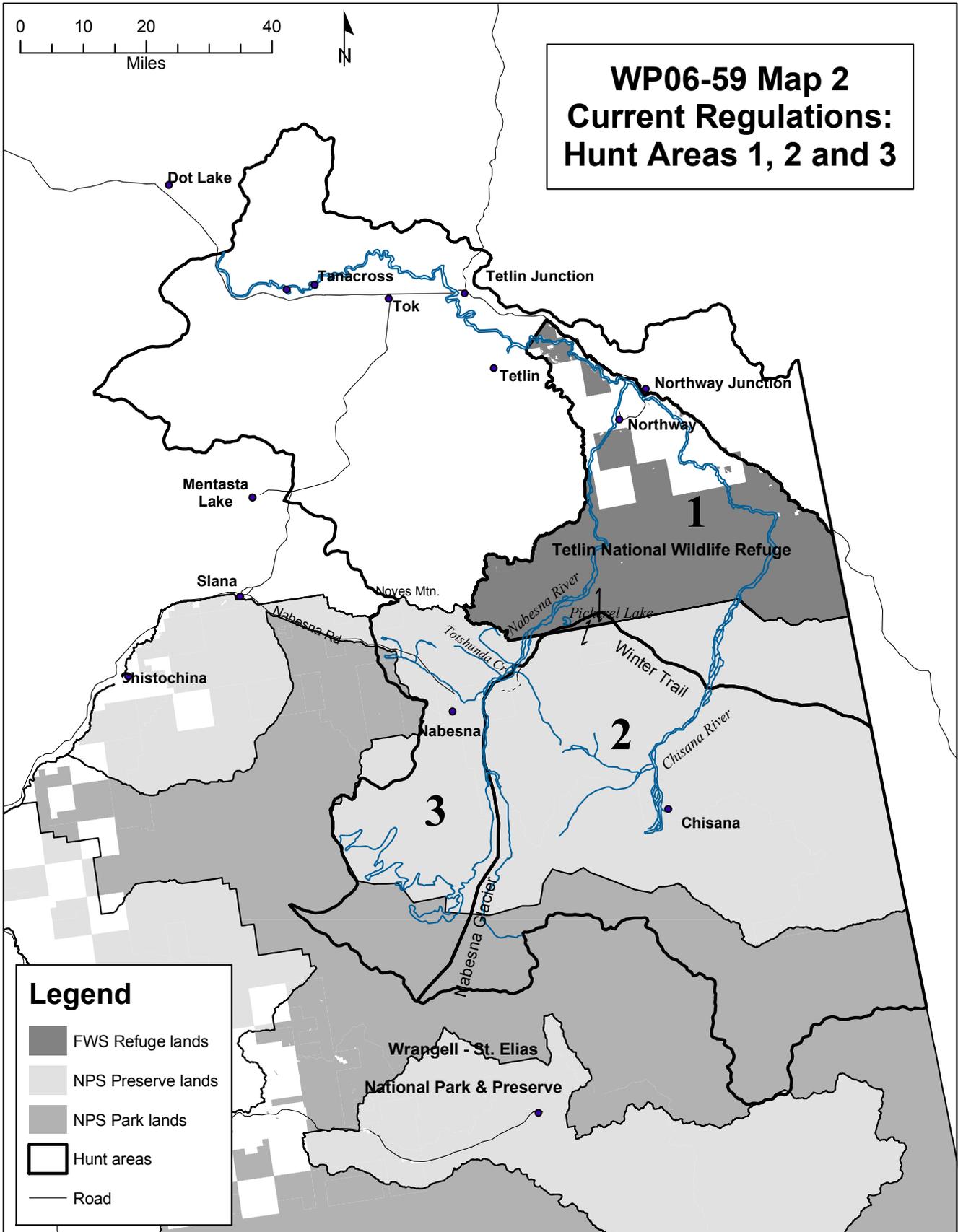
**Unit 12–Moose**

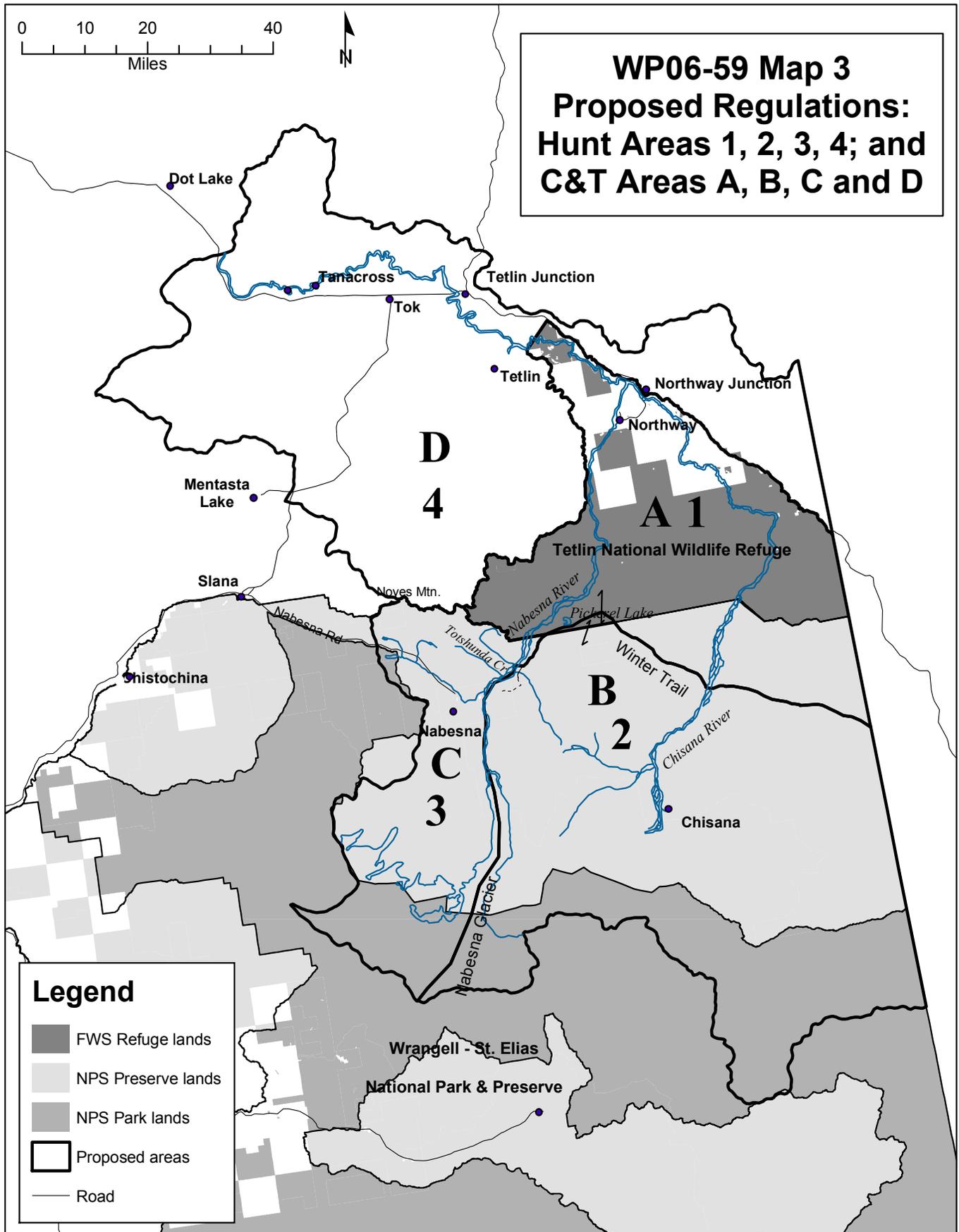
<b>Customary &amp; Traditional Use Determination</b> (See Map 1)	<b>Harvest Limits</b> (See Map 2)	<b>Open Seasons</b>
<b>A</b> <del>Unit 12 remainder</del> <b>That portion within the Tetlin National Wildlife Refuge and those lands within the Wrangell-St. Elias National Preserve north and east of a line formed by the Pickerel Lake Winter Trail from the Canadian border to the southern boundary of the Tetlin National Wildlife Refuge</b> —Rural residents of Unit 12, Chistochina, Dot Lake, Mentasta Lake, and Healy Lake.	<b>1</b> Unit 12, that portion within the Tetlin National Wildlife Refuge and those lands within the Wrangell-St. Elias National Preserve north and east of a line formed by the Pickerel Lake Winter Trail from the Canadian border to the southern boundary of the Tetlin National Wildlife Refuge—1 antlered bull. The November season is open by Federal registration permit only.	Aug. 24–Aug. 28 Sept. 8–Sept. 17 Nov. 20–Nov. 30
<b>B</b> Unit 12, that portion east of the Nabesna River and Glacier, and south of the Winter Trail running southeast from Pickerel Lake to the Canadian Border—Rural residents of Unit 12, Chistochina, and Healy Lake.	<b>2</b> Unit 12, that portion lying east of the Nabesna River and glacier, <del>east of the Nabesna Glacier,</del> and south of the Winter Trail running southeast from Pickerel Lake to the Canadian border—1 antlered bull.	Aug. 24–Sept. 30
<b>C</b> Unit 12, that portion west of the Nabesna River and Glacier, and south of <del>a line from Noyes Mountain southeast to the confluence of Totshunda Creek and Nabesna River</del> <b>the Wrangell-St. Elias National Park and Preserve boundary</b> —Rural residents of Units 11 (north of the 62nd parallel), 12, 13A, 13B, 13C, 13D, Chickaloon, Dot Lake, and Healy Lake.	<b>3</b> Unit 12, that portion west of the Nabesna River and Glacier, and south of the Wrangell-St. Elias National Park and Preserve boundary—1 antlered bull; however during the Aug. 15–Aug. 28 seasons, only bulls with spike fork antlers may be taken.	Aug. 15–Aug. 28 Sept. 1–Sept. 30
<b>D</b> Unit 12 remainder—Rural residents of Unit 12, Chistochina, Dot Lake, Mentasta Lake, and Healy Lake.	<b>4</b> Unit 12 remainder—1 antlered bull; however, during the Aug. 15–Aug. 28 season, only bulls with spike fork antlers may be taken.	Aug. 15–Aug. 28 Sept. 1–Sept. 17

**Extent of Federal Public Lands**

Federal public lands in Unit 12 are comprised of Wrangell-St. Elias National Park/Preserve (47.7%) and the Tetlin National Wildlife Refuge (10.7%). (Map 1)







## Regulatory History

The customary and traditional use determination for moose in Unit 12 is essentially the same as originally adopted in 1990, with the addition of the recognized customary and traditional use for residents of Chistochina throughout the unit made by the Federal Subsistence Board in May 2005. The original determination was based on existing State of Alaska determinations. The State recognized the customary and traditional use of moose in all of Unit 12 by residents of Unit 12. For use other than by Unit 12 residents, three use areas were identified. In the 1989 State regulations these areas were labeled South, East, and North respectively (5AAC 99.025). In the South portion of Unit 12, which encompasses the Nabesna Road area, residents of Unit 11 north of the 62<sup>nd</sup> parallel (approximately at the junction of the Unit 11 boundary with Klawasi River); residents of Units 13A, 13B, 13C, and 13D; and residents of Dot Lake were recognized, along with Unit 12 residents. In the North portion of Unit 12, residents of Dot Lake and Mentasta Lake were the additional communities recognized as additional customary and traditional users of moose. In the East portion of Unit 12, residents of Unit 12 were the only customary and traditional users recognized until 1998, when the Board adopted Proposal WP98-101 adding the residents of Healy Lake to all of Unit 12 (FSB 1998).

## Effects of the Proposal

If adopted, this proposal would change the customary and traditional use determination for two small geographic areas: 1) the area along the northern edge of Wrangell-St. Elias National Preserve west of the Nabesna River, and 2) an area within Tetlin National Wildlife Refuge south of the Pickerel Lake Winter Trail (See **Map 1**).

Upon close review of the of the harvest limit area descriptions for Unit 12 moose, staff discovered that the small area within the Tetlin National Wildlife Refuge south of the Pickerel Lake Winter Trail is currently contained within two harvest limit areas. An administrative correction of this error will place that small area within the area to the south. This correction is consistent with the location of the uniform coding units (UCU) boundaries used for harvest reporting (ADF&G 1997). This corrective action also removes one of the inconsistencies between customary and traditional use areas and harvest limit areas that are highlighted by this proposal.

The remaining area of concern consist of the area along the northern edge of Wrangell-St. Elias National Preserve west of the Nabesna River (see crosshatched area on **Map 1**). This small area consists mostly of mountainous terrain, except for that area along Totschunda Creek and the west side of the Nabesna River from the mouth of Totschunda Creek north to the Preserve boundary.

The justification provided by the proponent for making changes to the customary and traditional use determination is to make the regulations easier to understand. No information regarding the customary and traditional uses of the areas has been provided. There is no indication that the existing customary and traditional use determinations made by the Board are incorrect or incomplete. The area along the Nabesna River is relatively accessible from a traditional travel route and may be a significant harvest area. Adding communities to the existing customary and traditional use determinations previously made by the Board, only for the purpose of making regulations easier to understand, may be objectionable to the communities that currently use this area. Subsistence user comments at the upcoming Winter 2006 Southcentral and Eastern Interior Alaska Subsistence Regional Advisory Council meetings may provide information on the customary and traditional uses of the area in question.

Specifically, the proposed change will add residents of Unit 11, (north of the 62<sup>nd</sup> parallel), all residents of Units 13A, 13B, 13C and 13D (in addition to Chistochina and Mentasta Lake), and residents of

Chickaloon to the area described above within the Preserve. Note: If Proposal WP06-58 is adopted as proposed and as recommended by the Eastern Interior Alaska Subsistence Regional Advisory Council, all residents of Unit 13C will be recognized as having customary and traditional use of this area through the Proposal WP06-58 decision.

The proposed change will provide customary and traditional use areas descriptions identical to the harvest limit areas, resulting in the area labeled as “remainder” being the same for both customary and traditional use and harvest limit areas. However, the proposed regulatory language creates an additional subunit in both the customary and traditional use descriptions and the harvest limit descriptions.

The existing Unit 12 moose regulations, which have customary and traditional use areas that are not identical to harvest limit areas, are typical of how customary and traditional use determinations are displayed throughout Federal hunting and trapping regulations. Similar situations exist for Unit 22 muskox, Unit 25C caribou, Unit 19 caribou, and in Unit 17 for both moose and caribou.

### **Other Alternatives Considered**

The proponent states that the current regulations lead to confusion by subsistence users because the unit descriptions for customary and traditional use determinations are not the same as the unit descriptions for harvest limits and seasons. To minimize confusion the customary and traditional use areas can be described in a format similar to the harvest limit areas, while maintaining the current customary and traditional use area boundaries. In addition, subsistence users could be provided with additional maps to display the areas where they have a positive customary and traditional use determination as well as maps displaying the various harvest limit and seasons areas. Separate maps could be developed for each community (or group of communities) that have a positive customary and traditional use.

Public comments received on this proposal, from local subsistence users have all indicated that the proposed customary and traditional use determination change is inconsequential, and that the changes in regulatory language necessary to accomplish this request is of no concern or otherwise objectionable by subsistence users.

### **LITERATURE CITED**

ADF&G. 1997. Division of Wildlife Conservation, GMU Subunits–shape file: ADF&G wildlife management areas Game Management Unit/Subunit boundaries, Alaska Department of Fish and Game, Anchorage, AK.

FSB. 1998. Transcripts of Federal Subsistence Board proceedings, May 5, 1998. Office of Subsistence Management, FWS. Anchorage, AK.

<i>WP06-60 Executive Summary</i>	
<b>General Description</b>	Eliminate the Federal “spike-fork antler” restriction for Unit 12 remainder moose during the Aug. 15–28 season. <i>Submitted by Doug Fredrick of Slana.</i>
<b>Proposed Regulation</b>	<p><b>Unit 12–Moose</b></p> <p><i>Unit 12 remainder—1 antlered bull <del>with spike/</del> fork antlers</i> Aug. 15–Aug. 28</p> <p><i>Unit 12 remainder—1 antlered bull</i> Sept. 1–Sept. <del>30</del>17*</p>
	* <b>Note:</b> The Sept. 30 closure date for Unit 12 remainder is in error and should read as shown, Sept. 17.
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Support.</b>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Defer to home region.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support with modification.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support-2</b> <b>Support with modification-1</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATIONS WP06-60

### EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support.** The Eastern Interior Alaska Subsistence Regional Advisory Council supported the proposal because it would allow the harvest of any bull moose and eliminate the spike-fork antler restriction. There was no conservation concern presented at this time. The written comments from rural users and the Wrangell-St. Elias National Park Subsistence Resource Commission supported the proposal.

### SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Defer to home region.** The Southcentral Alaska Subsistence Regional Advisory Council Chair provided opportunity for public testimony on the proposals.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-60**

**Support with modification**, as recommended by the Eastern Interior Alaska Subsistence Regional Advisory Council, and with an additional modification to eliminate the season break between the August and September seasons.

The modified regulation should read:

<i>Unit 12 remainder—1 antlered bull. <del>with spike/fork antlers.</del></i>	<del>Aug. 15–Aug. 28</del> Aug. 15– <b>Sept. 17</b>
<i>Unit 12 remainder—1 antlered bull.</i>	<del>Sept. 1–Sept. 30*</del>

**Justification**

Adoption of the proposed regulatory change would allow Federally qualified subsistence users the same opportunity to harvest one bull within the affected area, as provided under State regulations for Unit 12 remainder during Aug. 24–28. The Interagency Staff Committee found no reason under ANILCA 805(c) to oppose the Council's recommendation. The Interagency Staff Committee also recommends a modification to eliminate the season break between the August and September seasons because the rational basis for maintaining this season break would no longer exist if the antler requirement is eliminated.

Up-to-date information on the moose population in this area is generally lacking. Further, it is recognized that the moose population is at a fairly low density and there is a concern that the proposed changes will lead to increased harvest in the area as a result of increasing the pool of moose that can be hunted by Federal qualified subsistence users. The Interagency Staff Committee recommends increased efforts to monitor the harvest in this area, to the extent that State and Federal agencies are capable of increasing their efforts in this regard.

Note: During the Interagency Staff Committee's discussion about this proposal an error in the season end date was found in the Eastern Interior Council book and the same error was found in the publically available Federal regulation book. However, the error was not duplicated in the 2005 Federal Proposal Book (orange cover). The affect of these errors is hard to determine, but certainly leads to some confusion about the ending date of this hunt. Staff researched the errors and determined that the moose season ending date has been printed in error since 2003 in the public regulation book. The effect of that error is that people have been allowed to hunt from Sept. 18-30, in this area for the past three hunting seasons. The book listed the season's end as September 30th, but the correct date is September 17th.

The Interagency Staff Committee recommends that this season revert back to the correct ending date, which is September 17th, regardless of what action the Board takes with this proposal.

Furthermore, the Interagency Staff Committee recommends that a special action request be generated and then considered separately by the Federal Subsistence Board to extend the season from September 18 to September 30, only for the fall of 2006, so that Federally qualified subsistence users might benefit from this time period for one more season. The merits of this special action should be analyzed separately and considered by the Board.

**WRITTEN PUBLIC COMMENTS**  
**WP06-60**

**Support.** We support WP06-60 to remove the antler restriction in early season in a portion of Wrangell-NP&P, because it is more restrictive than the State season.

*–Ahtna Tene Nene’ Subsistence Committee*

**Support.** We support this proposal, it would make less restrictions for subsistence users.

*–Mentasta Traditional Council*

**Support with modification.** Wrangell-St. Elias National Park Subsistence Resource Commission unanimously supports the original proposal with modification to eliminate the season break between the August and September season. In other words, the harvest limit in Unit 12 remainder would be 1 antlered bull with a season of August 15 to September 30. Harvest levels in Unit 12 remainder at the end of August are low, and the proposed change in harvest limit during the early season is not anticipated to cause a conservation concern. There is no good justification for the season break at the end of August, particularly given that the harvest limit would be the same for the entire season. Removing the break will make the regulation easier to understand.

*–Wrangell-St. Elias National Park & Preserve Subsistence Resource Commission*

**STAFF ANALYSIS  
WP06-60**

**ISSUES**

Proposal WP06-60, submitted by Doug Fredrick of Slana, requests the elimination of the Federal “spike-fork antler” restriction for Unit 12 remainder moose during the Aug. 15–28 season. Because fewer moose hunters have used Unit 12 remainder in recent years, elimination of the spike-fork antler restriction is not expected to attract additional hunters to the affected area during the fall seasons (Fredrick 2005, pers. comm.).

**DISCUSSION**

The current Federal harvest limit during the Aug. 15–28 season is more restrictive than the existing State harvest limit for Unit 12 remainder. The proposed regulatory change would align Federal and State harvest limits, by eliminating the spike-fork antler restriction for Unit 12 remainder. The spike-fork antler restriction was initially implemented by the State as a conservative antler strategy, by providing a harvest season that targeted the young-bull component that has the highest natural mortality rate of the age classes for this bull moose population.

**Existing Federal Regulations Unit 12—Moose**

<i>Unit 12 remainder—1 antlered bull with spike/fork antlers.</i>	<i>Aug. 15–Aug. 28</i>
<i>Unit 12 remainder—1 antlered bull.</i>	<i>Sept. 1–Sept. <del>30</del>17*</i>

**\*Note:** The Sept. 30 closure date for Unit 12 remainder is in error and should read as shown, Sept. 17.

**Proposed Federal Regulations Unit 12–Moose**

<i>Unit 12 remainder—1 antlered bull with spike/fork antlers.</i>	<i>Aug. 15–Aug. 28</i>
<i>Unit 12 remainder—1 antlered bull.</i>	<i>Sept. 1–Sept. <del>30</del>17*</i>

**\*Note:** The Sept. 30 closure date for Unit 12 remainder is in error and should read as shown, Sept. 17.

**Existing State Regulations—Moose**

<i>Remainder of Unit 12: Residents: One bull</i>	<i>Harvest</i>	<i>Aug. 24–Aug. 28</i>
<i>OR One bull</i>	<i>Harvest</i>	<i>Sept. 8–Sept. 17</i>
<i>Nonresidents: One bull with 50-inch antlers or 4</i>		<i>Sept. 8–Sept. 17</i>
<i>or more brow tines on at least one side</i>	<i>Harvest</i>	

**Extent of Federal public lands**

Federal public lands in Unit 12 remainder comprise 48% (48% NPS lands) of the total land management jurisdictions. This includes that portion of the Wrangell-St. Elias National Park and Preserve west of the Nabesna River and Nabesna Glacier.

### **Customary and Traditional Use Determination**

Rural residents of Units 11 (north of 62nd parallel), 12, 13A, 13B, 13C, 13D, Chickaloon, Dot Lake, and Healy Lake have a customary and traditional use determination for moose in Unit 12 in that portion west of the Nabesna River and Glacier, south of a line from Noyes Mountain southeast to the confluence of Totschunda Creek and Nabesna River.

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

### **Regulatory History**

Proposal WP01-41 requested the elimination of the spike-fork antler restriction and requested a decrease in season length for the Aug. and Sept. seasons for the area north of the Pickerel Lake Winter Trail; however, the Federal Subsistence Board (Board) did eliminate the antler restriction, but did not adopt the shorter seasons at the request of the Eastern Interior Alaska and Southcentral Alaska Subsistence Regional Councils.

The Alaska Board of Game adopted the spike-fork antler restriction in 1995 to target a less-hunted segment of the bull population. The Federal Subsistence Board adopted the spike-fork antler restriction for Unit 12 the following year. Proposal WP96-61 requested a 12-day extension of the Federal moose hunting season for the area. In response to WP96-61, the Board adopted the newly instituted State spike-fork restriction to afford subsistence users the same opportunities provided under State regulations. However, the Board did not grant the full 12-day extension due to conservation concerns. The opportunity to harvest spike-forked antlered moose was not particularly utilized by hunters and since has largely been eliminated from the State seasons in Unit 12, replacing the 14-day spike-fork season with a five-day any-bull season. In 2001 the Alaska Board of Game shortened the season but increased the pool of animals that could be harvested by changing from spike-fork to the current any-bull harvest limit. Since then, the Federal Subsistence Board eliminated the spike-fork antler restriction for Unit 12 except for the area affected by the proposed action.

The Federal and State regulations for the affected area remained unchanged from 1990/91 through 1994/95, until the Alaska Board of Game added the Aug. 20–28 spike-fork antler season in 1995 and the Federal Subsistence Board followed suit in 1996. In 1998, the Alaska Board of Game opened the spike-fork antler season on Aug. 15—five days earlier. The Federal Subsistence Board aligned the Federal subsistence management regulations with the more liberal State hunting season the following year in 1999. In response to conservation concerns, the Alaska Board of Game changed the opening date of the Aug. season back to Aug. 24 for the 2001/02 regulatory year.

### **Current Events Involving Species**

Current State regulations for the Unit 12 remainder Aug. season, consists of a five-day season from Aug. 24–28, which is nine days shorter than the Federal Aug. 15–28 season. However, the State season has a more liberal harvest limit that does not include the spike-fork antler restriction that exists in the current Federal August season.

### **State Management Objectives**

Maintain a minimum post-hunting sex ratio of 40 bulls:100 cows east of the Nabesna River and a minimum ratio of 20 bulls:100 cows in Unit 12 remainder.

## Biological Background

No information exists for the affected moose population. Anecdotal information gathered from hunters indicates that there are few moose and even fewer bulls seen each year in the Unit 12 remainder portion of the Nabesna Road (Gross 2005, pers. comm.). The ADF&G estimates from comparing data results from adjacent areas with similar habitat that the affected population density is 0.2–0.3 moose/mi<sup>2</sup> (Gross 2005, pers. comm.).

## Harvest

NPS staff observed that fewer hunters use the Unit 12 portion of the Nabesna Road than those who hunt the Unit 11 portion of the Nabesna Road (Cellarius 2006, pers. comm.). However, further results from analysis of harvest data revealed that harvest in two Uniform Coding Units (UCUs) associated with Unit 12 remainder, show some of the highest harvest rates along the road (number of animals taken in the Park during 1976–1995) (ADF&G 2005). Unit 12 remainder harvest constitutes approximately 38% of the total Nabesna Road (Unit 11 and 12) moose harvest. There is no way to accurately monitor subsistence use of moose in the affected area of Unit 12, because registration permits are not required. Moose hunters access the area via the Nabesna Road in Unit 13C and then Unit 11 where the majority access the Preserve. Users that access the Park to hunt moose must be residents of a community with resident zone community status under NPS regulations, while all other users are restricted to hunting the Preserve. Some users that hunt moose in Unit 11 prefer hunting along the Nabesna Road, while others access higher elevations with off-road vehicles via trails branching from the Nabesna Road (Fredrick 2005, pers. comm.) (Cellarius 2006, pers. comm.) (Gross 2006, pers. comm.). The low density moose population probably deters most hunters from accessing the affected area during the fall seasons (Gross 2006, pers. comm.).

## Effects of the Proposal

Because adoption of the proposal would allow for the harvest of any bull moose, elimination of the spike-fork antler restriction could cause an increase in harvest of the affected population in Unit 12 remainder. Based on the biological and harvest data for Unit 12 remainder, adoption of the proposed regulatory change could have adverse impacts on the affected low density moose population because of road access and the 14-day Federal August season.

## LITERATURE CITED

- ADF&G 2005. Harvest ticket database. Microcomputer database. ADF&G Div. of Wildl. Conserv., Anchorage, AK.
- Cellarius B. 2006. Cultural anthropologist/subsistence specialist. Personal communication. NPS Wrangell-St. Elias National Park and Preserve, Copper Center, AK.
- Fredrick D. 2005. Proposal WP06-60 proponent and Unit 12 remainder resident. Personal communication. Slana, AK.
- Gross J. 2006. Area wildlife biologist. Personal communication. ADF&G Div. of Wildl. Conserv. Tok, AK.

<i>WP06-61 Executive Summary</i>	
<b>General Description</b>	Close the moose hunting season in the Denali National Park and Preserve portion of Unit 20C due to concerns about a low moose population in the Kantishna area. <i>Submitted by Jeff Barney of Fairbanks, AK.</i>
<b>Proposed Regulation</b>	<p><b>Unit 20C–Moose</b></p> <p><i>That portion within Denali National Park west of <del>the Toklat River</del> <b>Bear Creek</b>, excluding lands within Mount McKinley National Park as it existed prior to Dec. 2, 1980—1 antlered bull; however, white-phased or partial albino (more than 50 percent white) moose may not be taken.</i></p> <p><i>Sept. 1–Sept. 30 Nov. 15–Dec. 15</i></p> <p><i>That portion within Denali National Park between the Toklat River and Bear Creek north and west of the Old Mount McKinley National Park boundary, which includes the Moose Creek drainage and Kantishna vicinity.</i></p> <p><i>No Federal open season.</i></p>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Western Interior Alaska Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Defer to home region.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Oppose–2</b> <b>1 comment citing more scientific data needed.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-61**

**EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose.** The Eastern Interior Alaska Subsistence Regional Advisory Council opposed the proposal because the number of users is small, ranging from zero to seven, and the number of moose harvested yearly is also small ranging from zero to five bulls. Based on this and the opposition from the Denali National Park Subsistence Resource Commission and others, the Council opposes this proposal.

**WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose.** The Western Interior Alaska Subsistence Regional Advisory Council opposes the proposal because it appears to be an effort to stop hunting in this area of the Denali National Park and Preserve. The moose population within this area can withstand this hunt. The Council bases its recommendation on the data presented, the low number of hunters, and low number of moose harvested. The Council feels this proposal appears to be an anti-subsistence proposal.

**SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Defer to home region.** The Southcentral Alaska Subsistence Regional Advisory Council Chair provided opportunity for public testimony on the proposals.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-61**

**Oppose** the proposal as recommended by the Eastern Interior Alaska and Western Interior Alaska Subsistence Regional Advisory Councils.

**Justification**

Most of the moose harvest in the Kantishna area is by Federally qualified subsistence users during the month of September. The number of users each year is small, ranging from zero to seven individuals, and the number of moose harvested each year varies from zero to five bulls. Based on few users harvesting a small number of bulls, the impact on the moose population in the Kantishna vicinity appears to be minimal.

**WRITTEN PUBLIC COMMENTS  
WP06-61**

**Oppose.** Most of the moose harvested in the Kantishna area is by Federally qualified subsistence users during the month of September. The number of users each year is small (0-7 individuals), and the number of moose harvested each year varies from 0-5 bulls. Based on few users harvesting a small number of bulls, the impact on the Kantishna area moose population appears to be minimal.

*–Denali National Park & Preserve Subsistence Resource Commission*

**Oppose.** We do not support WP06-61 to close 1 antlered Bull Moose season in Unit 20(C).

*–Ahtna Tene Nene’ Subsistence Committee*

There must be sufficient scientific data available to make sound management decisions so that subsistence hunting and “natural and healthy” wildlife populations can continue in perpetuity. Closures, such as the one proposed for the moose season in Unit 20C (proposal #61) and lifting closures, such as the proposed changes to existing geographic restrictions for moose and caribou in Unit 26A (proposals #65 and #66) can only be made based on sound science. The Federal Regional Advisory Boards need to identify where they are lacking data for making sound wildlife management decisions, whether they are considering a new closure, lifting an old closure, adjusting harvest levels, or changing the length of seasons. Where data is lacking, attention must be focused on improving the quality of harvest data, population data, etc. Only when the National Park Service is aware of instances in which data is lacking can it begin to direct the necessary funds to improve scientific research and gathering.

*–Alaska Regional Office, National Parks Conservation Association*

**STAFF ANALYSIS  
WP06-61**

**ISSUES**

Proposal WP06-61, submitted by Jeff Barney of Fairbanks, AK, requests that the moose hunting season in the Denali National Park and Preserve portion of Unit 20C be closed due to concerns about a low moose population in the Kantishna area.

**DISCUSSION**

In discussions with the proponent, Mr. Barney stated that the intent of his proposal is to stop hunting only in the Kantishna area so the moose population can rebuild. The proposed closure as he intended it encompasses the Moose Creek drainage with these parameters: north and west of the Old Mt. McKinley National Park boundary, south of the Denali National Park boundary, east of Bear Creek, and west of the Toklat River (**Map 1**). The Proposed Federal Regulation is modified from the Federal Subsistence Wildlife Proposals 2006/07 book, to reflect the geographic area described by the proponent and to coincide with the proponent's intentions. The Kantishna area is primarily Federal public lands, but there are also parcels of private lands as well.

**Existing Federal Regulation****Unit 20C–Moose**

<i>That portion within Denali National Park and Preserve west of the Toklat River, excluding lands within Mount McKinley National Park as it existed prior to Dec. 2, 1980—1 antlered bull; however, white-phased or partial albino (more than 50 percent white) moose may not be taken.</i>	<i>Sept. 1–Sept. 30 Nov. 15–Dec. 15</i>
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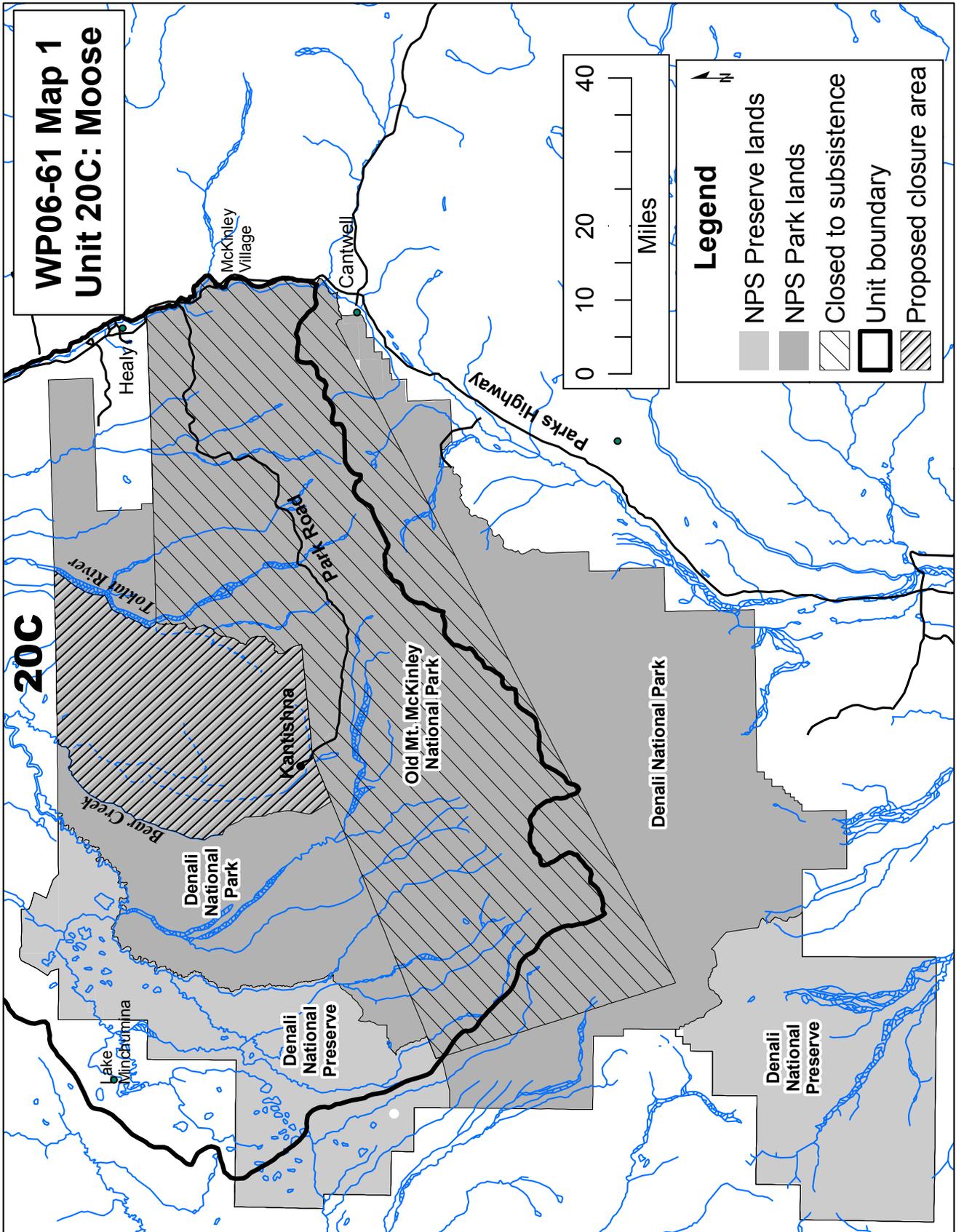
**Proposed Federal Regulation****Unit 20C–Moose**

<i>That portion within Denali National Park west of <del>the Toklat River</del> <b>Bear Creek</b>, excluding lands within Mount McKinley National Park as it existed prior to Dec. 2, 1980—1 antlered bull; however, white-phased or partial albino (more than 50 percent white) moose may not be taken.</i>	<i>Sept. 1–Sept. 30 Nov. 15–Dec. 15</i>
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<i>That portion within Denali National Park between the Toklat River and Bear Creek north and west of the Old Mount McKinley National Park boundary, which includes the Moose Creek drainage and Kantishna vicinity.</i>	<i>No Federal open season.</i>
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**Extent of Federal Public Lands**

The portion of Unit 20C applicable to this regulation is comprised almost entirely of National Park Service (NPS) Federal public lands, with the exception of some private inholdings (**Map 1**). The northern part of Denali National Park, which includes the Kantishna area, was established by the Alaska National Interest Lands Conservation Act (ANILCA) on Dec. 2, 1980, and is open only to Federally qualified subsistence users. Hunting in Denali National Preserve is open in accordance with both Federal and State hunting seasons. Inholdings are private lands subject to State regulations.



## Customary and Traditional Use Determination

Rural residents of Unit 20C (except that portion within Denali National Park and Preserve and that portion east of the Teklanika River), Cantwell, Manley, Minto, Nenana, Nikolai, Tanana, Telida, McKinley Village, and the area between mileposts 216–239 and 300–309 of the Parks Highway, have a positive customary and traditional use determination for Unit 20C.

## Regulatory History

When the Federal Subsistence Management Program began, the moose season in all of Unit 20C for regulatory year 1990/91 was from Sept. 1–20, with a harvest limit of one bull, and the restriction that white-phased or partial albino (more than 50% white) moose may not be taken. In 1993, the Federal Subsistence Board adopted a regulatory proposal to extend the September season until Sept. 30 (FWS 1993). Special Action S94-07 was requested by the Denali Subsistence Resource Commission to establish a second moose season on NPS land in Unit 20C (FWS 1994). Effective in the 1995/96 regulatory year, a late fall/early winter season was added from Nov. 15–Dec. 15 for a designated portion of NPS lands in Unit 20C (FSB 1994). This change reflects the open seasons and the geographic description for that portion of Unit 20C, which is currently still in effect.

The use of the Kantishna vicinity for hunting and concerns over potential conflicts between consumptive and non-consumptive users prompted the NPS to submit Proposal 53 to close a part of the Kantishna area with high recreational use to all subsistence hunting during the busiest months from June 1–Sept. 30 (FWS 1995). The Federal Subsistence Board deferred this proposal, supporting the NPS to take action as it deemed necessary to provide a public safety zone (FSB 1995). Subsequently, for public safety reasons, the Park imposed a firearms discharge closure in the Kantishna area within one mile of the Park Road from the beginning of the moose season on Sept. 1–15, when the facilities in Kantishna shut down for the winter.

## Biological Background

Moose surveys in Denali National Park and Preserve have been done as part of a long term monitoring program in which the information is utilized for park resource management (Meier 1987, Meier et al. 1991, Owen and Meier 2005). Based on survey counts through the years, moose numbers and density have declined in the Kantishna area (**Table 1**). Park biologists are uncertain what might be causing the decline in population, acknowledging that further studies are warranted (Owen 2005). It is not known if habitat and food availability are limiting factors as these issues have not been examined. There has been no significant change in numbers of bears and wolves, primary predators of moose.

During the 2003 survey, calves, bulls, and cows represented 4%, 49%, and 47% of the estimated population, respectively. Observers estimated that 91% of cows were without calves, 9% of the cows had 1 calf, and no cows had twins (Owen 2005). In 2004, calves, bulls, and cows represented 13%, 53%, and 36% of the estimated population, respectively. Estimates for this count were 68% of cows were without calves, 33% of cows had one calf, and 4% of cows had 2 calves present.

The high bull:cow ratio in the most recent survey conducted in Nov. 2004 (**Table 1**), is probably due to breeding-season aggregation and differential migration of bulls and cows. The ADF&G management

**Table 1.** Moose cohort ratios and estimated populations, and densities ( $\pm$  90% confidence intervals) for Kantishna area moose surveys, Denali National Park and Preserve, 1986-2004 (Owen and Meier 2005).

Year	Calves/ 100 cows	Bulls/ 100 cows	Estimated population	Density Estimate moose/ km <sup>2</sup>
1986	28	91	424 $\pm$ 123	0.27
1991	11	132	395 $\pm$ 69	0.25
2003	9	105	276 $\pm$ 72	0.13
2004	37	148	133 $\pm$ 64	0.08

objective is to maintain a bull:cow ratio of equal to or more than 30:100 in areas with aerial surveys (Seaton 2004).

### Harvest History

During the September moose season, subsistence users typically obtain a road permit from the park, and drive to Kantishna and the surrounding vicinity to access hunting areas. Based on past records kept by Denali National Park and Preserve staff, there are low numbers of hunters and harvested bulls reported for the Kantishna area (Table 2).

### Effect of the Proposal

The primary effect of this proposal, as intended by the proponent, would be to close the Federal hunting seasons for moose in the Kantishna area of Denali National Park. Federally qualified subsistence users would no longer be able to harvest moose there from Sept. 1–30, and from Nov. 15–Dec. 15. Bull moose that inhabit the Kantishna area could no longer be harvested from the population (with the exception of moose harvested under State regulation on private lands). Since there is no season for cows, under either the Federal or State regulations for all of Unit 20C, the one bull harvest limit has little effect on the reproductive potential for the moose population in the Kantishna area.

**Table 2.** Number of hunters and reported moose harvests in the Kantishna area, Denali National Park and Preserve, 1984-2005 (Hayden 2005).

Year	Hunters	Harvest
1984	1	0
1985	2	2
1986	2	1
1987	1	0
1988	1	1
1989	2	1
1990	1	1
1991	0	0
1992	0	0
1993	0	0
1994	1	1
1995	0	0
1996	0	0
1997	0	0
1998	1	0
1999	1	0
2000	2	2
2001	5	5
2002	7	4
2003	5	3
2004	1	0
2005	5	0

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<b>WP06-62 Executive Summary</b>	
<b>General Description</b>	Requests a Federal hunting season for muskrat for Federal public lands within the Yukon-Charley Rivers National Preserve in Units 20E, 25B, and 25C that mirrors both the Federal and State trapping seasons, which have no harvest limits. <i>Submitted by Steve Hamilton, Eagle.</i>
<b>Proposed Regulation</b>	<p><b>Units 20E, 25B, and 25C–Muskrat (Hunting)</b></p> <p><i>Unit 20E, that portion within Yukon-Charley Rivers National Preserve—No limit.      Sept. 20–June 10</i></p> <p><i>Units 25B and 25C, that portion within Yukon-Charley Rivers National Preserve—No limit.      Nov. 1–June 10*</i></p> <p>*Proponent agreed to alignment with existing trapping regulations.</p>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Support.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATION  
WP06-62**

**EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support.** The Eastern Interior Alaska Subsistence Regional Advisory Council placed this proposal on its consent agenda because the Council was in agreement with the staff recommendation to support the proposal after reviewing the proposal, the draft analysis, and other materials provided. There were no requests to remove the proposal from the consent agenda. Adoption of this proposal would provide for a subsistence need that has been denied due to existing Federal restrictions on the use of a firearm on National Park Service lands under a trapping license. The current muskrat populations for the units are healthy and stable.

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-62**

**Support** the proposal as recommended by the Eastern Interior Alaska Subsistence Regional Advisory Council.

**Justification**

Adoption of this proposal would provide for a subsistence need that has been denied due to existing Federal restrictions on the use of a firearm on NPS lands under a trapping license. The current muskrat population levels for Units 20E, 25B, and 25C are healthy and stable, and could accommodate the small increase in harvest that may occur with passage of this proposal.

**STAFF ANALYSIS  
WP06-62**

**ISSUES**

Proposal WP06-62, submitted by Steve Hamilton of Eagle, Alaska, requests a Federal hunting season for muskrat for Federal public lands within the Yukon-Charley Rivers National Preserve in Units 20E, 25B, and 25C that mirrors both the Federal and State trapping seasons, which have no harvest limits.

**DISCUSSION**

The proponent stated that a hunting season needs to be re-established for Federal public lands within the Yukon-Charley Rivers Preserve that was lost when the Preserve was created in 1980. Before the Preserve was established hunting muskrat for food and hides was allowed under a trapping license. On National Park Service lands, firearms are not an authorized method of trapping, hence the need for hunting season to allow the traditional practice to be re-established. Consultation with the proponent provided clarification that his intention was to establish hunting seasons that mirror existing trapping seasons and not create an expanded hunting season of Sept. 20–Oct. 31 for Units 25B and 25C.

**Existing Federal Regulation****Units 20E, 25B, and 25C–Muskrat (Hunting)**

No existing hunting regulation.

**Unit 20E–Muskrat (Trapping)**

*No limit*

*Sept. 20–June 10*

**Units 25B and 25C–Muskrat (Trapping)**

*No limit*

*Nov. 1–June 10*

**Proposed Federal Regulation****Units 20E, 25B, and 25C–Muskrat (Hunting)**

***Unit 20E, that portion within Yukon-Charley Rivers National Preserve—No limit.***

***Sept. 20–June 10***

***Units 25B and 25C, that portion within Yukon-Charley Rivers National Preserve—No limit.***

***Nov. 1–June 10\****

\*Proponent agreed to alignment with existing trapping regulations.

**Existing State Regulation**

*5 AAC 84.270. Furbearing trapping.*

*(8) Muskrat*

*Unit 20E*

*Sept. 20–June 10*

*No limit*

*Unit 25*

*Nov. 1–June 10*

*No limit*

### **Extent of Federal Public Lands**

National Park Service Federal public lands comprise approximately 20% of Unit 20E, 8% of Unit 25B, and 9% of Unit 25C (See **Unit Maps**).

### **Customary and Traditional Use Determinations**

All rural residents qualify because there is no determination for muskrats in Units 20E, 25B, and 25C.

### **Regulatory History**

State regulations allow the harvest of muskrat with a firearm during trapping seasons. State trapping Unit 25 have remained the same, Nov. 1–June 10, since 1980 through to present. For Unit 20E, State trapping seasons were Nov. 1–June 10 from 1979/80 through 1982/83. In 1983/84 through the present, the State's trapping seasons for Unit 20E have been Sept. 20–June 10. Federal trapping seasons have remained the same since 1990 for Unit 20E, Sept. 20–June 10, and for Units 25B and 25C, Nov. 1–June 10. There has not been a harvest limit for muskrats for any of these units.

### **Biological Background**

The status of the muskrat population in Units 20E, 25B, and 25C is not fully known. Muskrat harvests, along with fox, coyote, squirrel and weasel, are not easily documented. Trends were suggested for these species, including the muskrat, using trapper questionnaires, biologist observations, and personal conversations with trappers. Anecdotal observations suggested that muskrat populations are rising from a long-term low and beginning to occupy habitats unused for decades for Unit 25C. The trapper reports from the questionnaire support this by quantifying muskrats as rare, but increasing (Seaton 2004). In Unit 25B muskrats had declined because of cold winters and dry summers in the mid 1990s but have increased in the late 1990s because of restored water levels in sloughs and lakes in the Yukon Flats area. Trappers and the ADF&G reported increases in the muskrat populations in recent years (Stephenson 2005. pers. comm.). Due to limited funding, neither ADF&G nor NPS staffs routinely conduct surveys or inventories for muskrats. Muskrat populations in the units appear to be healthy based on the number of muskrat pushups (Stephenson 2005 per. comm.).

### **Harvest History**

Most of the muskrat harvest takes place during the last month of the season, when muskrats are actively looking for a mate and seeking food in open waters of thawing lakes and streams. The muskrat harvest provides fresh meat and a tasty meal for subsistence users at their spring camps. During high muskrat populations, muskrats are also economically and culturally important to local residents (Gross 2004). Eighty percent of the muskrats harvested in Alaska are taken with .22-caliber rifles (ADF&G 1994). Subsistence hunters have learned to shoot muskrats in the head, so as not to decrease the pelt's value (Caulfield 1983). The hides are used for clothing, including hats, as well as sold to fur buyers when pelt prices are high.

## Effects of the Proposal

This proposal would re-establish a traditional practice to harvest muskrats with a firearm for their food and hides. Current NPS regulations do not allow the taking of free ranging furbearers with a firearm under a trapping license. This proposal would allow the taking of muskrats with a firearm under a hunting license, thereby providing for a subsistence need that has been prevented under NPS regulations. 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.

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<i>WP06-63 Executive Summary</i>	
<b>General Description</b>	Allow wolf baiting during the hunting season in the Eastern Interior Alaska Region (Units 12, 20, and 25). <i>Submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council.</i>
<b>Proposed Regulation</b>	<p><b>Unit 12</b> 10 wolves—<i>Baiting is allowed.</i> Aug. 10–Apr. 30</p> <p><b>Unit 20</b> 10 wolves—<i>Baiting is allowed.</i> Aug. 10–Apr. 30</p> <p><b>Unit 25</b> Unit 25A—<i>No limit</i> Aug. 10–Apr. 30 Unit 25 remainder—10 wolves Aug. 10–Apr. 30 <i>Baiting is allowed.</i></p>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Support.</b>
<b>Western Interior Alaska Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Defer</b> to the Eastern Interior Alaska Subsistence Regional Advisory Council.
<b>Interagency Staff Committee Recommendation</b>	<b>Support with modification.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support–2</b> <b>Oppose–2</b> <b>Defer–1</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-63**

**EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support.** This is the Eastern Interior Subsistence Regional Advisory Council’s proposal. People should be able to harvest wolves in this manner. The Council wants to make it easier and more efficient to harvest this subsistence resource. Skin sewers can and do use the hides of wolves taken in the spring and fall.

## WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Oppose.** The Council opposed this proposal because the wolf hides are not in prime condition in spring. Council members shared that waiting for the wary wolf to come to a bait station would not be economical or productive. The Council recognized that there are more subsistence hunters in the Eastern Interior Region that do use bait to harvest black bears and could harvest wolves while hunting black bears over bait.

## SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Defer** to the Eastern Interior Alaska Subsistence Regional Advisory Council.

### INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-63

**Support with modification.** The Interagency Staff Committee supports the proposal as recommended by the Eastern Interior Alaska Subsistence Regional Advisory Council, with the additional modification to allow the use of bait to hunt wolves only on FWS and BLM lands in Units 12, 20, and 25.

The modified regulation should read:

*General Provisions/Methods for Taking Wildlife/Subsistence Restrictions—*

- *When taking wildlife for subsistence purposes, you may not: ... Use bait for taking ungulate, bear, wolf, or wolverine; except for black bear **and wolf** when authorized in Unit-specific hunting regulations and under a hunting license.*

*Special Provisions for Units 12, 20, and 25—*

- ***Bait may be used to hunt wolf on FWS and BLM lands.***

#### **Justification**

The Interagency Staff Committee supports the proposal, but recommends that wolf baiting during the hunting season should not apply to National Park Service (NPS) lands for public safety reasons (ANILCA §816). There are special provisions for safety and resource conservation in both the State and Federal regulations concerning black bear baiting. However at their March 10–20, 2006 meeting, the Alaska Board of Game did not apply similar provisions to the use of bait for wolf hunting. Each individual instance of bear baiting is permitted with requirements for registration, clean-up, number of stations allowed, and distance requirements from roads and facilities. These requirements would not exist for wolf baiting under this proposed regulation. NPS lands are managed for general public use in areas that would likely be used for wolf baiting under the proposed regulation, including those areas close to roads and facilities. Therefore, for safety reasons, the Interagency Staff Committee recommends not providing for wolf baiting on National Park Service lands and restricting the regulation to Bureau of Land Management and Fish and Wildlife Service managed lands.

At their winter 2006 meeting, the Western Interior Alaska Regional Advisory Council opposed this proposal. The Interagency Staff Committee opposes the Western Interior Council's recommendation

because this regulation would only be implemented in Eastern Interior areas, and not implementing the regulation would be detrimental to the satisfaction of subsistence needs for residents of the Eastern Interior area.

### WRITTEN PUBLIC COMMENTS WP06-63

**Support.** We support WP06-63 to allow bait in Unit 12 and portions of Unit 20A, Unit 20C and Unit 20D to hunt wolves as long as no edible wild game is used. The population of wolves is over abundant, and allowing bait would increase the chance of harvesting more wolves.

*–Ahtna Tene Nene’ Subsistence Committee*

**Oppose.** If there is a “parallel proposal . . . submitted to the Alaska Board of Game to provide a similar hunting opportunity for other users,” as this proposal suggests, it becomes questionable whether the true intent of this proposed regulation can be considered subsistence. NPCA is concerned that the use of bait to increase the wolf kill in Units 12, 20 and 25 (which include portions of Wrangell-St. Elias and Denali National Park & Preserve and all of Yukon-Charley national Preserve) by “providing additional opportunity” for “its hunters” is nothing more than predator control in disguise and should not be considered. NPCA does not feel the intent is to provide for a subsistence opportunity, but rather it is to make killing wolves easier. The opportunity to kill wolves exists under current regulations. Killing wolves for the sake of reducing wolf populations is not consistent with Congressional intent that units of the national park system should provide for “natural and healthy” wildlife populations. [This] proposal should not be adopted.

*–National Parks Conservation Association*

**Oppose.** (1) Liberal seasons and no bag limits in all three units at present allow sufficient opportunity for subsistence uses of wolves. Baiting is not justified; (2) Even if justification was offered for baiting, the proposal offers no system to administer or limit baiting practices such as provided in State regulation; (3) There is a serious question about whether baiting as it is commonly practiced is customary and traditional subsistence activity under section 803 of Title VIII of ANILCA; and (4) Again, this type of proposal is primarily a predator control measure for which there is no authorization in Federal subsistence law, except as the responsibility of the individual land management agencies, with additional review and procedures.

*–Alaska Defenders of Wildlife*

**Defer.** Baiting of wolves is not a traditional subsistence activity in the Denali National Park area, and therefore this proposal would have little effect on subsistence users.

*–Denali National Park & Preserve Subsistence Resource Commission*

**Support.** The proposal would provide additional opportunities to hunt wolves. We are losing moose and caribou to predators, and this proposal will help to manage these important subsistence resources.

*–Wrangell-St. Elias National Park & Preserve Subsistence Resource Commission*

**STAFF ANALYSIS  
WP06-63**

**ISSUES**

WP06-63, submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council, requests that wolf baiting be allowed during the hunting season in the Eastern Interior Region (Units 12, 20, and 25).

**DISCUSSION**

The proponent wants to provide additional opportunity for subsistence hunters to harvest wolves in the Eastern Interior Region.

**Existing Federal Regulations**

**Unit 12**

*10 wolves*

*Aug. 10–Apr. 30*

**Unit 20**

*10 wolves*

*Aug. 10–Apr. 30*

**Unit 25**

*Unit 25A—No limit*

*Aug. 10–Apr. 30*

*Unit 25 remainder—10 wolves*

*Aug. 10–Apr. 30*

**Proposed Federal Regulations**

**Unit 12**

*10 wolves—**Baiting is allowed.***

*Aug. 10–Apr. 30*

**Unit 20**

*10 wolves—**Baiting is allowed.***

*Aug. 10–Apr. 30*

**Unit 25**

*Unit 25A—No limit*

*Aug. 10–Apr. 30*

*Unit 25 remainder—10 wolves*

*Aug. 10–Apr. 30*

***Baiting is allowed***

To accomplish the proponent's intent, there is a need to address wording from §\_\_.26(b)(14). The following changes would be necessary in the "General Provisions" section and Unit-specific "Special Provisions" sections of the hunting regulations:

*General Provisions/Methods for Taking Wildlife/Subsistence Restrictions—*

- *When taking wildlife for subsistence purposes, you may not: ... Use bait for taking ungulate, bear, wolf, or wolverine; except for black bear **and wolf** when authorized in Unit-specific hunting regulations and under a hunting license...*

*Special Provisions for Units 12, 20, and 25—*

- ***Bait may be used to hunt wolf.***

**Extent of Federal Public Lands**

The combined surface area of Units 12, 20, and 25 is approximately 133,500 square miles; approximately 45,180 square miles (33.8%) are Federal public lands. These consist of 47% FWS, 30% NPS, and 23% BLM lands. (See **Units 12, 20, and 25 Maps**.)

**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 for wolves in Units 12, 20A, 20B, 20C, 20D, 20E, 25A, 25B, and 25C. Rural residents of Unit 26, Stevens Village, and Manley have a positive customary and traditional use determination for wolves in Unit 20F. Rural residents of Unit 25D have a positive customary and traditional use determination for wolves in Unit 25D.

**Regulatory History**

Federal subsistence management regulations define bait and its utilization as follows:

*“Bait means any material excluding a scent lure that is placed to attract an animal by its sense of smell or taste; however, those parts of legally taken animals that are not required to be salvaged and which are left at the kill site are not considered bait.” [§ .25(a)]*

*“You may not use wildlife as food for a dog or furbearer, or as bait... except for the following: (i) The hide, skin, viscera, head, or bones of wildlife; (ii) The skinned carcass of a furbearer; (iii) Squirrels, hares (rabbits), grouse, or ptarmigan; however you may not use the breast meat of grouse or ptarmigan as animal food or bait; (iv) Unclassified wildlife” [§ .25(j)(1)]*

Under Federal subsistence management regulations, using bait to take wolves is specifically prohibited except with a trapping license during the trapping season [§ .26(b)(14)]. During the trapping season, there is no requirement concerning placement of the bait (in a trap, near a trap, or whether a trap must be used with the bait). It is not legal to take free-ranging furbearers with a firearm on NPS lands during the trapping season [36 CFR 13.1.4 and 36 CFR 13(u)]. Under the NPS definition of “trap”, a firearm is not an approved method of taking free-ranging furbearers. The net effect of the above regulations is that, during the trapping season, with a trapping license, wolf baiting is already allowed on BLM, FWS, and NPS lands; but on NPS lands, you can not shoot a free-ranging wolf with a trapping license. Federal subsistence management regulations [§ .26(b)(7)] allow the use of a firearm (shotgun, muzzle-loaded rifle, rifle, or pistol using center-fire cartridges) to harvest wolves during both the hunting and trapping seasons. The trapping season for wolves in Units 12 and 20E is from Oct. 1–Apr. 30. The trapping season for wolves in Unit 20D is from Oct. 15–Apr. 30. The trapping season for wolves in Units 20A, 20B, 20C, 20F, and 25 is from Nov. 1–Apr. 30.

## Current Events Involving the Species

A parallel proposal was submitted to the Alaska Board of Game to allow wolf baiting in Units 12, 20, and 25 during the hunting season. The State proposal (Proposal 121) was considered by the Alaska Board of Game at their Mar. 10–20, 2006 meeting in Fairbanks. At that meeting, the Alaska Board of Game allowed wolf baiting statewide by striking a statewide provision that prohibits intentional feeding of wolf, fox, coyote, and wolverine from 5 AAC 92.230.

Currently, wolf hunting seasons in Units 12, 20, and 25 are from Aug. 10–Apr. 30. The Eastern Interior Alaska Subsistence Regional Advisory Council developed this proposal (WP06-63) in conjunction with a proposal to extend the wolf hunting season to May 31 (WP06-64). The Regional Council's intent under WP06-63 was, if WP06-64 is adopted, wolf baiting would be allowed during the extended May hunting season as well.

## Biological Background

Density of wolves in an area is primarily regulated by prey availability. Collins and Johnson (2004) estimated that there were 20.9 wolves/1000 square mile on the Tetlin National Wildlife Refuge. Gardner (2003a) estimated that during Feb.–Mar. 2003, the density in Unit 20E and Unit 12 was 23.1 wolves/1000 square miles. Burch (2002) reported that wolf population density averaged 10.6 wolves/1000 square miles and that the average home range was 886 square miles in the Yukon-Charley Rivers National Preserve. Adams (2000) observed that Denali National Park and Preserve wolf packs occupy territories that range from an estimated 200 to 1,000 square miles. Small packs, small litters, and low pup survival are all characteristics of wolf populations in areas where prey is relatively scarce (Stephenson 2003).

Wolves have an ability to quickly respond to changes in prey abundance or population reductions that may result from localized harvest. Most wolves disperse from the territory where they were born by 3 years of age, and 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). Natural dispersal and behavioral interactions between individuals and packs serve to prevent inbreeding. Frequent pairing of unrelated wolves is observed (Smith et al. 1997). Dispersal of 1-3 year old wolves helps buffer variations in food availability, with more wolves dispersing during leaner years. Burch (2002) reported that 28% of the 91 radio-collared wolves dispersed from 19-292 miles. Twenty eight percent of the Denali National Park and Preserve radio-collared wolves dispersed annually (Mech et al. 1998). Wolves have a relatively high reproductive rate; Adams (2000) observed that from 1986 to 1999, on average, pups made up 36% of the Denali National Park and Preserve wolf population in the fall. Multiple litters of pups in a single year do occur (Haber 1977; Mech et al. 1998).

In a Denali National Park and Preserve research projects, wolf-caused deaths were the largest source of mortality for wolves age 9 months and older (Mech et al. 1998; Adams 1999). Adams (2000) observed that territorial maintenance and direct aggression were responsible for 43 (30.1%) of the losses of radio-collared wolves recorded during the 1986–2000 Denali National Park and Preserve study. Another 22 (15.4%) died of unknown natural causes, many of which were probably wolf kills. Thus, nearly half of the losses of wolves from the Denali National Park and Preserve study population were probably due to other wolves. Garner and Reynolds (1986) observed lower pup production and survival in packs of five or fewer wolves; summer pup survival for packs of <5 wolves were 23%-25%, while larger packs had nearly 100% pup survival.

Wolves occur throughout the Eastern Interior Region (Units 12, 20 and 25) and populations are healthy (DuBois 2003; Stephenson 2003; Young 2003; Gardner 2003a, b; James 2005, pers. comm.; DuBois

2005, pers. comm.; Stephenson 2005, pers. comm.; Young 2005, pers. comm.). Fluctuations in abundance of caribou, moose, and Dall sheep and cycles in the snowshoe hare populations, affect wolf abundance. Annual snow conditions affect their ability to travel and take prey. Various assessment techniques contribute to wolf population estimates for the units and subunits within the Eastern Interior Region. The estimated total wolf population for the Eastern Interior Region (Units 12, 20, and 25) for regulatory year 2001 (July 1, 2001 to June 30, 2002) was 1,696-2,090 wolves (DuBois 2003; Stephenson 2003; Young 2003; Gardner 2003a, b). There are hundreds of wolf packs in the Eastern Interior Region (DuBois 2003; Stephenson 2003; Young 2003; Gardner 2003a, b).

Over the years, there have been a number of intensive wolf management programs in parts of the Eastern Interior Region. These programs have contributed to the overall harvest levels in these Units.

### **Harvest History**

Wolves are an important subsistence resource for rural Alaskans (CATG 2005). As they did in the past, rural hunters and trappers continue the tradition of harvesting the economically and culturally significant wolf resource. The skills required to successfully harvest wolves are specialized and generally are learned from an experienced mentor. Passing on of hunting skills necessary to pursue and harvest the wolves is important to rural Alaskans. Wolf pelts are used by rural residents to make clothing and handicrafts. There is traditional folklore and strong spiritual beliefs regarding wolves.

Most of the annual wolf harvest occurs between November and March when all harvest methods are allowed (Gardner 2003b). Annual harvest levels are affected by fur prices and snow conditions. In the Eastern Interior Region, most of the wolf harvest is taken using traps and snares. Few trappers select for wolves, and most concentrate on marten and lynx. However, during years when marten and lynx prices are low, and wolf prices are adequate, more trappers concentrate on catching wolves (Gardner 2003b). Most of the harvest by hunters is incidental to moose, caribou, and Dall sheep hunting activities (DuBois 2003; Stephenson 2003; Young 2003; Gardner 2003a, b).

Even though it is legal to do so on FWS and BLM lands, it is unclear to what extent, trappers put out bait without traps with the intent of harvesting wolves over that bait using firearms. Trappers usually carry a firearm when they are checking their traps. Wolves that are not caught in the traps or snares, are sometimes harvested with a firearm around wolf sets and at other points along the traplines. People do shoot and trap wolves near wolf kills (moose, caribou, or Dall sheep that have been previously killed by wolves), and harvest wolves over wolf kills where they did not have any traps set (Umphenour 2005, pers. comm.). Collins (2005, pers. comm.) checked with a number of subsistence users in the Tok, Tanacross, and Tetlin areas, and reported that when trappers put out bait there, they also put traps out; none reported putting out bait without traps with the specific intent of taking wolves over the bait with a firearm.

During Regulatory Years 1999 through 2001, the average annual harvest of wolves by hunters and trappers in the Eastern Interior Region (Units 12, 20 and 25) was 399 wolves/year (DuBois 2003; Stephenson 2003; Young 2003; Gardner 2003a, b). Harvest rates vary across the Eastern Interior Region. Harvest rates in remote areas are dependent on fur prices and weather conditions. Along the road system, trapping pressure is high, especially around communities, and wolf numbers are regulated at low numbers (Gardner 2003b). DuBois (2003) reported a regulatory year 2001 harvest rate of 47%-50% in 20D; he observed that this harvest rate was not a concern that particular year given that wolves there were near the upper population objective. Stephenson (2003) reported a maximum harvest rate of 7%-9% in Units 25A, 25B, and 25D for Regulatory Years 1999–2001. Adams (2000) observed an annual harvest rate by hunters and trappers of approximately 3% of the radio collared wolves for Denali National Park and Preserve. Stable wolf populations throughout North America have sustained annual harvest rates of 20%-40%

(Keith 1983). Based on prey availability in Unit 12 and parts of Units 20 and 25, Gardner (2003a, b) and Stephenson (2003) felt that wolf populations there can sustain annual harvest rates of up to 30%. Where ungulate populations are low, as in part of Unit 25, the sustainable harvest rate for wolves can be low (Stephenson 2003).

### **Effect of the Proposal**

There is a harvestable surplus of wolves in Units 12, 20 and 25, (DuBois 2003; Stephenson 2003; Young 2003; Gardner 2003a, b; James 2005, pers. comm.; DuBois 2005, pers. comm.; Stephenson 2005, pers. comm.; Young 2005, pers. comm.). Wolf populations can support the additional harvest that would result if baiting were allowed during the hunting season. While wolves are usually an incidental take during the hunting season, it is expected that some hunters would use this method to target wolves during the hunting season. Umphenour (2005, pers. comm.) observed that wolf baiting may not be used by a lot of hunters, but that he expected that some hunters would use this method.

If approved as written, WP06-63 would open Federal public lands to the practice of baiting wolves during the hunting season. Bait is used to harvest wolves during the late fall, winter, and early spring by trappers. Proposed regulations in WP06-63, combined with existing seasons for trapping, would broaden wolf baiting on BLM and FWS lands by 52 days in Unit 12 and Unit 20E, 66 days in Unit 20D, and 83 days in Units 20A, 20B, 20C, 20F, and Unit 25. If regulations proposed in WP06-64 were adopted, the allowance for use of bait would be extended an additional 31 days in spring.

Although it is currently illegal to do so during the hunting season, Tarnai (2005, pers. comm.) and Umphenour (2005, pers. comm.) noted that this regulatory change would legalize historic and existing practice during the hunting season. Wolves are attracted to food, and do come to fish camps, hunting camps, and villages in search of food. Alex Tarnai lived on the Nowitna National Wildlife Refuge for 30 years and reported that wolves normally come into the pile of fish heads and guts at his fish camp on a daily basis (Tarnai 2005, pers. comm.). Umphenour (2005, pers. comm.) observed that both bears and wolves frequent the beach across from Rampart, where village residents dispose of fish heads and guts. Wolves are harvested in such situations when an opportunity presents itself. While it is legal to hunt wolves over a moose, caribou, or Dall sheep gut pile, it is currently not legal [§\_\_.26(b)(14)] for a hunter to move the backbone and entrails to a different location to provide for a better opportunity to shoot wolves that come in to feed. Umphenour (2005, pers. comm.) observed that moose are often harvested in the middle of willow patches and that such locations do not allow for good visibility. He noted that if they could move the backbones and entrails to more open areas, it would allow hunters to harvest more wolves.

This proposal would allow for the harvest of additional wolves during the fall hunting season when wolf hides are not prime. WP06-64 seeks to extend the hunting season to May 31 when hides would similarly not be prime. Any person taking a wolf for subsistence uses must salvage the hide [§\_\_.25(j)(2)(i)]. At their winter 2005 meetings, both the Eastern and Western Interior Alaska Subsistence Regional Advisory Councils observed that the fur from wolves taken in late summer and fall is sought after for subsistence use. The Eastern Interior Council noted that, "Fur clothing sewers do use the shorter fur wolf pelts for making hats (FWS 2005)". The Western Interior Council noted that, "The pelts from yearlings are highly prized and sought after in the fall time to provide for winter clothing (FWS 2005)".

Wolf baiting sites would attract a wide variety of terrestrial and avian scavengers/carnivores. One might expect that gray jays, ravens, fox, coyotes, and bears (in spring and fall) would utilize the bait sites more than wolves would. Wolves may be more wary than some other scavengers/carnivores. Tarnai (2005, pers. comm.) noted that he had two different wolves coming into his black bear bait stations in spring 2005,

and could have harvested both of them had it been legal to do so. He uses both dog food and horse food for black bear bait; the wolves came in where he used dog food for bait. Bertram (2005, pers. comm.) noted that he had experience with wolves coming into a black bear bait station early in the spring before the bears were out.

Bait may be used to hunt black bear in the spring (Apr. 15–June 30) in Units 12, 20 and 25 [§\_\_ .26(vii)(12)(i)(A), (20)(iii)(A), and (25)(iii)(A)]. In Unit 25, black bear baiting is also allowed in the fall (Aug. 1–Sept. 1) [§\_\_ .26(vii)(25)(iii)(A)]. It is not legal [§\_\_ .26(b)(14)] to harvest wolves that come into black bear bait stations in Units 12, 20, and 25 during the period when wolf trapping seasons and black bear baiting overlap (Apr. 15 and Apr. 30) unless the hunter also possesses a trapping license and is on BLM and FWS lands (it is illegal to shoot free ranging wolves with a trapping license on NPS lands). It is not legal [§\_\_ .26(b)(14)] to harvest wolves that come into a black bear bait stations in Unit 25 during the period when the wolf hunting and black bear baiting seasons overlap (Aug. 10–Sept. 1).

For black bear baiting, there are safety requirements such as, no baiting allowed within ¼ mile of a publicly maintained road or trail [§\_\_ .26(b)(14)(iv)], and no baiting within one mile of a house, campground, or developed recreational facility [§\_\_ .26(b)(14)(v)]. Resource conservation requirements include a specification that all litter and equipment must be removed from the bait station site when hunting is complete [§\_\_ .26(b)(14)(vi)]. An ADF&G permit provision prohibits the harvest of brown bear near a black bear bait station. Federal subsistence regulations specify that an ADF&G permit is required to bait black bear [§\_\_ .26(b)(14)(i)]. While the above provision is required for baiting black bear, the Alaska Board of Game did not apply similar requirements when they allowed feeding (baiting) of wolves at their March 10–20, 2006, meeting.

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<b>WP06-64 Executive Summary</b>	
<b>General Description</b>	Change the closing dates of the wolf hunting seasons in Units 12, 20, and 25 from April 30 to May 31. <i>Submitted by the Eastern Interior Alaska Subsistence Regional Council.</i>
<b>Proposed Regulation</b>	<p><b>Unit 12</b> 10 wolves <span style="float: right;"><del>Aug. 10–Apr. 30</del> Aug. 10–<b>May 31</b></span></p> <p><b>Unit 20</b> 10 wolves <span style="float: right;"><del>Aug. 10–Apr. 30</del> Aug. 10–<b>May 31</b></span></p> <p><b>Unit 25</b> Unit 25A—No limit <span style="float: right;"><del>Aug. 10–Apr. 30</del> Aug. 10–<b>May 31</b></span> Unit 25 remainder—10 wolves <span style="float: right;"><del>Aug. 10–Apr. 30</del> Aug. 10–<b>May 31</b></span></p>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Support.</b>
<b>Western Interior Alaska Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Southcentral Alaska Regional Council Recommendation</b>	<b>Defer</b> to the home region.
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>Support—2</b> <b>Oppose—3</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATIONS WP06-64

### EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support.** This is the Eastern Interior Alaska Subsistence Regional Advisory Council's proposal. The Alaska Board of Game passed a parallel proposal submitted by the Council. Passage of this proposal would align with the actions of the Board of Game. The Board of Game adopted the proposal as a predator control measure but the Council does not have any control over the discussion and actions of the Board of Game. The Council submitted both the State and Federal proposals to provide additional subsistence opportunity for hunters to hunt wolves when hunting bears. The wolf populations are abundant. Passage of this proposal would not have a significant impact on the wolf populations. Skin sewers can and do make good use of the hides of wolves harvested during the month of May. The wolf populations are healthy and can support the additional harvest if this proposal was passed.

### WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Oppose.** The Western Interior Alaska Subsistence Regional Advisory Council felt that extending the wolf season into the month of May might be considered a wasteful practice. The hides are of very poor quality in May. This proposal would allow the taking of wolves during a period when wolf pup survival could be impacted from the harvest of the respective parent wolves and other members of the pack that provide protection for the pups.

### SOUTHCENTRAL ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Defer** to the Eastern Interior Alaska Subsistence Regional Advisory Council.

## INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-64

**Oppose** the proposal contrary to the recommendation of the Eastern Interior Alaska Subsistence Regional Advisory Council.

### **Justification**

This proposal is contrary to sound principles of wildlife management and will not contribute to the satisfaction of subsistence needs.

Killing of adult wolves, especially post parturient females, in Units 12, 20, and 25 during the month of May will result in the deaths of pups through starvation. The loss of pack members who would otherwise contribute to the sustenance of the alpha pair's offspring during this time will be detrimental to the pups' survival. Accordingly, extending the hunting season for wolves into the time when wolves have pups in the den is contrary to sound principles of wildlife management.

The hides of wolves taken in May are not prime, and are not suitable for the making of clothing and handicrafts. Although some handicrafts are made from non-prime hides with short hair, those hides are taken in the autumn. Spring hides are in the process of winter hair loss and the hair is not of sufficient

uniformity as are autumn or prime hides to be of use in crafts. Accordingly, passage of this proposal will constitute wasteful take and not contribute to the needs of subsistence users.

## WRITTEN PUBLIC COMMENTS WP06-64

**Support.** We support WP06-64 to extend the wolf hunting season to May 31 in Unit 12, and portions of Unit 20A, Unit 20C, and Unit 20D. The wolf population is abundant, and can sustain a longer hunting season.

*–Ahtna Tene Nene’ Subsistence Committee*

**Support.** The proposed regulation change will provide additional opportunities to hunt wolves. Additional opportunity will help address the problems with predation on the ungulates upon which we depend for subsistence needs. Pelt quality in May is not significantly different from that in August, when the season opens, and subsistence users would make use of the pelts.

*–Wrangell-St. Elias National Park & Preserve Subsistence Resource Commission*

**Oppose.** (1) The harvest of wolves in May constitutes wasteful taking under Sections 802 and 804 of Title VIII, ANILCA. At this time, the pelt is of poor quality; (2) The taking of wolves in May during critical denning time is also inconsistent with sound management principles and a threat to the conservation of healthy populations of wildlife and is therefore prohibited under Section 802 of Title VIII, ANILCA; (3) .... this is primarily a predator control measure for which there is no specific authorization in Federal subsistence law. Such activity is the responsibility of the individual land management agency and must go through intensive review; and (4) In State regulation, all interior Game Management Units are closed to the taking of wolves on April 30. To add another month in these three units in Federal regulation would create serious enforceability problems.

*–Alaska Defenders of Wildlife*

**Oppose.** The Alaska Regional Office of the National Parks Conservation Association understands that the existing season end date of April 30 in Units 12, 20 and 25 (which include portions of Wrangell-St. Elias and Denali National Park & Preserve and all of Yukon-Charley National Preserve) is set because pelts lose most of their useful value as winter turns into summer. As such, an extension of the season cannot be considered to benefit a subsistence purpose and is another ill-conceived attempt to kill more wolves to benefit moose and caribou populations. Intensively managing wildlife, such as wolves, to benefit moose and caribou populations is contrary to NPS policy. ... NPCA does not feel the intent is to provide for a subsistence opportunity, but rather it is to make killing wolves easier. The opportunity to kill wolves exists under current regulations. Killing wolves for the sake of reducing wolf populations is not consistent with Congressional intent that units of the national park system should provide for “natural and healthy” wildlife populations. [This] proposal should not be adopted.

*–Alaska Regional Office, National Parks Conservation Association*

**Oppose.** Wolf hides during the month of May are considered to be of low economic value because of their sub prime condition due to shedding. The Commission does not support the harvest of wolves during a time when they may have pups.

*–Denali National Park & Preserve Subsistence Resource Commission*

**STAFF ANALYSIS  
WP06-64**

**ISSUES**

Proposal WP06-64, submitted by the Eastern Interior Alaska Subsistence Regional Advisory Council (Council), requests that the closing dates of the wolf hunting seasons in Units 12, 20, and 25 be changed from April 30 to May 31. The proposed regulatory change would provide an additional 31 days of opportunity for Federally qualified subsistence users to harvest wolves in the affected areas.

**DISCUSSION**

The proponent wants to provide additional opportunity for subsistence hunters to harvest wolves in the Eastern Interior Region.

**Existing Federal Regulations**

**Unit 12**

*10 wolves*

*Aug. 10–Apr. 30*

**Unit 20**

*10 wolves*

*Aug. 10–Apr. 30*

**Unit 25**

*Unit 25A—No limit*

*Aug. 10–Apr. 30*

*Unit 25 remainder—10 wolves*

*Aug. 10–Apr. 30*

**Proposed Federal Regulations**

**Unit 12**

*10 wolves*

*Aug. 10–~~Apr. 30~~–May 31*

**Unit 20**

*10 wolves*

*Aug. 10–~~Apr. 30~~–May 31*

**Unit 25**

*Unit 25A—No limit*

*Aug. 10–~~Apr. 30~~–May 31*

*Unit 25 remainder—10 wolves*

*Aug. 10–~~Apr. 30~~–May 31*

**Existing State Regulations**

*Unit 12: Five wolves*

*Aug. 10–Apr. 30\**

*Unit 20: Five wolves*

*Aug. 10–Apr. 30\**

*Unit 25 except 25C: Ten wolves*

*Aug. 10–Apr. 30\**

*Unit 25C: Five wolves*

*Aug. 10–Apr. 30\**

**\*Note:** The 2006/07 State wolf seasons will be Aug.10–May 31, resulting from recent action taken by the Alaska Board of Game.

### **Extent of Federal Public Lands**

The combined area of Units 12, 20, and 25 is approximately 133,500 square miles; Federal public lands comprise approximately 45,180 square miles (33.8%) and consist of 47% FWS, 30% NPS, and 23% BLM lands.

### **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 for wolves in Units 12, 20A, 20B, 20C, 20D, 20E, 25A, 25B, and 25C. Rural residents of Unit 26, Stevens Village, and Manley have a positive customary and traditional use determination for wolves in Unit 20F. Rural residents of Unit 25D have a positive customary and traditional use determination for wolves in Unit 25D.

### **Regulatory History**

#### Federal Regulations

##### **Unit 12**

- 1990/91—No limit, Aug. 10–Apr. 30.
- 1991/92—10 wolves, Aug. 10–Apr. 30.
- 1992/93–1998/99: 5 wolves, Aug. 10–Apr. 30.
- 1999/00–2005/06: 10 wolves, Aug. 10–Apr. 30.

##### **Unit 20**

- 1990/91 No limit, Aug. 10–Apr. 30.
- 1991/92 10 wolves, Aug. 10–Apr. 30.
- 1992/93–1997/98: 10 wolves, Aug. 10–Apr. 30.
- 1998/99–1999/00: Unit 20F—No limit, Aug. 10–Apr. 30.  
Unit 20 remainder—10 wolves, Sept. 1–Mar. 31.
- 2000/01: No limit, Aug. 10–Apr. 30.
- 2001/02–2005/06: 10 wolves, Aug. 10–Apr. 30.

##### **Unit 25**

- 1990/91: Unit 25A—No limit, Aug. 10–Apr. 30.  
Units 25B and 25D—10 wolves, Aug. 10–Apr. 30.
- 1991/92–2005/06: Unit 25A—No limit, Aug. 10–Apr. 30.  
Unit 25 remainder—10 wolves, Aug. 10–Apr. 30.

#### State Regulations

##### **Unit 12—Resident seasons**

- 1990/91–1991/92: 10 wolves, Aug. 10–Apr. 30.
- 1992/93–2005/06: 5 wolves, Aug. 10–Apr. 30.

##### **Unit 20—Resident seasons**

- 1990/91–1991/92: 10 wolves, Aug. 10–Apr. 30.
- 1992/93–2005/06: 5 wolves, Aug. 10–Apr. 30.

**Unit 25—Resident seasons**

- 1990/91–1991/92: Unit 25A—No limit, Aug. 10–Apr. 30.  
Unit 25 remainder—10 wolves, Aug. 10–Apr. 30.
- 1992/93–2001/02: Unit 25—5 wolves, Aug. 10–Apr. 30.
- 2002/03–2005/06: Unit 25C—5 wolves, Aug. 10–Apr. 30.  
Unit 25 remainder—10 wolves, Aug. 10–Apr. 30.

**Current Events Involving the Species**

A parallel proposal was submitted to the Alaska Board of Game to allow wolf hunting in Units 12, 20, and 25 during the proposed 31–day season extension. The Alaska Board of Game adopted the 31–day season extension at its Mar. 10–20, 2006 meeting in Fairbanks.

Currently, wolf hunting seasons in Units 12, 20, and 25 are from Aug. 10–Apr. 30. The Council developed this proposal (WP06-64) in conjunction with a proposal (WP06-63) that would allow baiting of wolves in Units 12, 20, and 25 during the existing seasons and the proposed extensions.

**Biological Background**

Wolves normally breed in February and March, with litters averaging four to seven pups, and are born in May or early June. The period between birth to when pups can skillfully hunt with other members of the pack is when pups are most dependent upon the parent wolves for survival. Wolf pups are weaned gradually during midsummer. Most adult wolves center their activities around the den site while traveling as far as 20 miles in search of food that is brought back to the den. In mid- or late summer, pups are usually moved some distance away from the den and by early winter are capable of traveling and hunting with adult pack members.

Refer to the analysis of WP06-63 for additional biological background on wolves.

**Harvest History**

Wolves are an important subsistence resource for rural Alaskans. Hunters and trappers continue the tradition of harvesting the economically and culturally significant wolf resource. The skills required to successfully harvest wolves are specialized and generally are learned from an experienced mentor. Wolf pelts are used by rural residents for clothing and handicrafts. In addition to these uses, traditional folklore and strong spiritual beliefs regarding wolves, along with the passing on of the hunting skills necessary to pursue and harvest the animal remain in perpetuity throughout interior Alaska.

Refer to the analysis of WP06-63 for additional harvest history on wolves.

**Effects of the Proposal**

The existing wolf populations in Units 12, 20 and 25 have a harvestable surplus (DuBois 2003; Stephenson 2003; Young 2003; Gardner 2003*a, b*; James 2005, pers. comm.; DuBois 2005, pers. comm.; Stephenson 2005, pers. comm.; Young 2005, pers. comm.). Because wolves are generally harvested by incidental take during the hunting seasons, the affected wolf populations can support the additional harvest that may occur during the proposed season extensions in Proposal WP06-64. If approved as written, WP06-63 would open the affected Federal public lands to the practice of baiting wolves during the hunting season. Bait is used to harvest wolves during the late fall, winter, and early spring by trappers.

If regulations proposed in WP06-63 and -64 were adopted, the allowance for use of bait would be extended an additional 31 days during May.

WP06-64 seeks to extend the hunting season to May 31 when wolves shed their fur and the hides are in sub prime condition. Any person taking a wolf for subsistence uses must salvage the hide [§ \_\_.25(j)(2)(i)]. At their winter 2005 meetings, both the Eastern and Western Interior Alaska Subsistence Regional Advisory Councils observed that the fur from wolves taken in late summer and fall is sought after for subsistence use. The Eastern Interior Council noted that, “Fur clothing sewers do use the shorter fur wolf pelts for making hats” (FWS 2005). The Western Interior Alaska Subsistence Regional Advisory Council (Council) noted that, “The pelts from yearlings [wolves] are highly prized and sought after in the fall time to provide for winter clothing” (FWS 2005).

A harvested pelt during the proposed season extension usually does not render quality clothing and handicrafts, as sub prime pelts are not sought after by hunters and trappers. For this reason, experienced hunters prefer taking wolves during late summer through April when pelts are prime and prior to the emergence of pups. The proposed 31-day extension would also occur at the end of spring when wolves become more difficult to track and see without adequate snow cover.

Adoption of the proposed season extension could cause the inadvertent harvest of adult wolves with pups, resulting in the abandonment of the young at the den site and subsequent additional mortality. Abandoned wolf pups might have the remaining pack to protect them at the den site; however, pup survival is not possible without the lactating female and both adult wolves to later provide freshly harvested meat and passing on of the skills necessary to survive.

Recent action taken by the Alaska Board of Game will provide the May 1–31 season extension on State and Federal public lands, except on National Parks and Monuments, under State regulations. Adoption of WP06-64 would align Federal and State regulations for wolves in Units 12, 20, and 25.

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*WP06-65 Executive Summary*

<b>General Description</b>	Requests a change to remove the closed area for caribou in Unit 26A. Submitted by Alaska Department of Fish and Game.
<b>Proposed Regulation</b>	<i>Unit 26A—10 caribou per day; however, July 1–June 30 cow caribou may not be taken May 16–June 30. Federal public lands south of the Colville river and east of the Killik River are closed from Aug. 1–Sept. 30 to the taking of caribou except by Federally-qualified subsistence users hunting these regulations. (You may not transport more than 5 caribou per regulatory year from Unit 26 except to the community of Anaktuvuk Pass.)</i>
<b>North Slope Regional Council Recommendation</b>	<b>Support.</b>
<b>Western Interior Alaska Regional Council Recommendation</b>	<b>Support.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>1 comment cites more scientific data needed.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-65**

**NORTH SLOPE SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support.** The North Slope Subsistence Regional Advisory Council supports this proposal. The existing closure is less effective because of recent land status changes. Lands formerly managed by Bureau of Land Management have either been selected or conveyed to native corporations or the State of Alaska and are no longer Federal public lands. Only National Park Service Preserve lands to the east of Anaktuvuk Pass would be affected by the continued closure. The populations of the three caribou herds whose ranges traverse Unit 26A are not currently a management concern. The harvestable surplus of these healthy caribou populations is sufficient to provide for both subsistence and nonsubsistence uses. Continuation of the closure would not be consistent with the requirements of ANILCA Section 815(3).

The Alaska Board of Game recently adopted a Controlled Use Area for the Anaktuvuk River drainage effective July 1, 2006 that prohibits the use of aircraft for caribou hunting from Aug. 15–Oct. 15. This hunter transportation restriction will limit access for nonlocal hunters in the Anaktuvuk Pass vicinity.

Limiting the access of nonlocal hunters should reduce the occurrence of user conflicts and may also lessen the impact on caribou migration.

Maintaining the status quo, in which only Federally qualified subsistence users can harvest caribou from this area, was considered. However, maintaining the closure for nonsubsistence uses for the purpose of conserving a healthy wildlife population (ANILCA, Title VIII, Section 815(3)) is no longer needed. The harvestable surplus of these healthy caribou populations is sufficient to provide for both subsistence and nonsubsistence uses. The small amount of additional hunting effort and harvest by other Alaska residents on these lands is anticipated to be compatible with Federal subsistence uses and would have little effect on the caribou population.

#### **WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support.** The Western Interior Alaska Subsistence Regional Advisory Council supported the proposal to lift the Federal closure because of the small amount of land involved and the recent land status changes that reduce the affected land further. The Council felt the recent Alaska Board of Game's action to establish a controlled use area for the Anaktuvuk River drainage that prohibits the use of aircraft for caribou hunting from Aug. 15–Oct. 15 addresses the Council and local residents concerns about changing caribou migrations. Limiting the access of nonlocal hunters should reduce the occurrence of user conflicts and also lessen the impact on caribou migration. The affected caribou herds are not currently a management concern.

#### **INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-65**

**Support** the proposal as recommended by the North Slope and Western Interior Alaska Subsistence Regional Advisory Councils.

#### **Justification**

The existing closure is less effective because of recent land status changes. Lands formerly managed by Bureau of Land Management have either been selected or conveyed to Native corporations or the State of Alaska and are no longer Federal public lands. Only National Park Service Preserve lands to the east of Anaktuvuk Pass would be affected by the continued closure.

The populations of the three caribou herds whose ranges traverse Unit 26A are not currently a management concern. The harvestable surplus of these healthy caribou populations is sufficient to provide for both subsistence and non subsistence uses. Continuation of the closure would not be consistent with the requirements of ANILCA Section 815(3).

The Alaska Board of Game recently adopted a Controlled Use Area for the Anaktuvuk River drainage effective July 1, 2006 that prohibits the use of aircraft for caribou hunting from Aug. 15–Oct. 15. This hunter transportation restriction will limit access for nonlocal hunters in the Anaktuvuk Pass vicinity. Limiting the access of nonlocal hunters should reduce the occurrence of user conflicts and may also lessen the impact on caribou migration.

**WRITTEN PUBLIC COMMENT**  
**WP06-65**

There must be sufficient scientific data available to make sound management decisions so that subsistence hunting and “natural and healthy” wildlife populations can continue in perpetuity. Closures, ... and lifting closures, such as the proposed changes to existing geographic restrictions for moose and caribou in Unit 26A (proposals #65 and #66), can only be made based on sound science. The Federal Regional Advisory Boards need to identify where they are lacking data for making sound wildlife management decisions, whether they are considering a new closure, lifting an old closure, adjusting harvest levels, or changing the length of seasons. Where data is lacking, attention must be focused on improving the quality of harvest data, population data, etc. Only when the National Park Service is aware of instances in which data is lacking can it begin to direct the necessary funds to improve scientific research and gathering. The analysis behind lifting the geographic residency restrictions on caribou and moose in Unit 26A (proposals #65 and #66) needs to consider what will happen to the success of Federally qualified subsistence hunters when competition is introduced in an area where it is now restricted. Furthermore, there needs to be an analysis of the potential impact on the future ability of the area to provide moose and caribou for local subsistence users assuming harvest levels will increase as a result of the proposed lifting of hunting restrictions. That information needs to be developed and considered as these two proposals move forward.

*–Alaska Regional Office, National Parks Conservation Association*

## STAFF ANALYSIS WP06-65

### ISSUE

Proposal WP06-65, submitted by the Alaska Department of Fish and Game, requests a change to remove the closed area for caribou in Unit 26A.

### DISCUSSION

The Office of Subsistence Management conducted a review of this closure (Federal Wildlife Closure Review WCR-05-24) and concluded that, “The relative high abundance of caribou along with the high harvest by local hunters may warrant a more thorough review of this Federal closure.” The review also points out that most of Federal public lands in the closure area lie within Gates of the Arctic National Park, which is already closed to nonsubsistence hunting. Other Federal public lands affected include a portion of Gates of the Arctic National Preserve which is open to nonsubsistence hunting.

The proponent anticipates no negative impact on subsistence users if the closure is removed. The Federal Wildlife Closure Review WCR-05-24 documents no conservation concerns for caribou in this area at this time. The proponent states that WCR-05-24 presents no direct evidence that nonlocal hunters are affecting caribou migration.

The proponent acknowledges there may be additional competition by sport hunters for the resource being pursued by subsistence users.

During the fall 2005 Regional Advisory Council meetings, both, the North Slope and the Western Interior Alaska Subsistence Regional Advisory Councils reviewed WCR-05-24. The North Slope Council passed a motion to maintain the closure, preventing non-Federally qualified subsistence users from taking caribou on Federal public lands south of the Colville River and east of the Killik River from Aug. 1–Sept. 30. The Western Interior Council deferred to the home region, the North Slope Council. The Western Interior Council discussed that the land status has changed, and this closure does not achieve the desired protection for the caribou migrations critical for Anaktuvuk Pass residents and other residents in Unit 24. The Western Interior Council directed a letter be sent requesting an educational program be developed for the general public to avoid harvesting the lead caribou. Harvesting the lead or first caribou migrating into an area will result in changing or deflecting the caribou migration, possibly resulting in hardships for subsistence hunters.

### Existing Federal Regulation

#### Unit 26A–Caribou

<p><i>Unit 26A—10 caribou per day; however, cow caribou may not be taken May 16–June 30. Federal public lands south of the Colville River and east of the Killik River are closed from Aug. 1–Sept. 30 to the taking of caribou except by Federally qualified subsistence users hunting under these regulations.</i></p>	<p><i>July 1–June 30</i></p>
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*(You may not transport more than 5 caribou per regulatory year from Unit 26 except to the community of Anaktuvuk Pass.)*

**Proposed Federal Regulation                      Unit 26A–Caribou**

*Unit 26A—10 caribou per day; however, cow caribou may not be taken July 1–June 30  
 May 16–June 30. Federal public lands south of the Colville river  
 and east of the Killik River are closed from Aug. 1–Sept. 30 to the  
 taking of caribou except by Federally qualified subsistence users  
 hunting these regulations.*

*(You may not transport more than 5 caribou per regulatory year from  
 Unit 26 except to the community of Anaktuvuk Pass.)\*

**Existing State Regulation**

<b>Species/bag limits</b>	<b>Permit/ticket required</b>	<b>Open season</b>
<i>Unit 26A: Residents:</i>		
<i>Five caribou per day: Bulls</i>	<i>Harvest</i>	<i>No closed season</i>
<i>Cows</i>	<i>Harvest</i>	<i>July 1–May 15</i>
<i>Unit 26A: Nonresidents:</i>		
<i>Five caribou total: Bulls</i>	<i>Harvest</i>	<i>No closed season</i>
<i>Cows</i>	<i>Harvest</i>	<i>July 1–May 15</i>

**Extent of Federal Public Lands**

Federal public lands in the Unit 26A closed area include NPS managed lands. Review of Federal land status records indicate that lands north of Anaktuvuk Pass, formerly managed by BLM, have either been selected or conveyed to native corporations or the State of Alaska and are no longer Federal public lands (BLM 2005). The only tracts of Federal public lands in the closed area are a portion of Gates of the Arctic National Park and Preserve (**Map 1**) near Anaktuvuk Pass. Federal public lands comprise approximately 25% of Unit 26A closed area, of which 23% is NPS Park and 2% is NPS Preserve.

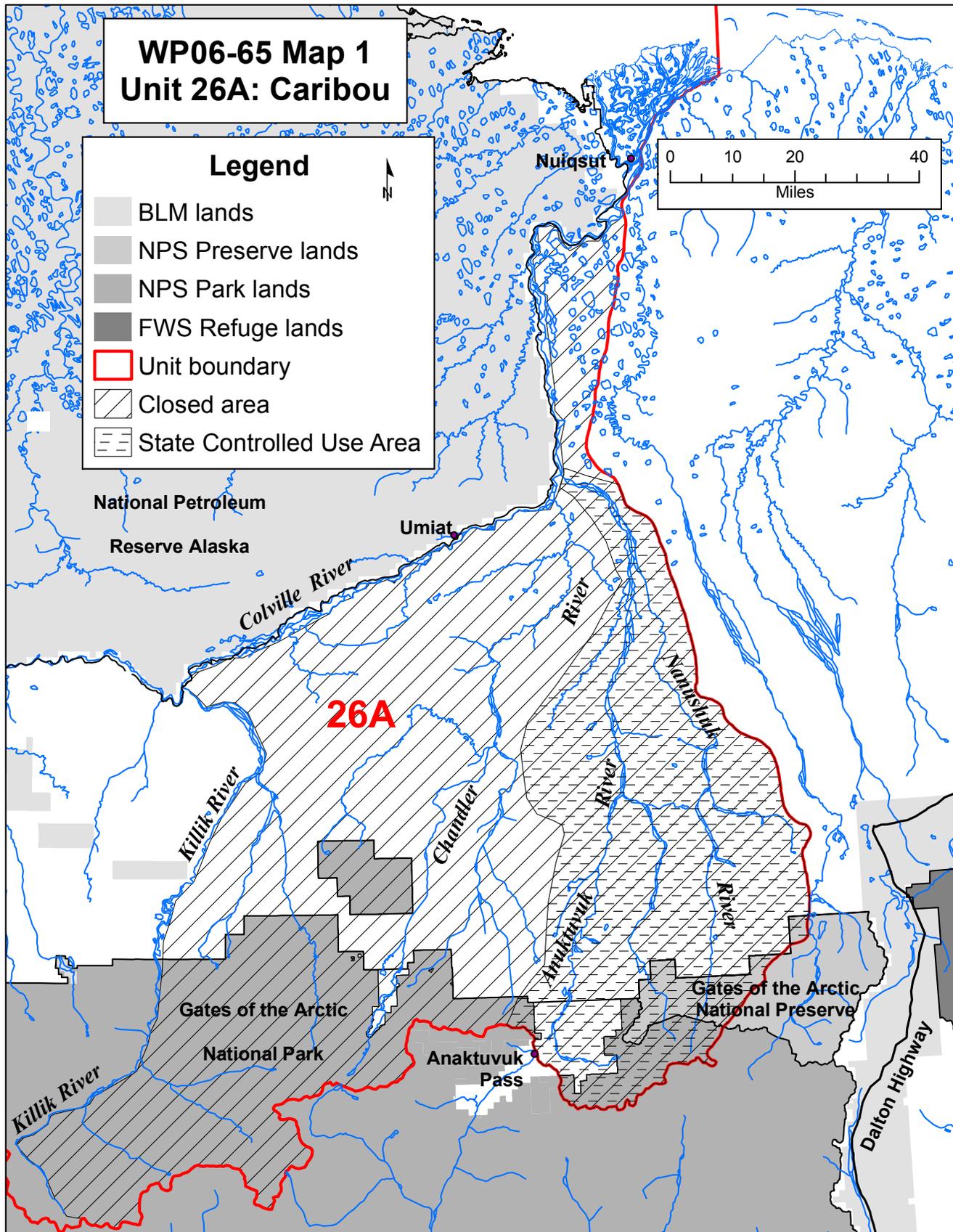
**Customary and Traditional Use Determination**

The current customary and traditional use determination for caribou in Unit 26A is rural residents of Unit 26, Anaktuvuk Pass, and Point Hope.

**Regulatory History**

Under the Federal subsistence management regulations beginning in 1990, five caribou per day were allowed, but cow caribou could not be taken from May 16–June 30. At that time there were no closed areas to nonsubsistence hunting. In 1995, the Federal Subsistence Board adopted Proposal P95-64 (FSB 1995) and changed the harvest limit to ten caribou per day. Justification for the increased harvest was that there were no biological or conservation concerns, and also that the custom and tradition of North Slope subsistence users was to take the number of caribou needed and the maximum number that could be carried in one day (FSB 1995).

The Board also adopted Proposal P95-62 (FSB 1995) and closed the area of Unit 26A east of the Killik River and south of the Colville River to nonsubsistence hunting on Federal public lands. Justification for adopting the closure was that the Board accepted the Council’s recommendation for the closed area to lessen the impact on caribou migration by reducing competition from nonsubsistence hunting. Local



subsistence users were concerned that nonsubsistence hunters take the first caribou of the migration, which traditional knowledge says will cause the migration to shift. It had been their observation that nonsubsistence hunters were causing the migration to move away from the area subsistence users hunt in Unit 26A.

In Nov. 2005, the Alaska Board of Game adopted a Controlled Use Area for the Anaktuvuk River drainage (**Map 1**) beginning July 1, 2006 that prohibits the use of aircraft for caribou hunting from Aug. 15–Oct. 15 (Haynes 2006). It was the intent of the Board of Game that this hunter transportation restriction should effectively limit access for nonlocal hunters in the Anaktuvuk Pass vicinity. A secondary intent from limiting nonlocal hunter access was to reduce the occurrence of user conflicts and lessen the impact on caribou migration in the Anaktuvuk Pass area.

### **Current Events Involving Species**

Three caribou herds are present in the general area of Anaktuvuk Pass at various times during the year. These are the Teshekpuk Caribou Herd, the Central Arctic Caribou Herd, and the Western Arctic Caribou Herd. The ADF&G Caribou Management Reports (2003) indicate that the management objectives for 2002 were achieved relative to the populations for these herds. The 2002 census numbered just over 45,000 for the Teshekpuk herd, and since the population remains high, no regulatory changes were recommended by ADF&G. In 2002, the population size for the Central Arctic herd was nearly 32,000 caribou, with an objective to maintain a population of at least 18,000–20,000 caribou. A census for the Western Arctic herd was conducted in 2003, with a population of 490,000 caribou (Dau in prep).

### **Biological Background**

The following trends are reported (ADF&G 2003) for each of the three caribou herds in Unit 26A: Since 1984 when the first photocensus of the Teshekpuk herd was completed totaling nearly 12,000 animals, subsequent counts in the 1980s showed higher numbers and the herd population has steadily increased since the early 1990s, to just over 45,000 caribou in 2002. The Central Arctic herd was approximately 13,000 animals in 1983, and grew to over 23,000 caribou in 1992. In 1995 the herd had declined to 18,000 and then grew to nearly 20,000 in 1997 and in 2000 was counted at over 27,000 caribou. Since then, the Central Arctic herd has increased to nearly 32,000 animals in 2002. The largest herd, the Western Arctic, experienced a major decline in the 1970s, and then increased annually with a peak in 1996 at 463,000 animals. The census in 1999 of 430,000 may have been conservative, as the 2003 census of the Western Arctic herd was 490,000 caribou. According to the 2003 Management Report, biological indications suggest that the Western Arctic herd will probably decline in the foreseeable future. Overall, the populations of the three caribou herds whose ranges traverse Unit 26A are not currently a management concern.

### **Harvest History**

Due to the extensive ranges of the caribou herds, and the varying harvests by communities in the region, harvest information for this review is provided specifically for the community of Anaktuvuk Pass. For the 2000/01 regulatory year, the total community harvest was estimated to be approximately 500 caribou (based on 2000 population and community harvest assessments in Anaktuvuk Pass 1990–95). About 80% of the total harvest is from the Western Arctic herd (ADF&G 2003).

In a more recent ten-year study, the North Slope Borough's Department of Wildlife Management compiled harvest assessments for eight North Slope communities, including Anaktuvuk Pass (Brower 2006). The study results are preliminary and are not currently available until after appropriate review by

participating villages. The harvest assessments cover a period from 1995 to 2005. Review of the study results may provide an opportunity to determine the effect of the closure on caribou harvest.

The total reported caribou harvest for Unit 26A for the years 2001–04 can be found in **Table 1**.

**Table 1.** Total Reported caribou harvest for Unit 26A (ADF&G 2005).

Year	Reported Resident Harvest	Reported Nonresident Harvest	Unspecified Harvest	Total Reported Harvest
2001	35	22	0	57
2002	35	44	0	79
2003	68	46	4	118
2004	65	48	1	114

### Effects of the Proposal

Based on ADF&G's Caribou Management Reports (2003) for the three caribou herds found in the affected area, there appears to be no conservation concerns. However, in 1995, local residents were very concerned and were hopeful that eliminating non-Federally qualified hunters would help them meet their subsistence needs. At the time, concerns were expressed that activities by non-Federally qualified hunters, guides, and transporters were affecting the caribou migration. These concerns still exist; however, there is no biological data that a limited number of nonlocal hunters would affect the overall path of the caribou migration.

In the Western Arctic Herd Management Report (ADF&G 2003), a paragraph describing 'User issues' specifically indicates that conflicts between nonlocal hunters, commercial operators and local hunters continued in portions of the Western Arctic range during the reporting period from 2000–2002. Some conflicts occurred near Anaktuvuk Pass. The staff analysis for Requests for Reconsideration in 1995 describes how local traditional ecological knowledge (TEK) strongly suggests that nonlocal hunters have an effect on caribou migration routes, and that this aspect of the issue should be evaluated more thoroughly. TEK in 1995 indicated that if the beginning of the caribou migration is disturbed, then the herd will vary its migratory path. The concern for Anaktuvuk Pass residents is that, despite the high population of caribou, if the migration turns away from the pass at Anaktuvuk, then the caribou migrate too far away for the people of Anaktuvuk to easily harvest them. Thus, the proposal was initiated to keep nonlocal hunters from hunting early in the migration to avoid this from occurring.

If this proposal is adopted, it would eliminate the closure for caribou east of the Killik River and south of the Colville River in Unit 26A, which would allow subsistence and nonsubsistence hunting in the Gates of the Arctic National Preserve east of Anaktuvuk Pass. The Gates of the Arctic National Park lands are open only to Federally qualified resident zone communities.

If adopted it may result in additional competition by sport hunters for the resource being pursued by subsistence users. This change would affect only those Federal public lands open to nonsubsistence hunting, the NPS Preserve east of Anaktuvuk Pass. However, access on those lands to nonlocal hunters will be limited during Aug. 15 to Oct. 15 as a result of adoption of the new Anaktuvuk River Drainage Controlled Use Area by the Alaska Board of Game.

Recent land status changes have made the existing closure almost irrelevant; as most caribou hunting in the Unit 26A closed area now occurs under State regulations. Removing the closure will more closely align Federal and State regulations.

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<b>WP06-66 Executive Summary</b>	
<b>General Description</b>	Requests that Federal public lands in that portion of the Colville River drainage downstream from and including the Chandler River within Unit 26A be open to the taking of moose by all Alaska residents. <i>Submitted by Office of Subsistence Management.</i>
<b>Proposed Regulation</b>	<b>Unit 26A—Moose</b> <span style="float: right;"><i>Aug. 1–Sept. 14</i></span> <i>That portion of the Colville River drainage downstream from and including the Chandler River—1 bull. Federal public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations.</i>
<b>North Slope Regional Council Recommendation</b>	<b>Support.</b>
<b>Western Interior Alaska Regional Council Recommendation</b>	<b>Support.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Support.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>1 comment citing more scientific data needed.</b>

## REGIONAL ADVISORY COUNCIL RECOMMENDATIONS WP06-66

### NORTH SLOPE SUBSISTENCE REGIONAL ADVISORY COUNCIL

**Support.** The North Slope Subsistence Regional Advisory Council supports this proposal. The proposal, submitted by the Office of Subsistence Management, requests that Federal public lands in that portion of the Colville River drainage downstream from and including the Chandler River within Unit 26A be open to the taking of moose by all Alaska residents. Opening the small amount of Federal public lands within that portion of the Colville River drainage downstream from and including the Chandler River to the taking of moose by all Alaskan residents should have little effect upon either the moose population or Federally qualified subsistence users. Only a small number of the total moose population occurs on Federal public lands that would be affected by this regulatory change. Existing Federal public lands that are subject to the current regulation are limited to the headwaters of the Nanushuk River within Gates of the Arctic National Preserve and portions of the lower Colville River and associated tributaries within the National Petroleum Reserve Alaska. The moose population has substantially increased and should be able to support some additional harvest of bulls. Therefore, the original basis for closing this area to hunters that were not residents of Unit 26A, to conserve a healthy wildlife population (ANILCA, Title VIII, Section 815(3)), can no longer be justified. Only a small amount of additional hunting pressure and harvest is expected to occur as a result of this proposed regulation change. The ability of Federally

qualified subsistence users to harvest moose should not be impaired by the small amount of additional competition expected from other Alaska hunters, and only a small amount of additional harvest opportunity would be provided to these other hunters. Additionally, adoption of the proposed regulatory changes would make it less confusing for these other hunters to determine legal areas in which to hunt.

#### **WESTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Support.** The Western Interior Alaska Subsistence Regional Advisory Council supports lifting the moose closure to allow the taking of moose by all Alaskan residents because it would have little effect on the moose population. Only a small number of the total moose population occurs on Federal public lands. The moose population has substantially increased and should be able to support the additional harvest of bull moose. Adoption of the proposal would make it less confusing for other hunters to determine the legal areas to hunt.

#### **INTERAGENCY STAFF COMMITTEE RECOMMENDATION WP06-66**

**Support** the proposal as recommended by the North Slope and Western Interior Alaska Subsistence Regional Advisory Councils.

#### **Justification**

Opening the small amount of Federal public lands within that portion of the Colville River drainage downstream from and including the Chandler River to the taking of moose by all Alaskan residents should have little effect upon either the moose population or Federally qualified subsistence users. Only a small number of the total moose population occurs on Federal public lands that would be affected by this regulatory change. Existing Federal public lands that are subject to the current regulation are limited to the headwaters of the Nanushuk River within Gates of the Arctic National Preserve and portions of the lower Colville River and associated tributaries within the National Petroleum Reserve Alaska. The moose population has substantially increased and should be able to support some additional harvest of bulls. Therefore, the original basis for closing this area to hunters that were not residents of Unit 26A, to conserve a healthy wildlife population (ANILCA, Title VIII, Section 815(3)), can no longer be justified. Only a small amount of additional hunting pressure and harvest is expected to occur as a result of this proposed regulation change. The ability of Federally qualified subsistence users to harvest moose should not be impaired by the small amount of additional competition expected from other Alaska hunters, and only a small amount of additional harvest opportunity would be provided to these other hunters. Additionally, adoption of the proposed regulatory changes would make it less confusing for these other hunters to determine legal areas in which to hunt.

#### **WRITTEN PUBLIC COMMENTS WP06-66**

There must be sufficient scientific data available to make sound management decisions so that subsistence hunting and “natural and healthy” wildlife populations can continue in perpetuity. Closures, ... and lifting closures, such as the proposed changes to existing geographic restrictions for moose and caribou in Unit 26A (proposals #65 and #66), can only be made based on sound science. The Federal Regional Advisory Boards need to identify where they are lacking data for making sound wildlife management decisions, whether they are considering a new closure, lifting an old closure, adjusting harvest levels, or changing

the length of seasons. Where data is lacking, attention must be focused on improving the quality of harvest data, population data, etc. Only when the National Park Service is aware of instances in which data is lacking can it begin to direct the necessary funds to improve scientific research and gathering. The analysis behind lifting the geographic residency restrictions on caribou and moose in Unit 26A (proposals #65 and #66) needs to consider what will happen to the success of Federally qualified subsistence hunters when competition is introduced in an area where it is now restricted. Furthermore, there needs to be an analysis of the potential impact on the future ability of the area to provide moose and caribou for local subsistence users assuming harvest levels will increase as a result of the proposed lifting of hunting restrictions. That information needs to be developed and considered as these two proposals move forward.

*–Alaska Regional Office, National Parks Conservation Association*

**STAFF ANALYSIS  
WP06-66**

**ISSUES**

Proposal WP06-66, submitted by Office of Subsistence Management, requests that Federal public lands in that portion of the Colville River drainage downstream from and including the Chandler River within Unit 26A be open to the taking of moose by all Alaska residents.

**DISCUSSION**

The proponent requests that Federal public lands within that portion of the Colville River drainage downstream from and including the Chandler River within Unit 26A be open to all Alaska residents for moose hunting (**Map 1**). This request is being made since the moose population has substantially increased since various regulatory restrictions were adopted during the 1990s. Only a relatively small amount of Federal public lands occur within this area. The State currently allows only Alaska residents to harvest moose on the remainder of lands within this area with a bag limit of one bull per hunter, and aircraft cannot be used to hunt moose in any portion of Unit 26A. However, beginning July 1, 2006, the State will provide more opportunity for Alaska residents to harvest moose in some areas of Unit 26A. This will include a limited drawing permit hunt that will allow use of aircraft in some areas; a winter season hunt without aircraft use in some areas; and an expanded summer season hunt without aircraft use in some areas.

**Existing Federal Regulation*****Unit 26A—Moose****Aug. 1–Sept. 14*

*That portion of the Colville River drainage downstream from and including the Chandler River—1 bull. Federal public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations.*

**Proposed Federal Regulation*****Unit 26A—Moose****Aug. 1–Sept. 14*

*That portion of the Colville River drainage downstream from and including the Chandler River—1 bull. ~~Federal public lands are closed to the taking of moose except by Federally qualified subsistence users hunting under these regulations.~~*

**Existing State Regulation**

*Unit 26A, that portion of the Colville River drainage downstream from and including Chandler River*

*Residents: One bull**Aug. 1–Sept. 14**Nonresidents**No open season*

## Extent of Federal Public Lands

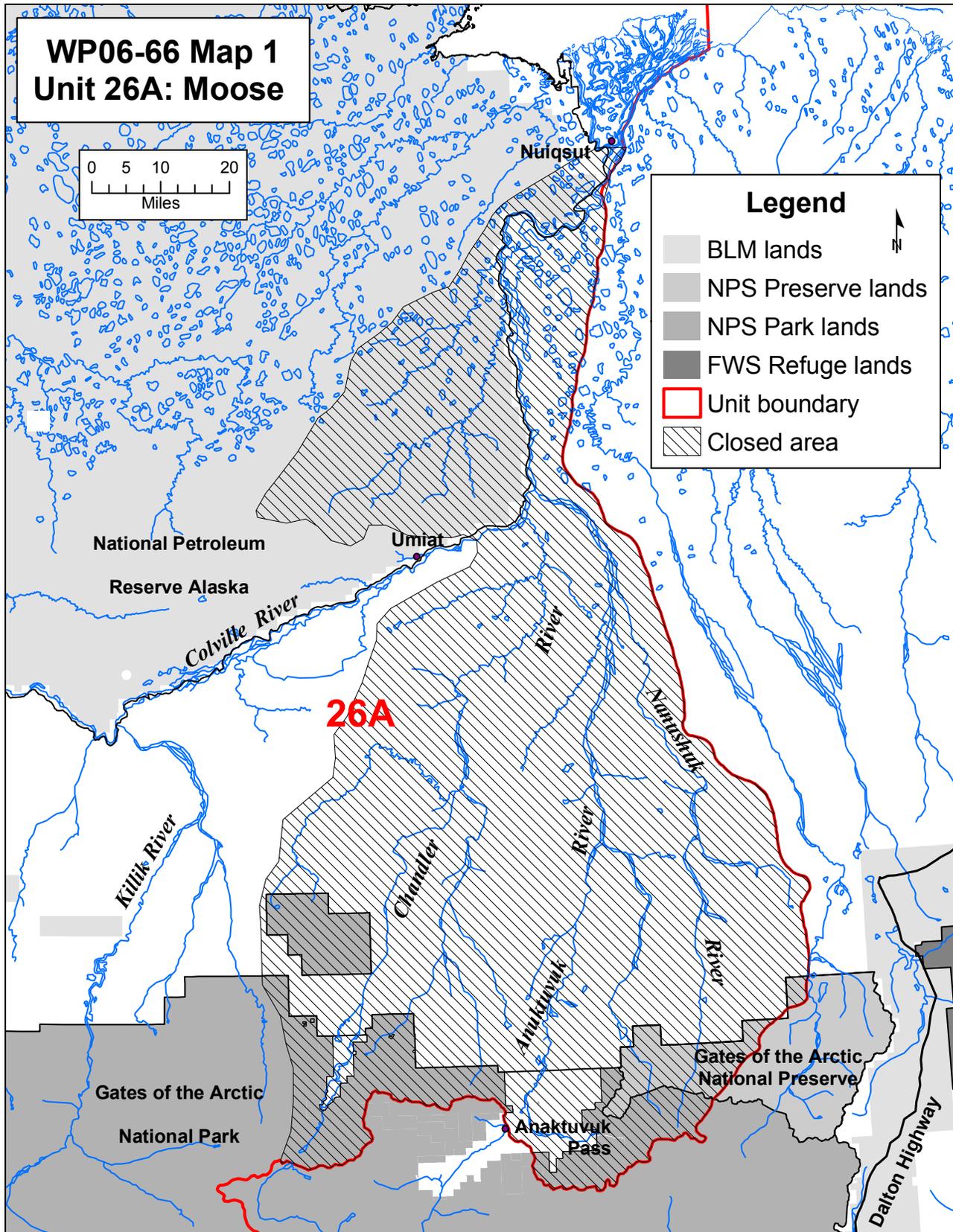
Most Federal public lands, which comprise approximately 70% of Unit 26A, would not be affected by the proposed regulatory change. Only lands along the upper reaches of the Anaktuvuk River within Gates of the Arctic National Preserve and some lands along the lower portion of the Colville River within the National Petroleum Reserve Alaska would be affected since Bureau of Land Management lands within Chandler and Anaktuvuk river drainages are being conveyed from Federal ownership (**Map 1**). Most Federal public lands within Unit 26A, including most of the National Petroleum Reserve Alaska and all of Gates of the Arctic National Park (about 8%), would be unaffected by this regulation change since they are either within the Colville River drainage upstream from the Chandler River or outside the Colville River drainage.

## Customary and Traditional Use Determinations

All rural residents of Unit 26 (except the Prudhoe Bay-Deadhorse Industrial Complex), Point Hope and Anaktuvuk Pass have a positive customary and traditional use determination for moose in Unit 26A, although during the last several years, only rural residents from the communities of Anaktuvuk Pass, Barrow, Nuiqsut, and Wainwright have reported hunting moose in this area.

## Regulatory History

A moose population decline during the 1990s, due both to higher adult mortality and poor calf production, led to both Federal and State moose hunting restrictions in Unit 26A. In 1994, the Federal Subsistence Board (Board) adopted State regulations on aircraft use restrictions for Unit 26A moose hunting. This made all of Unit 26A a Controlled Use Area that was closed to use of aircraft for moose hunting from July 1–Sept. 14 and from Jan. 1–Mar. 31, except for transportation of hunters, gear, and moose parts by aircraft between public airports. In 1996, the Board adopted regulatory proposal P96-66 that closed moose hunting on all Federal public lands in Unit 26A except in that portion of the Colville River drainage downstream from the mouth of the Anaktuvuk River. This area remained open only to Federally qualified subsistence hunters from Aug. 1–Mar. 31, and the harvest was limited to 1 moose per hunter, as long as it was not a cow accompanied by a calf. The Board’s justification for adopting the closure to nonsubsistence uses of moose was for the conservation of healthy wildlife populations. In 2002, the Board adopted regulatory proposal WP02-45 that expanded the Federal subsistence moose harvest area in Unit 26A from that portion of the Colville River drainage downstream from the mouth of the Anaktuvuk River to that portion of the Colville River drainage downstream from and including the Chandler River and also extended the season by two weeks, from Aug. 1–Aug. 31 to Aug. 1–Sept. 14. In 2005, the Office of Subsistence Management conducted closure review WCR-05-23 and recommended that closure of that portion of the Colville River drainage downstream from and including the Chandler River to non-Federally qualified moose hunters should continue to remain in effect. However, when WCR-05-23 was discussed during the North Slope Regional Advisory Council’s (Council) fall 2005 meeting (NSSRAC 2005), new winter moose census information provided by the Alaska Department of Fish and Game suggested the closure was no longer necessary since the moose population had reached at least 1,000 animals. Additionally, information provided by the Bureau of Land Management at that meeting indicated that the amount of lands affected by this closure would decrease since several blocks of Federal public lands along the Chandler and Anaktuvuk Rivers had been selected by the State or Arctic Slope Regional Corporation. Although the Council recommended maintaining the closure for nonsubsistence uses, the new information indicated such a closure may no longer be needed to conserve a healthy wildlife population (ANILCA, Title VIII, Section 815(3)). This prompted the Office of Subsistence Management to develop the current proposal, WP06-66, which seeks to reopen remaining Federal public lands on that



portion of the Colville River drainage downstream from and including the Chandler River to hunting by all Alaska residents.

### Current Events Involving Species

During their Nov. 2005 meeting, the Alaska Board of Game adopted regulation changes for moose hunting seasons and bag limits in some portions of Unit 26A due to the improved status of the moose population. While Unit 26A lands managed by the State will continue to be closed to hunting by nonresidents, and aircraft use will continue to be restricted for most times and areas, a limited drawing permit hunt was established that will allow use of aircraft in some areas. Specifically, the following State hunting seasons and bag limits for Unit 26A moose will go into effect on July 1, 2006:

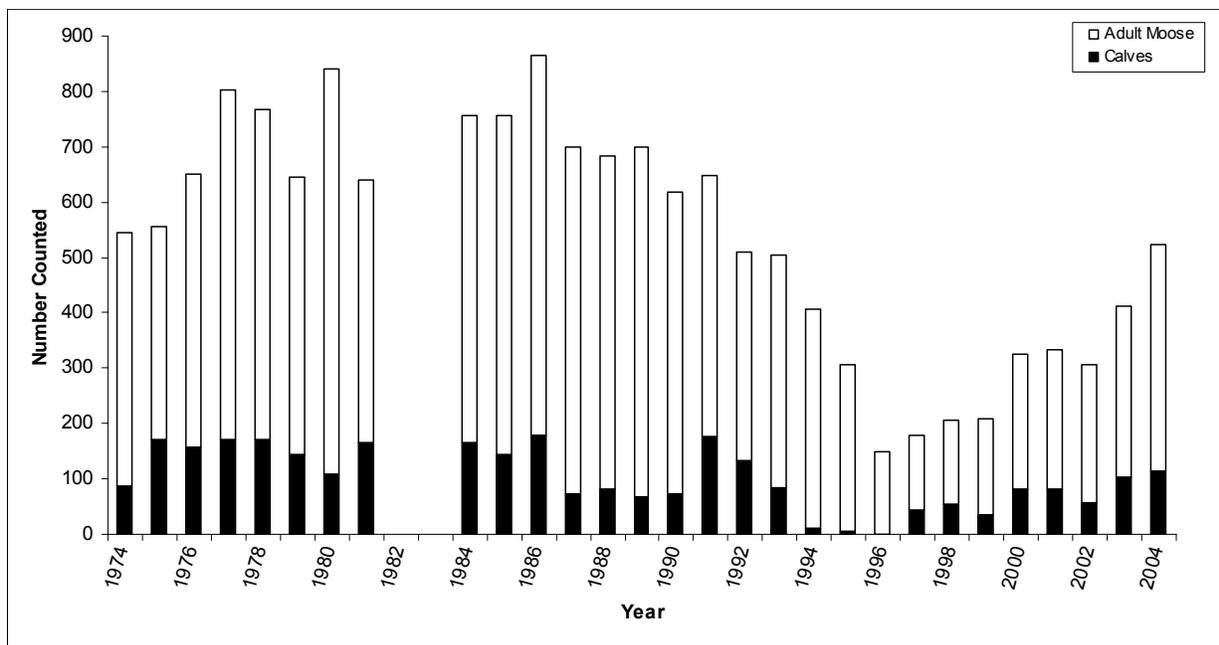
1. The entire Colville River drainage, including the Anaktuvuk and Chandler rivers, along with the Ikpikpuk River drainage will retain the Aug. 1–Sept. 14 season for bull moose, and aircraft use will continue to be prohibited.
2. A resident only winter season hunt for moose of either sex (except a calf or cow accompanied by a calf) was established in the Colville River drainage upstream from and including the Anaktuvuk River for the period Feb. 15–Apr. 15, and aircraft use will be prohibited.
3. A resident drawing permit hunt for bull moose was established in the Colville River drainage upstream from and including the Anaktuvuk River during Sept. 1–14. Twenty permits will be issued, and aircraft use will be permitted only on the Colville River upstream from and not including the Anaktuvuk River.
4. The summer season hunt in the area west of 156°00' N. Longitude, excluding the Colville River drainage, will be retained during July 1–Sept. 14, but hunters will now be allowed to harvest moose of either sex (except a calf or cow accompanied by a calf), and aircraft use will continue to be prohibited. In the remainder, east of 156°00' N. Longitude and the Colville River drainage downstream from the Anaktuvuk River drainage, the Board lengthened the season for any bull to Aug. 1–Sept. 14.

### Biological Background

Prior to the 1950s, moose were scarce along the North Slope. Subsequently, populations expanded along the limited riparian habitat of the major drainages (LeResche et al. 1974, Lenart 2000). Habitat availability is thought to control the upper limits of the North Slope moose population, and moose tend to concentrate along riparian corridors where browse is most abundant. Alaska Department of Fish and Game began aerial surveys of moose in all major drainages of Unit 26A in the 1970s (Carroll 2000). Based on spring trend count data for the Colville, Chandler, and Anaktuvuk rivers, the moose population appears to be stable or slowly increasing through 1991, after which the population, including calf production, started to sharply decline (**Figure 1, Table 1**). By 1996 the moose population was estimated to have declined to about 25% of its 1991 abundance. This led to restrictions being adopted for the State moose hunting season in 1995, and for both Federal and State moose harvest bag limits in 1996. Management objectives for Unit 26A include rebuilding the population to at least 1,000 moose (Carroll 2000). In 1997, the moose population, including the number of calves, began to improve, and this increase has continued. Increased moose abundance is probably due to a combination of lower adult mortality and greater calf survival, although immigration may also play a role. The percentage of younger bulls has also gradually increased, which improves the chances of sustaining a bull only harvest.

**Table 1.** Spring moose trend counts and calf percentages obtained from aerial surveys in Unit 26(A), 1991-2004 (Carroll 2005, pers. comm.). No tributaries were included in count areas.

	Count Year													
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<i>Chandler River from mouth to Sivugak Bluff</i>														
Total	177	167	164	148	95	50	50	50	56	65	79	63	100	102
Calf %	27	16	10	3	0	0	18	26	18	28	24	11	24	25
<i>Anaktuvuk River from mouth to Table Top Mountain</i>														
Total	187	150	143	140	94	40	50	56	46	82	75	72	69	141
Calf %	10	19	18	3	1	0	16	25	17	20	19	4	29	13
<i>Colville River from mouth of Killik River to Umiat</i>														
Total	240	148	155	93	90	51	56	74	55	140	135	142	189	195
Calf %	26	15	17	0	3	2	29	23	13	28	27	16	24	24
<i>Colville River from Umiat (including Maranucci Island) to mouth of Anaktuvuk River</i>														
Total	43	45	42	26	28	11	24	26	29	38	44	30	55	84
Calf %	19	38	24	12	4	0	33	35	24	18	27	23	25	27
Grand Total	647	510	504	407	307	149	180	206	186	325	333	307	413	522
Total Calf %	21	18	15	3	2	<1	23	26	17	25	25	13	25	22



**Figure 1.** Moose trend counts (white bars), and number of calves included within these counts (black bars), obtained during spring aerial surveys, Unit 26(A), Chandler River (mouth to Sivugak Bluff), Colville River (mouth of Kilik River to Umiat, and Umiat, including Maranucci Island, to mouth of Anaktuvuk River), and Anaktuvuk River (mouth to Table Top Mountain), North Slope, 1991-2004 (Carroll 2005, pers. comm.). No counts were made along tributaries.

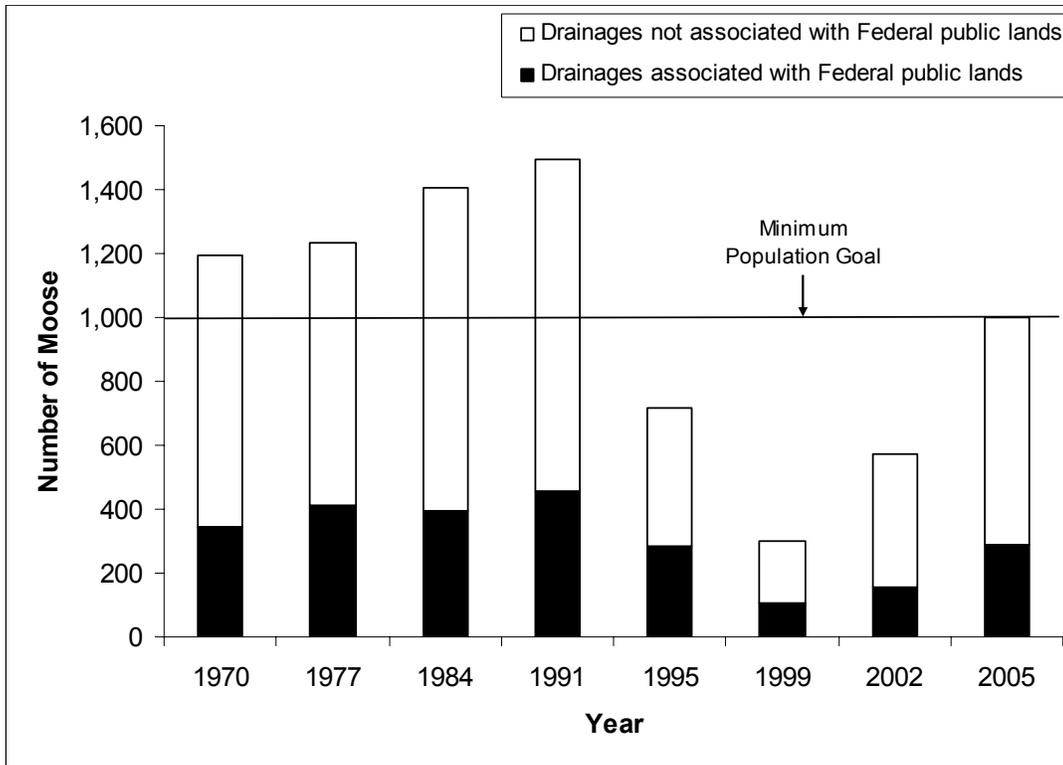
Moose winter census counts, although not conducted annually by Alaska Department of Fish and Game, cover all Unit 26A drainages south of the coastal plain and provide an estimate of the total moose population (**Figure 2, Table 2**). Census counts show the same abundance pattern seen in annual trend counts: increasing moose numbers (1,197–1,488 moose) and good calf production (18.3%–26.6% of total count) through 1991; decreasing moose numbers (299–718) and calf production (1.3%–17.0%) through 2002; and an increased count of 998 moose and improved calf production (18.2%) in 2005. While about 34% of moose census counts occur within drainages associated with Federal public lands affected by this proposal (Gates of the Arctic National Preserve and a portion of the National Petroleum Reserve Alaska), most of these moose were on lands managed by the State.

### Harvest History

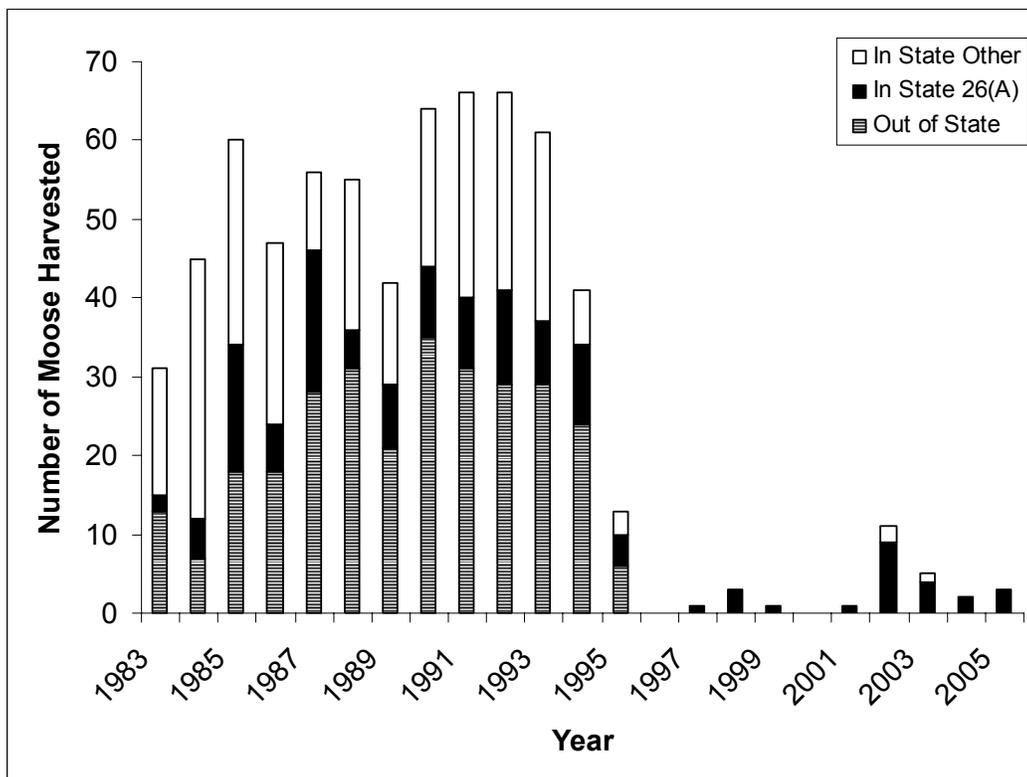
Trends in reported moose harvests in Unit 26A seem to more closely parallel regulatory restrictions than moose population levels (**Figures 1-3**). Total annual harvests did not appear to be greatly affected by the declining moose population in the early 1990s, but after State season restrictions were put into effect in 1995 and State and Federal harvest limit restrictions were put into effect in 1996, the reported harvest quickly dropped to <10% of previous levels (1983–1994 mean reported harvest: 53 moose; 1995–2005 mean reported harvest: 4 moose). Regulatory changes also affected hunter participation. Prior to 1996, most moose hunters reporting harvests in Unit 26A were not Alaska residents, while those who were Alaska resident hunters mainly lived outside of Unit 26A. After 1996, all hunters were Alaska residents, and most reporting harvests lived in Unit 26A. Of the 27 moose reported to have been harvested during 1996–2005, 24 were taken by Unit 26A residents: 11 by Nuiqsut residents, 9 by Barrow residents, 2 by Anaktuvuk Pass residents, 1 by a Wainwright resident, and 1 by an Atqasuk resident (ADF&G 2005). However, while these trends are probably valid, harvest numbers based on Alaska Department of Fish and

**Table 2.** Moose winter census counts by river drainage, Unit 26(A), North Slope, 1970-2005 (Carroll 2005, pers. comm.). Most moose counted in drainages associated with Federal public lands (Gates of the Arctic National Preserve and National Petroleum Reserve) were not on Federal public lands (Carroll 2005, pers. comm.).

	1970		1977		1984		1991		1995		1999		2002		2005		
Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Number Calves		Number Calves		Number Calves		Number Calves		Number Calves		Number Calves		Number Calves		Number Calves		Number Calves	
<b><u>Drainages Associated with Federal public lands affected by WP06-66</u></b>																	
<i>Anaktuvuk River drainages (Anaktuvuk, Kanayut, and Nanushuk rivers)</i>																	
239	24.3	290	16.6	399	19.6	424	13.7	253	1.6	84	20.2	135	5.9	235	14.9		
<i>Colville River (Umiak to Itkillik River)</i>																	
109	24.8	123	17.9	78	30.8	61	18.0	47	2.1	35	20.0	50	18.0	77	24.7		
<i>Subtotal</i>																	
348	24.5	413	17.0	477	21.4	485	14.2	300	1.7	119	20.1	185	9.2	312	17.3		
<b><u>Drainages Not Affected by WP06-66</u></b>																	
<i>Upper Colville River drainages (Nuka, Kaligwa, Kuna, Ipnakvik, Etivik, Karupa, Oolamnagavik, and Killik rivers, and Prince Creek)</i>																	
222	14.4	223	22.0	260	17.3	230	16.5	48	0.0	29	6.9	107	7.5	171	17.0		
<i>Chandler River drainages (Chandler, Ayyiak, and Siksikpak rivers)</i>																	
237	19.8	286	20.6	318	20.8	393	24.7	239	0.4	68	19.1	105	12.4	211	16.1		
<i>Colville River (Head to Umiat)</i>																	
380	35.3	301	27.2	337	22.6	348	26.4	130	2.3	80	12.5	168	15.5	300	21.3		
<i>Non-Colville or Lower Colville River Drainages (Utukok, Kokolik, and Ikpikpak Rivers)</i>																	
10	20.0	11	18.2	11	36.4	32	3.1	1	0.0	3	66.7	2	0.0	4	25.0		
<i>Subtotal</i>																	
849	25.3	821	23.4	926	207	1,003	22.7	418	0.9	180	15.0	382	12.3	686	18.7		
<b><u>Grand Total</u></b>																	
1,197	25.1	1,234	21.2	1,403	20.9	1,488	20.0	718	1.3	299	17.0	567	11.3	998	18.2		



**Figure 2.** Moose census counts obtained during winter aerial surveys, Unit 26(A), North Slope, 1970-2005 (Carroll 2005, pers. comm.). Counts made along all drainages to represent total population estimate. Most moose counted in drainages associated with Federal public lands (black portion of bars) were not on Federal public lands (Carroll 2005, pers. comm.). The management minimum population goal of 1,000 moose is shown.



**Figure 3.** Total reported moose harvest by hunter residency, Unit 26(A), North Slope, 1983-2005 (ADF&G 2005).

Game Big Game Harvest Files (2005) may not include all moose harvested by Unit 26A residents (**Table 3**; ADF&G 2001, Brower and Opie 1996).

**Table 3.** Reported annual Unit 26A moose harvest by community based on the State's Big Game Harvest Files (BGHF; ADF&G 2005) versus estimated annual subsistence moose harvest based on either the State's Community Profile Database (CPDB; ADF&G 2001) or a North Slope Borough Technical Report (NSB; Brower and Opie 1996). Some of the reported harvest for Anaktuvuk Pass residents by Brower and Opie (1996) may have been taken outside Unit 26A.

Year	Community									
	Anaktuvuk Pass		Barrow		Nuiqsut		Wainwright		Point Lay	
	BGHF	NSB	BGHF	CPDB	BGHF	CPDB	BGHF	CPDB	BGHF	CPDB
1985					1	13				
1987			15	52					0	5
1988			5	53			0	3		
1989			7	40			0	0		
1993					1	9				
1994	1	6								
1995	0	0								

### Effects of the Proposal

Adoption of this proposal should have little effect upon either the moose population or Federally qualified subsistence users. The moose population has substantially increased and should be able to support the small additional harvest of bulls that could occur. Trend counts for Unit 26A have more than tripled over the period 1996–2004, calf production has increased from a low of <1% of the total spring moose count in 1996 to an average of 22% during 1997–2004 (range 13%-26%), and the 2005 winter moose census count for Unit 26A (998 moose) indicated the total population was at or above the 1,000 moose minimum population size goal. The ability of Federally qualified subsistence users to harvest moose should not be impaired by the small amount of additional competition expected from other Alaskan hunters on the small amount of Federal public lands involved. A small amount of additional opportunity to harvest moose would be provided to all Alaska residents, and they would face less confusion in determining legal areas in which to hunt.

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**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-67a**

**Oppose** the proposal as recommended by the North Slope and Eastern Interior Alaska Subsistence Regional Advisory Councils.

**Justification**

While residents of Arctic Village and the surrounding area have a demonstrated pattern of use of moose in other units, they do not have a demonstrated pattern of use of moose in Unit 26C.

## STAFF ANALYSIS

### WP06-67a

#### ISSUES

Proposal WP06-67a, submitted by Heimo Korth of Fort Yukon, requests that the positive customary and traditional use determination for moose in Unit 26C within the Firth and Kongakut River drainages be expanded to include residents of Unit 25A.

#### DISCUSSION

Residents of Unit 25A include the community of Arctic Village and families and individuals living nearby in Chandalar as well as other remote areas within the unit (Reakoff 2005, pers. comm.). It is unknown if these individuals consider themselves residents of Unit 25A. The Korth family has a summer cabin in Fort Yukon (Unit 25D) where they live for one and a half months a year stocking up on supplies (Campbell 2004:69). During the rest of the year, the family runs a trap line within the Arctic National Wildlife Refuge. They rotate their winter residence between two cabins along the Coleen River (Unit 25A) and one cabin along Bilwaddy Creek (Unit 25A) (Kaye 2005, pers. comm; Wertz 2005, pers. comm.). The proponent requests that the residents of Unit 25A be given a positive customary and traditional use determination for moose in that part of Unit 26C within the Firth and Kongakut River Drainages. A companion analysis (WP06-67b) addresses the season and harvest limit elements of this proposal.

#### Existing Federal Regulation

##### Customary and Traditional Use Determinations

*Unit 26*

*Residents of Unit 26 (except the Prudhoe Bay-Industrial Complex), Point Hope, and Anaktuvuk Pass.*

#### Proposed Federal Regulation

##### Customary and Traditional Use Determinations

*Unit 26*

*Residents of Unit 26 (except the Prudhoe Bay-Industrial Complex), Point Hope, and Anaktuvuk Pass.*

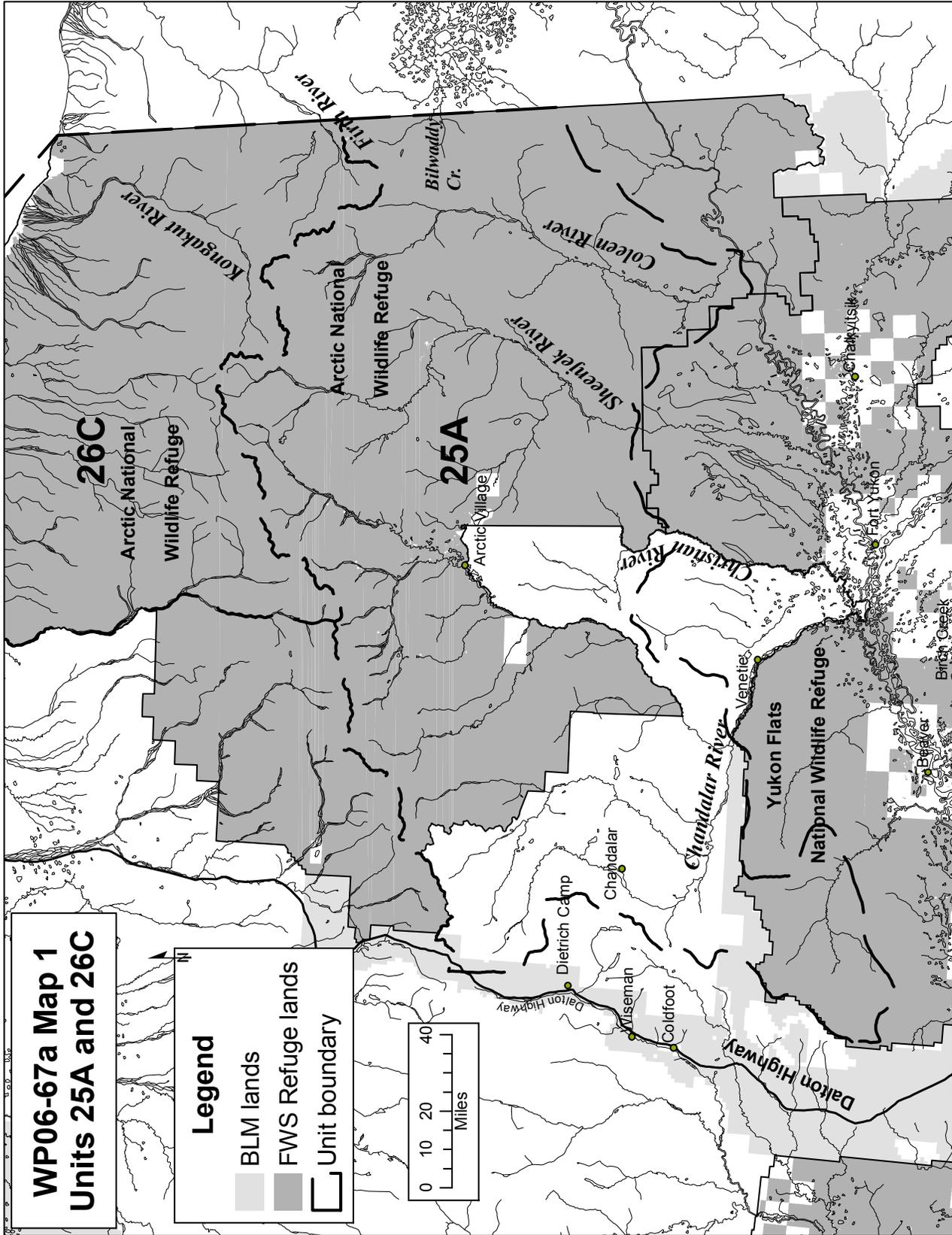
*Unit 26C that portion within the Kongakut and Firth river drainages*      *Residents of Unit 25A*

#### Extent of Federal Public Lands

Federal public lands comprise almost all (98%) of Unit 26C. This includes the Arctic National Wildlife Refuge, which is administered by U.S. Fish and Wildlife (refer to **Map 1**).

#### Regulatory History

The customary and traditional use determination for all of Unit 26 was adopted from the State of Alaska in 1991 when the Federal Subsistence Board adopted all of the State's determinations. This is the first time the Board will specifically address the customary and traditional use determination for moose in Unit 26C.



## Community Characteristics

Federal customary and traditional use determinations are based on an area or a community or communities. The main focus of this analysis is on people using the area in Unit 25A and on Arctic Village, the only community located within 25A. Arctic Village has an estimated population of 152 (Alaska Department of Community and Economic Development 2004) and is situated in a broad, somewhat isolated valley shaped by the East Fork of the Chandalar River in the eastern Brooks Range. The community is unique in the region in that it lies in a mountainous area north of Yukon Flats. The Neets'aii Gwich'in "residents of the north side" are the predominant people who reside in Arctic Village, and they lead a subsistence-based lifestyle. Until the 1950s the Gwich'in lived a highly nomadic lifestyle.

There are also a number of people scattered around Unit 25A who live in isolation while running trap lines (Reakoff 2005, pers. comm; McPhee 1977); however, there is little information documented regarding these individuals. McPhee (1977) notes that there was a generation of young men who set out for remote Alaska in the 1960s and 1970s from the lower 48 states with the intention of recreating the life of early fur traders in the American West.

Today, Mr. Korth and his family are the only remaining residents who continue to live a remote lifestyle 115 miles directly east of Arctic Village along the Coleen River (Campbell 2004:69). Up until the recent past, there were a number of trapping families living in the area (Kaye 1995: H-8), but many eventually moved permanently into larger communities where life was physically less demanding and more social. According to one trapper, he and others like him left the remote area along the Coleen River due to "bad backs, bad knees, and bad marriages" (Kaye 2005, pers. comm.).

## Eight Factors for Determining Customary and Traditional Uses

A community or area's customary and traditional use is generally exemplified through the following eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) 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 patterns 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; (8) a patterns 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 an 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 242.1(b)).

Evidence of moose inhabiting northern Alaska and surrounding areas during the 1800s is limited (Coady 1980). Reports by early explorers and Native hunters suggest that moose were first seen in northern Alaska in the late 1800s. It is difficult to state exactly when moose became regular inhabitants of the area, but according to Arctic Village residents, moose became more prolific and common in the foothills and valleys of the Brooks Range between 1940s and 1950s (Caulfield 1983: 54). Harvest ticket returns

for Arctic Village indicate few moose harvested. However, while it is likely that harvest ticket returns are low (as is common for many rural communities) moose constitute an important subsistence resource and are likely harvested when possible, and particularly when caribou are unavailable (Caulfield 1983; Payer 2005, pers. comm.; Wertz 2005, pers. comm.). Since the early 1970s, the Korth family has lived a subsistence lifestyle in Unit 25A. According to Mr. Korth's biographer, Mr. Korth regularly harvests moose (Campbell 2004:274).

The primary season for hunting moose in Unit 25A begins around mid-September and lasts into October. Occasionally moose are taken opportunistically during the winter when trapping (Caulfield 1983:101). The fall is the best season to harvest moose because the moose shot at this time can be kept without drying them to prevent spoilage.

Most radio collared moose wintering on the upper Kongakut and the Firth rivers (which are in Unit 25C) migrate to summer ranges in Old Crow Flats. Other moose in Unit 26C from the lower Kongakut River west to the Canning River are year-round residents of Unit 26C. More than half the moose collared on the Sheenjok River in Unit 25A were non-migratory (Mauer 1998). Other moose in Unit 25A, such as those along the East Fork of the Chandalar River near Arctic Village, are believed to be year-round residents (Payer 2005, pers. comm.).

The Gwich'in generally harvested moose incidentally while caribou hunting or if caribou are not readily available, as caribou are generally the preferred food of the Gwich'in (Ahlf 2005, pers. comm.). Typically riverboats are used for fall hunting and moose are harvested within one half-mile to a mile of the river. Hunters build camps near small hills or bluffs where they can scan nearby flats or lakes. Generally, three or four hunters travel together and moose are found using a number of visual, auditory, and tracking techniques. During the rutting season, hunters often trick bull moose to come to them by imitating the call of a cow. The hunter also tries to play on the jealous instincts of the bull by scrapping a moose scapula with a brush to imitate the sound of a bull moose traveling through underbrush (McKenna 1965:32; Caulfield 1983:55).

Mr. Korth's method and means for hunting moose are similar to the Gwich'in. Typically Mr. Korth harvests moose in the close vicinities of rivers and always upriver from his cabin so he can float the meat down in his canoe. Campbell reports that Mr. Korth calls a moose by "...cupping his hands around his mouth to amplify his interpretation of the bawling of a lusty female searching for a suitor" (Campbell 2004:275).

Hunting areas for all subsistence resources are highly dependent on the location of the wildlife. A hunter weighs many factors when making the decision to travel long distances for any type of hunting: hunting long distance takes more time, more fuel, causes more wear and tear on equipment, creates issues of safety, and requires more supplies. In recent years, Arctic Village residents have been more likely to travel shorter distances for large terrestrial wildlife due in part to the high price of fuel (Arctic Borderlands Ecological Knowledge Coop 2003-2004).

Traditionally, the Gwich'in lived a nomadic lifestyle using seasonal camps and semi-permanent settlements in pursuit of fish and game (Gwich'in Steering Committee 2005). Their traditional territory ranged eastward as far as the Coleen River (a northern tributary of the Porcupine River east of the Sheenjok). The summit of the Brooks Range is regarded by most as the northern most boundary of their territory; although, it is well-known that prior to contact the Gwich'in were recognized to engage in warfare and trade with their northern Inupiat neighbors, located in what is known today as Unit 26 (McKenna 1965:16). Although there is no evidence in the written or oral tradition that the Gwich'in harvested moose in Unit 26, recent community reports note that local moose hunters hunt up river to the

Junjik area in Unit 25A, which is northwest of Arctic Village (Arctic Borderlands Ecological Knowledge Coop 2003-4).

According to Mr. Korth's biographer, Mr. Korth takes as least one moose a year in the vicinity of the upper Coleen river country in Unit 25A (Campbell 2004:274). Although one of Mr. Korth's cabin is located on Bilwaddy Creek and is roughly only 50 miles from the proposed area, the Brooks Range serves as the boundary between Units 25A and 26C; thus restricting travel by snowmachine across the two Units. Therefore it is unknown if Mr. Korth's hunting area extends beyond Coleen River.

As with the take of all large terrestrial mammals, the harvested animal is quartered in the field and brought back to the community for final processing and distribution. Moose meat is preferred fresh, but also is frozen and occasionally processed into dried meat. After the hunters cut up the meat they typically cache it temporarily (a day or two) by throwing a thick layer of willows over it to keep the birds away. If the meat is left longer, it is hung up in trees so that it can't be disturbed by large animals. Long-term caches are made of log structures built like cabins. Today it is uncommon for people to use long-term caches because they typically take moose nearby Arctic Village (Nelson 1973:99). Elements of these practices are likely typical of Mr. Korth's methods of harvesting and storing.

The Gwich'in possess a detailed orally transmitted knowledge relating to moose hunting, butchering, and preparation (Nelson 1973:84-112). A number of Gwich'in terms are used to describe moose that reflects in-depth knowledge of moose (Nelson 1983:97). Arctic Villagers' knowledge of moose hunting follows many of the same traditions employed for generations. Mixed age groups travel together to facilitate inter-generational transmission of knowledge regarding appropriate hunting techniques, preparation, processing, and handling the meat, as well as sharing and distribution patterns. Respect for elders and their knowledge continue to be paramount amongst the Gwich'in.

The sharing and exchange of locally derived resources has been documented at the community, regional, and interregional levels since the first Euro-Americans explored the Upper Yukon-Porcupine region. Moose meat is occasionally shared between relatives in nearby communities in the region, especially when local moose populations are in short supply. Exchange and sharing between relatives and friends also occur within communities. In particular, residents of Arctic Village, Birch Creek, and Venetie report that local harvests are often widely shared. Caulfield (1983) noted that moose harvested near those communities appeared to be distributed to most households. Distinct patterns of sharing continue to be prevalent among the Gwich'in to include the sharing of meat between closely related extended family members. Meat is shared primarily between households of people who hunt together and their elderly parents. During potlatch gatherings moose is occasionally shared amongst the community (Caulfield 1983:204).

Mr. Korth's distribution practices are described in Mr. Campbell's book where the author receives a hind quarter; Mr. Korth takes the nose, the brisket, the tongue, the head, and the horns; and the pilot from Fairbanks (who killed the moose) keeps the remaining moose.

The Gwich'in rely on a wide diversity of fish and wildlife resources from their surrounding area. Caribou are the most important large terrestrial wildlife and are supplemented by mountain sheep, moose, and occasionally bears. When large terrestrial wildlife are unavailable, smaller animals such as porcupines, ground squirrels, rabbits, muskrats, ptarmigan, spruce grouse and beavers provide an alternative source of food (McKennen 1965:28).

Similar to the Gwich'in, Mr. Korth and his family live a subsistence based lifestyle and rely on a wide variety of fish wildlife resources from their surrounding area, although specific information is not available.

### **Effects of the Proposal**

While the residents of Arctic Village and the surrounding area have a customary and traditional pattern of use for moose within Unit 25A, they do not have a demonstrated pattern of use of moose in Unit 26C, within the upper Firth and Kongakut river drainages. In part, this is due to the distance of over 120 land miles across the Brooks Ranges between Arctic Village and the upper Firth and Kongakut river drainages (Kaye 2005, pers. comm.). Most significantly, it is unlikely that Arctic Village residents would travel to Unit 26C for moose because they can still generally travel a much shorter distance to hunt caribou and caribou are preferred. Although Mr. Korth and his family reside in the eastern area of Unit 25A, there is no documentation available that Mr. Korth has ever hunted in Unit 26C.

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<b>WP06-67b Executive Summary</b>	
<b>General Description</b>	Requests that residents of Unit 25A be allowed to harvest two bull moose per drainage within the Firth and Kongakut River drainages within Unit 26C. <i>Submitted by Heimo Korth of Fort Yukon.</i>
<b>Proposed Regulation</b>	<p><i>Units 26B and 26C—1 moose by Federal registration permit by residents of Kaktovik only. The harvest quota is 3 moose (2 bulls and 1 of either sex) provided that no more than 2 bulls may be harvested from Unit 26C and cows may not be harvested from Unit 26C. You may not take a cow accompanied by a calf. Only 3 Federal registration permits will be issued. Federal public lands are closed to the taking of moose except by a Kaktovik resident holding a Federal registration permit, hunting under these regulations.</i></p> <p><i>July 1–Mar. 31</i></p> <p><b>Unit 26C, that part within the Firth and Kongakut River drainages—1 bull by Federal registration permit. Permits will be issued only to Unit 25A residents by the Arctic National Wildlife Refuge office in Fairbanks. Only 2 Federal registration permits will be issued for each drainage.</b></p> <p><i>July 1–Mar. 31</i></p>
<b>North Slope Regional Council Recommendation</b>	<b>Oppose.</b>
<b>Eastern Interior Alaska Regional Council Recommendation</b>	<b>Take no action.</b>
<b>Interagency Staff Committee Recommendation</b>	<b>Oppose.</b>
<b>ADF&amp;G Comments</b>	See note on page 7.
<b>Written Public Comments</b>	<b>None.</b>

**REGIONAL ADVISORY COUNCIL RECOMMENDATIONS  
WP06-67b**

**NORTH SLOPE SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Oppose.**

**EASTERN INTERIOR ALASKA SUBSISTENCE REGIONAL ADVISORY COUNCIL**

**Take no action.**

**INTERAGENCY STAFF COMMITTEE RECOMMENDATION  
WP06-67b**

**Oppose** the proposal as recommended by the North Slope Subsistence Regional Advisory Council.

**Justification**

Establishing a separate harvest opportunity within the Kongakut and Firth river drainages with a harvest quota of two bulls for each drainage may not be sustainable. The proposal would allow harvest from two distinct moose populations, the North Slope resident population of Unit 26C and the migratory population within the southeastern corner of Unit 26C and northeastern corner of Unit 25A. Both of these populations are significantly reduced compared to the early 1990s, and the North Slope resident population is of greatest concern.

Moose are on the northern limits of their range on the North Slope of the ANWR. Habitat and climate in this area severely limits the population recovery rates and potential size of moose populations. An additional harvest opportunity on this small recovering population would prolong the conservation concern. Also, the remoteness of the hunt area would prevent timely reporting by hunters, therefore preventing harvest quotas from becoming an effective management tool.

**STAFF ANALYSIS  
WP06-67b**

**ISSUES**

Proposal WP06-67, submitted by Heimo Korth of Fort Yukon, requests that residents of Unit 25A be allowed to harvest two bull moose per drainage within the Firth and Kongakut River drainages within Unit 26C. Companion proposal (WP06-67a), which addresses the customary and traditional use determination for residents of Units 25A, is being considered concurrently. Should the Federal Subsistence Board (Board) reject WP06-67a, no action should be taken on this proposal.

**DISCUSSION**

The proponent states that the moose population on the Firth and Kongakut river drainages consists of seasonal (winter) resident moose that migrate into the area from their summer range in Old Crow Flats in the Yukon Territory. He states that Arctic National Wildlife Refuge (ANWR) biologists have confirmed that this population is a healthy population and a completely separate population from other North Slope moose in Alaska. The proposal requests a “Limit of 2 moose per drainage, bulls only.”

**Existing Federal regulation:**

**Unit 26 Moose**

*Units 26B and 26C—1 moose by Federal registration permit by residents of Kaktovik only. The harvest quota is 3 moose (2 bulls and 1 of either sex) provided that no more than 2 bulls may be harvested from Unit 26C and cows may not be harvested from Unit 26C. You may not take a cow accompanied by a calf. Only 3 Federal registration permits will be issued. Federal public lands are closed to the taking of moose except by a Kaktovik resident holding a Federal registration permit, hunting under these regulations.* *July 1–Mar. 31*

**Proposed Federal regulation:**

**Unit 26 Moose**

*Units 26B and 26C—1 moose by Federal registration permit by residents of Kaktovik only. The harvest quota is 3 moose (2 bulls and 1 of either sex) provided that no more than 2 bulls may be harvested from Unit 26C and cows may not be harvested from Unit 26C. You may not take a cow accompanied by a calf. Only 3 Federal registration permits will be issued. Federal public lands are closed to the taking of moose except by a Kaktovik resident holding a Federal registration permit, hunting under these regulations.* *July 1–Mar. 31*

***Unit 26C, that part within the Firth and Kongakut River drainages—1 bull by Federal registration permit. Permits will be issued only to Unit 25A residents by the Arctic National Wildlife Refuge Office in Fairbanks. Only 2 Federal registration permits will be issued for each drainage.*** *July 1–Mar. 31*

## **Extent of Federal Public Lands**

Unit 26C is almost solely composed of Federal public lands (98% Arctic National Wildlife Refuge [NWR]). Refer to **Map 1**.

## **Customary and Traditional Use Determinations**

Currently, the residents of Unit 26A, 26B, and 26C, except for the Prudhoe-Bay/Deadhorse Industrial Complex, and the residents of Point Hope and Anaktuvuk Pass, have a positive customary and traditional use determination for moose in all of Unit 26. However, if adopted, proposal WP06-67a would change the customary and traditional use determination for moose in parts of Unit 26C to include residents of Unit 25A.

## **Regulatory History**

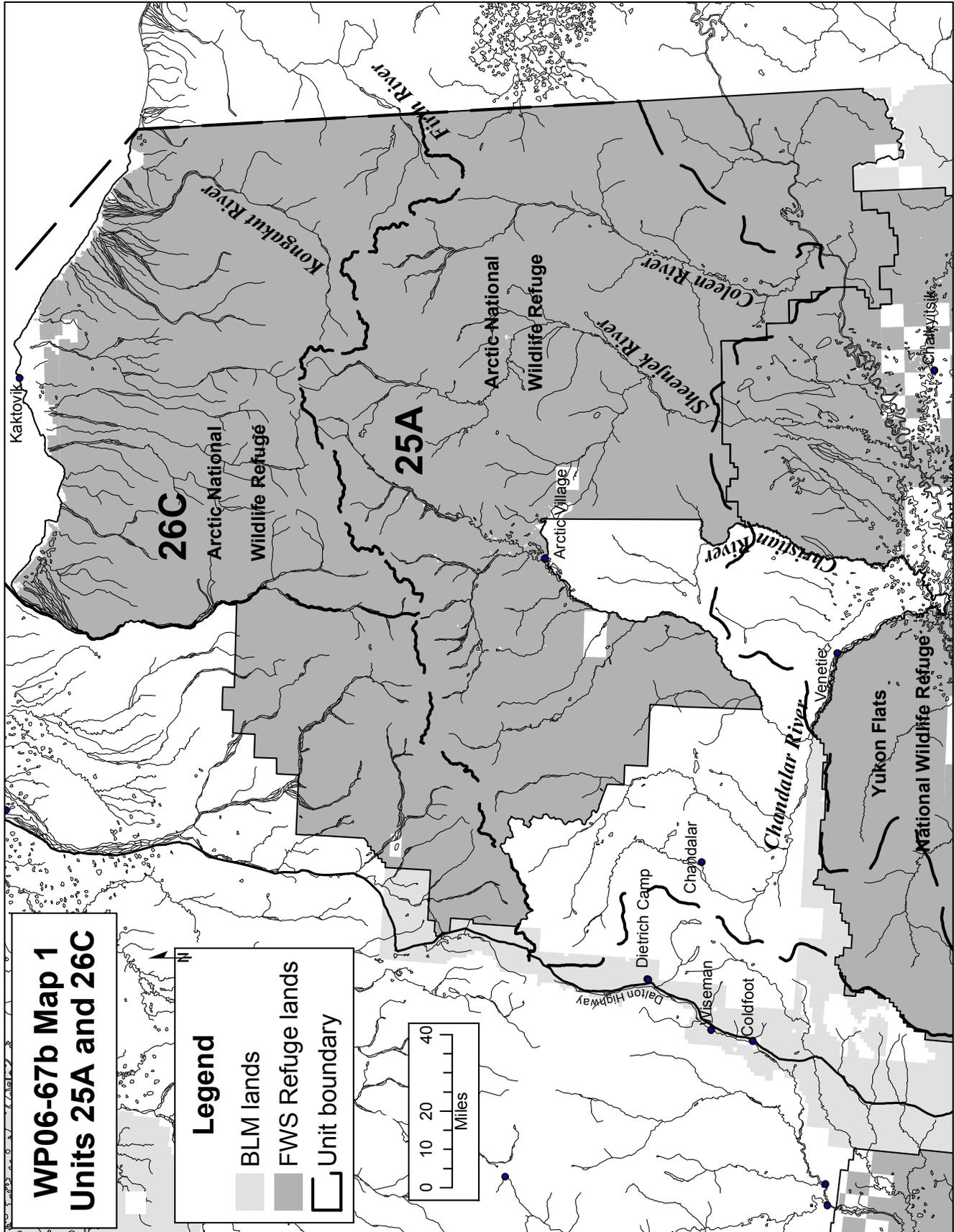
Prior to 1996, Unit 26C was open for 1 moose, Aug. 1–Dec. 31. Based on a moose population decline first documented in 1996, the Board, at that time, closed the Federal moose harvest in all portions of Unit 26 except for Unit 26A. The moose season was closed in Unit 26C between 1996 and 2004 due to the low numbers of moose. Similarly in State regulations, moose harvest was allowed throughout Unit 26 until 1996, when parallel actions taken by the Alaska Board of Game closed all of Unit 26 except for Unit 26A. The State did not reopen a moose season in 2004 when it was reopened in Units 26B and 26C by the Board.

Prior to the 1996 change, State regulations for Unit 26C permitted State residents to take one bull, Sept. 5–15, Nov. 1–Dec. 31 and nonresidents to take one bull (50-inch antler restriction), Sept. 5–15. In 2003, Special Action WSA03-04 was adopted by the Board allowing residents of Kaktovik only to take one moose for their Thanksgiving Feast and one moose for their Christmas Feast under temporary regulations. The City of Kaktovik (City) originally asked for a limited moose harvest in Unit 26C for their community only, but modified their request to a ceremonial harvest for Kaktovik residents only. Kaktovik is the only community in Unit 26C (75% Inupiat with a population of 256 in 2000 [US Census 2000]). The Board adopted WSA03-04 on Sept. 23, 2003 with the following modification: in order to minimize adverse affects on the very low moose population in Unit 26C, no more than one moose could be harvested from Unit 26C, the other moose could be harvested from Unit 26B. However, no moose were harvested under the permit authority of WSA03-04 because caribou moved near Kaktovik in large numbers and it was decided that it would be easier, cheaper, safer, and take less time to harvest caribou. During the 2004 regulatory cycle, proposal WP04-86 was adopted by the Board putting into regulation a hunt for Units 26B and 26C with a harvest quota of three moose (2 bulls and 1 of either sex) provided that no more than 2 bulls are harvested from Unit 26C and cows cannot be harvested from Unit 26C.

## **Biological Background**

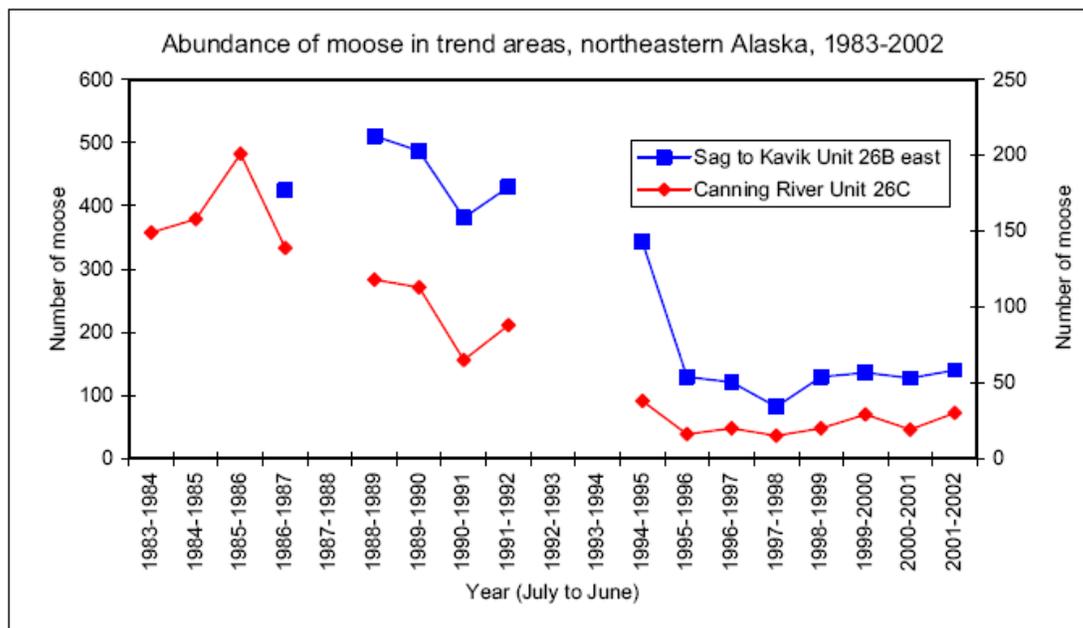
Moose are on the northern limits of their range on the ANWR. Habitat in this area severely limits the potential size of moose populations. Moose are limited almost entirely to riparian shrub habitat during winter. During surveys in the 1970s and 1980s, small numbers of moose were observed in the Sadlerochit, Hulahula, Okpilak, Okerokovik, Jago, Aichilik and Egaksrak drainages allowing for a limited harvest. Larger concentrations of moose were found on the Canning River and between the Sagavanirktok and Kavik Rivers, west of the Canning River.

The ANWR staff, in cooperation with the ADF&G, has conducted moose surveys on the Canning River since 1983 and in other trend areas between the Sagavanirktok and the Canning Rivers since 1986 (Martin



and Garner 1984, Weiler and Liedberg 1987, Mauer 1995, Boyle 2001, Lenart 2002a). Moose numbers in these regions were relatively high until the early 1990s after which they declined substantially (**Figure 1**). This declining trend occurred across the entire North Slope; moose numbers on the Colville River in northwestern Alaska also declined substantially during this same period (Lenart 2002b). A complete moose population survey has not been conducted in Units 26C, but the nature of terrain and sparse low vegetation makes it possible for trend surveys to account for a large percentage of the moose in areas supporting major concentrations. Based on data from trend areas on the Canning River and drainages between the Sagavanirktok and Kavik Rivers [in Unit 26B east] numbers of moose in northeastern Alaska have been stable but low since 1998 (**Figure 1**). Moose abundance, however, on the Canning River is still lower than abundance observed in the 1980s and early 1990s, suggesting that moose numbers have not yet recovered (**Figure 1**).

**FIGURE 1.** Abundance of moose in trend survey areas, northeastern Alaska, 1983-2002.



On the Canning River, moose calf production and early survival declined from about 16% in 1983–1985 to less than 8% in 1988–1991. Very few calves were seen in the mid-1990s. By 1996, calf production appeared to be improving. However, the relatively large percentage of calves seen in the fall of 1997 is an anomaly likely related to the small number of male moose (3) and total moose (15) observed that year. In 1999–2002, moose surveys were done in the spring and percentages of short yearlings ranged from 3% to 7%. On the Canning River, sex ratios have ranged from 42–72 adult males per 100 adult females from 1986–1997. Little information is available on the number of moose east of the Canning River to the lower Kongakut River. Only 14 moose were counted during a survey of select drainages between the Sadlerochit and Kongakut Rivers in 2000. Two to ten moose have been observed on the upper Sadlerochit River in late winter and similar numbers may occur on forks of the Egaksrak, Aichilik and other rivers. Trends in these numbers are difficult to evaluate because they are so low. Because moose numbers have not yet recovered on the Canning River, it is unlikely that moose numbers have greatly increased in areas east of the Canning River where winter conditions are even more severe and habitat more limited.

In summary, 50 or fewer moose are believed to occur east of the Canning River to the Lower Kongakut River.

The ANWR staff conducted moose surveys on the entire Refuge coastal plain and all major river drainages from the Canadian border to the Canning River in April 2003 (Wertz 2003). The coastal plain was flown on north-south transects spaced 3 miles apart. River drainages were flown upriver until no more willows were present. Major side drainages were surveyed as well. Fifty-two moose were seen on this part of the survey. Over half of the moose observed were seen in the Lower Kongakut and Egaksrak River drainages, 16 and 18 animals respectively. No moose were observed in the Okpilak, Jago, Ekaluakut, Kekiktuk Rivers and Okpirourak Creek. The number of moose observed was similar to the 1984 survey, the previous survey conducted on the coastal plain. The survey was repeated in April 2005. Forty seven moose were observed, including 19 moose in the Lower Kongakut and 6 on the Egaksrak (Wertz 2005).

Moose in the upper Kongakut River and Firth River drainages are within Unit 26C, but are thought to be part of a population that is distinct from those moose inhabiting the lower Kongakut River and areas west to the Canning River. A study by Mauer (1998) suggested that the moose in the upper Kongakut and Firth are part of a migratory population that also occurs in the Sheenjok and Coleen River drainages during winter, and migrates to the Old Crow Flats in the Yukon Territory during summer. An aerial survey of this population was conducted by refuge staff during Oct. 21–23, 2002. On the upper Kongakut, the number of moose observed in 2002 (95) was greater than observed in a previous survey in 2000 (75), but was still significantly less than 1991 when 163 were counted in the same area. Adult females rose dramatically from 17 in 2000 to 52 in 2002. However, bulls declined from 35 in 2000 to only 24 in 2002, decreasing the bull:cow ratio from 206:100 in 2000 to 46:100 in 2002. Within the Firth River trend area, 132 and 87 moose were observed in 2002 and 2000, respectively. While adult female (44), yearling (12), and calf (12) counts for 2002 remained similar to the 2000 counts of 45, 10, and 10 respectively, total bulls increased nearly threefold, from 22 to 64, in the same time period (Buchholtz 2002). However, Mauer (1998) recorded movement of moose between drainages year to year, which implies that comparisons between years for a specific drainage not very informative (e.g., in year 1 there might be more cows in the Kongakut and in year 2 there might be more cows in the Sheenjok, but overall the population didn't necessarily change). Overall the numbers of bulls:100 cows for the population of all four drainages combined (upper Kongakut, Firth, Sheenjok, and Coleen) were 96 in 2000 and 90 in 2002. In addition, Buchholtz (2002) acknowledged that the increase found in the Firth area may be a result of using slower aircraft resulting in significantly more survey time for the count effort. This suggests that comparisons between results of the 2000 and 2002 surveys are tenuous at best. Despite this, it appears that this moose population declined significantly between 1991 and 2002. Insufficient data are available to evaluate the current trend of the population.

Management goals and management objectives for moose management for Units 26B and 26C are as follows (ADF&G 2001):

1. Management Goals

- Maintain viable populations of moose in their historic range throughout the region.
- Provide a sustained opportunity to harvest moose.

2. Management Objectives

- Once a hunting season has been reopened, maintain a post hunting sex ratio in Units 26B and 26C of 35 bulls:100 cows.

## Harvest History

Kaktovik was the only community within Unit 26C and residents took two to six moose annually prior to the season closure in 1996. Subsistence harvest has been limited because moose are scarce near Kaktovik and most hunting by Nuiqsut residents has occurred in the Colville River drainage in Unit 26A. Prior to the 1980s, residents of Kaktovik took one or two moose per year, mostly on an opportunistic basis. Moose have expanded their range into Kaktovik's subsistence use area relatively recently. Moose were reported taken in the Sadlerochit Valley, and along Old Man Creek, and the Okpilak and Okerokovik Rivers. Moose were also occasionally taken along both sides of the Canning River and as far west as the Kavik River. Moose hunting activities and success in the eastern part of Unit 26C in the vicinity of the Kongukut and Firth drainages is unknown. Because moose are relatively recent arrivals to this part of the North Slope, there is not a strong cultural tradition built around hunting them (Jacobson and Wentworth 1982). The reported moose harvest in Unit 26C peaked in the late 1980s at 15 animals taken annually, but this dropped significantly in the 1990s to three to six animals taken (ADF&G 2001), **Table 1**. During 1986–1996, Alaska residents living outside the area comprised all but a few of the hunters in Units 26B and 26C. Hunter success declined to below 50 % beginning in 1993, due to the declining moose population. Nonresidents reported a higher success rate than Alaska residents, probably because most nonresidents benefited from guide/outfitter services. Almost half of the reported moose harvest was by nonresidents, with unit residents accounting for less than 1%. Kaktovik residents have reported harvesting three moose from 1983–1996, all during December.

No moose have been reported harvested since the Federal subsistence harvest opportunity was reestablished for Kaktovik residents in 2003. However, ANWR staff believes at least one moose was harvested in 2004–2005, but apparently it was not reported.

## Other Alternatives

If the Board established a positive customary and traditional use determination for moose in the Kongakut and Firth drainages of Unit 26C by residents of Unit 25A without establishing a separate hunt opportunity, Unit 25A residents will be unable to participate in a hunt. The existing hunt opportunity is only available to residents of Kaktovik. Other options considered and rejected include; (1) to add Unit 25A residents to the existing hunt with a current harvest quota of two bulls in Unit 26C (shared with Unit 26B), which is currently available to only Kaktovik residents. This option was rejected because the existing hunt specifically addresses the needs of Kaktovik residents and generally occurs in the western portions of Unit 26C. The harvest of two moose by Unit 25A residents in the Kongakut or Firth drainages would fill the harvest quota and preclude Kaktovik residents from meeting their needs. Option (2) to establish a new season limited to the upper Kongakut (above Drain Creek) and Firth drainages with a harvest quota of two bulls total was also rejected. Although this new small harvest opportunity (limited to only the Kongakut and Firth drainages) would be available to all residents of Unit 25A the remoteness of the hunt area would prevent timely reporting for this small quota hunt, therefore preventing harvest quotas from becoming an effective management tool.

## Effect of the Proposal

Adoption of this proposal would establish a moose hunt specific to the Kongakut and Firth River drainages with a harvest quota of two bulls for each drainage. Currently, only residents of Kaktovik may harvest up to two bulls from Unit 26C. The hunts conducted by Kaktovik residents have taken place within the western parts of the unit (Sadlerochit Valley to the Canning River valley) while the hunting by Unit 25A residents would occur only in the Kongakut and Firth drainages, if a positive customary and traditional use determination is made for Unit 25A residents.

**Table 1.** Unit 26C reported moose harvest, regulatory years 1983/84 through 2002/03 (ADF&G 2001).

Regulatory Year	Reported Harvest			Hunters
	M	F	Total	
1983-84	2	0	2	?
1984-85	7	0	7	?
1985-86	8	0	8	?
1986-87	9	0	9	?
1987-88	15	0	15	?
1988-89	10	0	10	18
1989-90	1	0	1	11
1990-91	3	0	3	8
1991-92	6	0	6	11
1992-93	4	0	4	5
1993-94	4	0	4	7
1994-95	6	0	6	12
1995-96	4	0	4	8
1996-2002 <sup>a</sup>				
2003 <sup>b</sup>				
<b>Totals</b>	<b>79</b>	<b>0</b>	<b>79</b>	<b>70</b>

a No open season

b Special Action WSA03-04 was in effect for 60 days. No moose were reported harvested.

Moose are on the northern limits of their range on the North Slope of the ANWR. Habitat and climate in this area severely limits population recovery rates and potential size of moose populations. This proposal would allow harvest of bulls from two different populations, at least one of which (the North Slope resident population) has experienced a severe decline. A harvest opportunity on this small recovering population would prolong the existing conservation concern. It is because of this existing conservation concern and the additional subsistence needs that would have to be addressed if WP06-67a were adopted, that a Section 804 analysis would likely be needed to establish a subsistence priority between Federally qualified subsistence users. Also, the remoteness of the hunt area would prevent timely reporting by hunters, therefore preventing harvest quotas from becoming an effective management tool.

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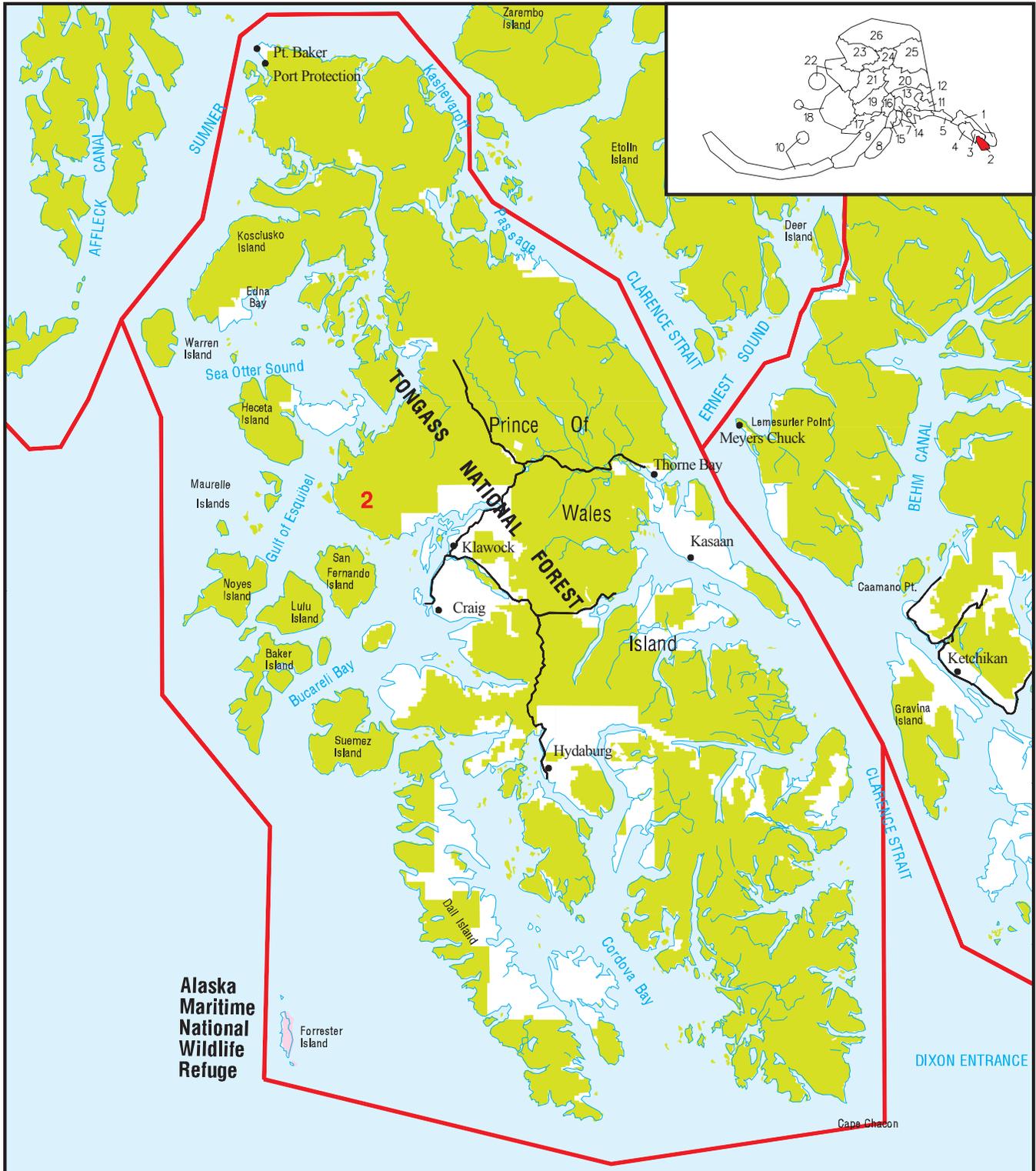
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Map from ADF&G



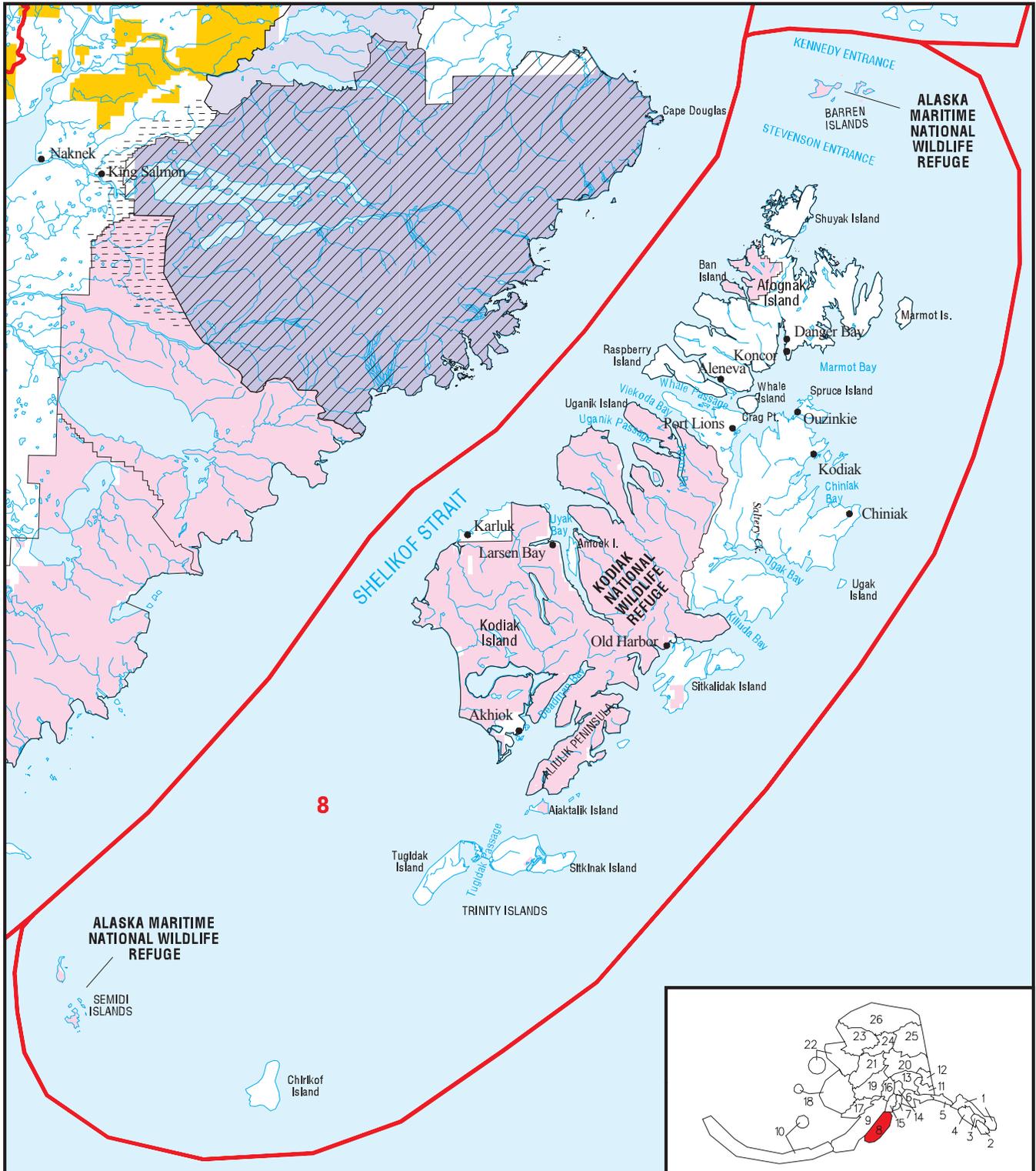
**Alaska  
Maritime  
Wildlife  
Refuge**



**Unit 2**  
Southeast  
Region

**Prince  
Of Wales  
Island**

- Federal Public Lands Open to Subsistence Use**
- FWS Administered Land
  - NPS Administered Parks
  - NPS Administered Preserves
  - BLM Administered Land
  - USFS Administered Land
  - Closed to Subsistence
  - Special Management & Controlled Use Areas
  - Unit Boundary
  - Sub-Unit Boundaries
  - Roads

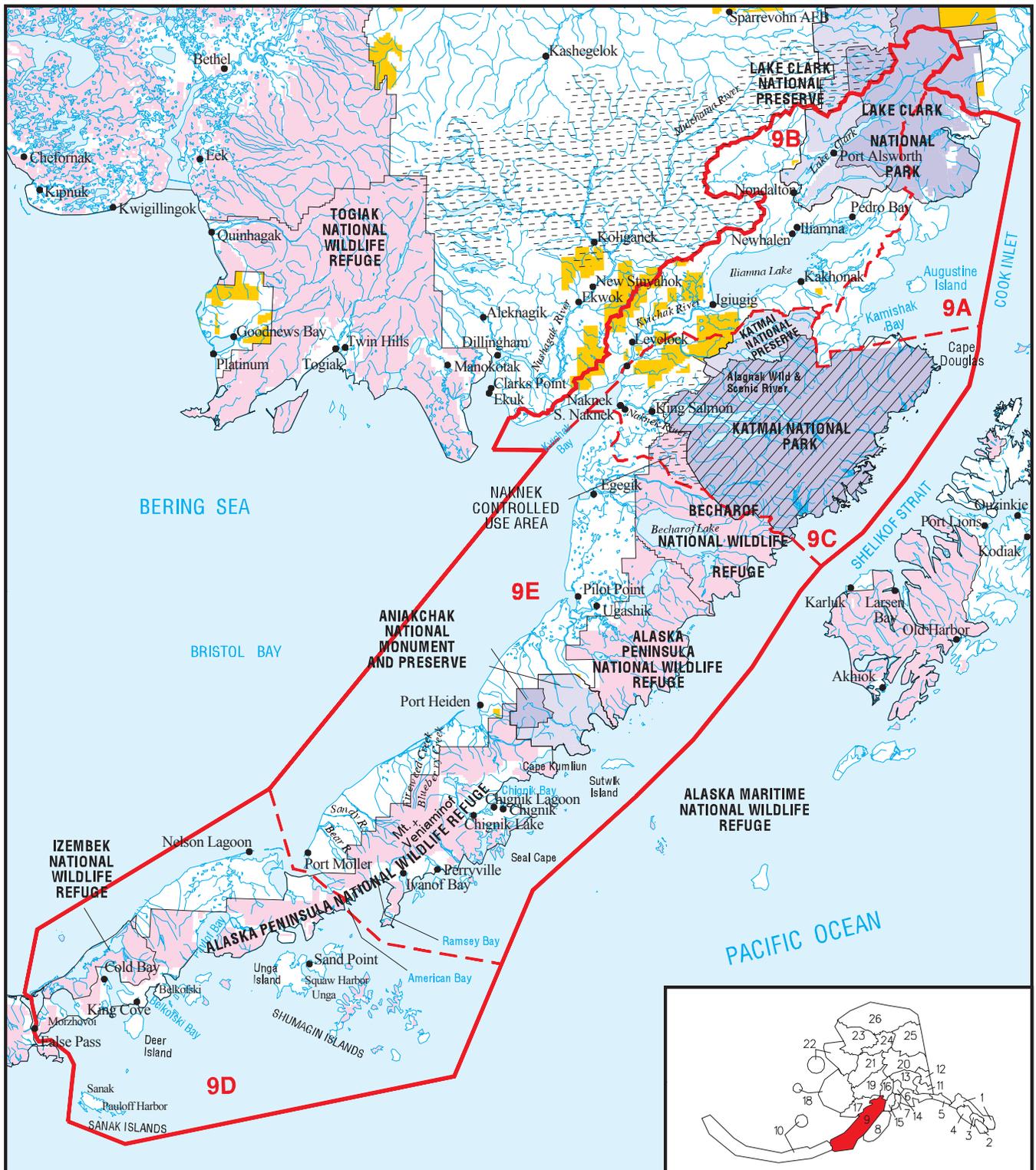


**Unit 8**  
Kodiak/Aleutians  
Region

**Kodiak-Shelikof**

**Federal Public Lands Open to Subsistence Use**

FWS Administered Land	Closed to Subsistence
NPS Administered Parks	Special Management & Controlled Use Areas
NPS Administered Preserves	Unit Boundary
BLM Administered Land	Sub-Unit Boundaries
USFS Administered Land	Roads

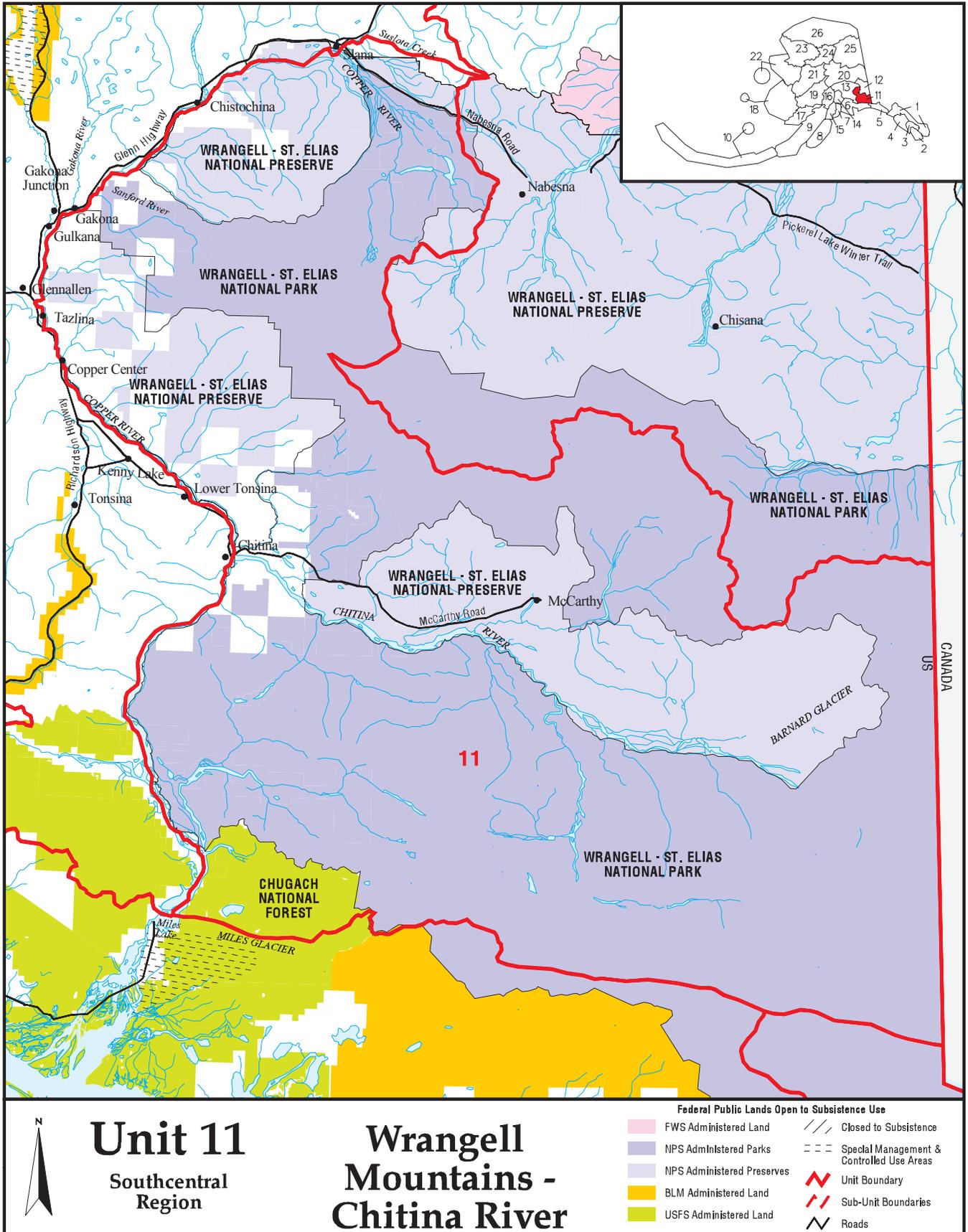


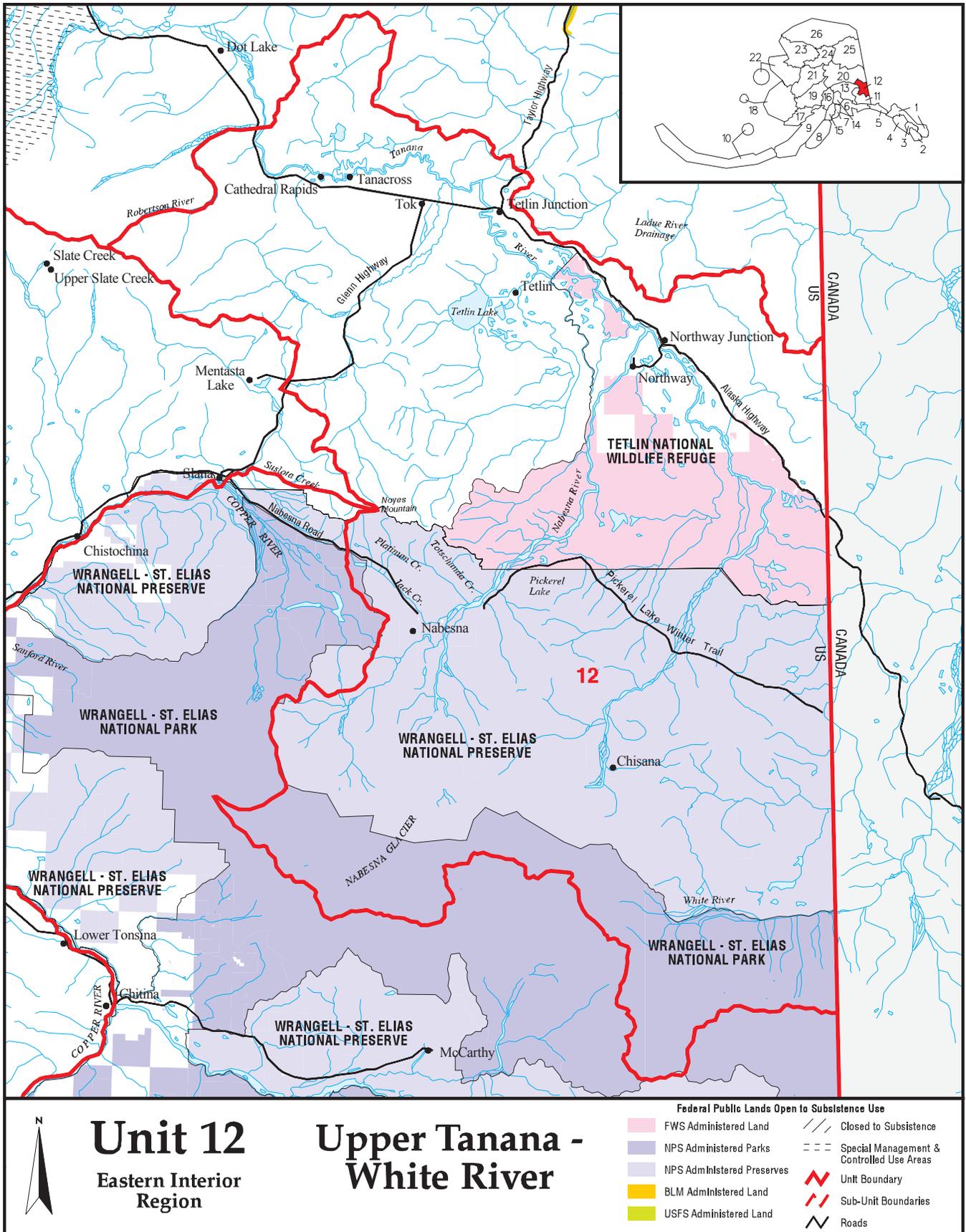
# Unit 9 Alaska Peninsula

## Bristol Bay and Kodiak/Aleutian Islands Regions

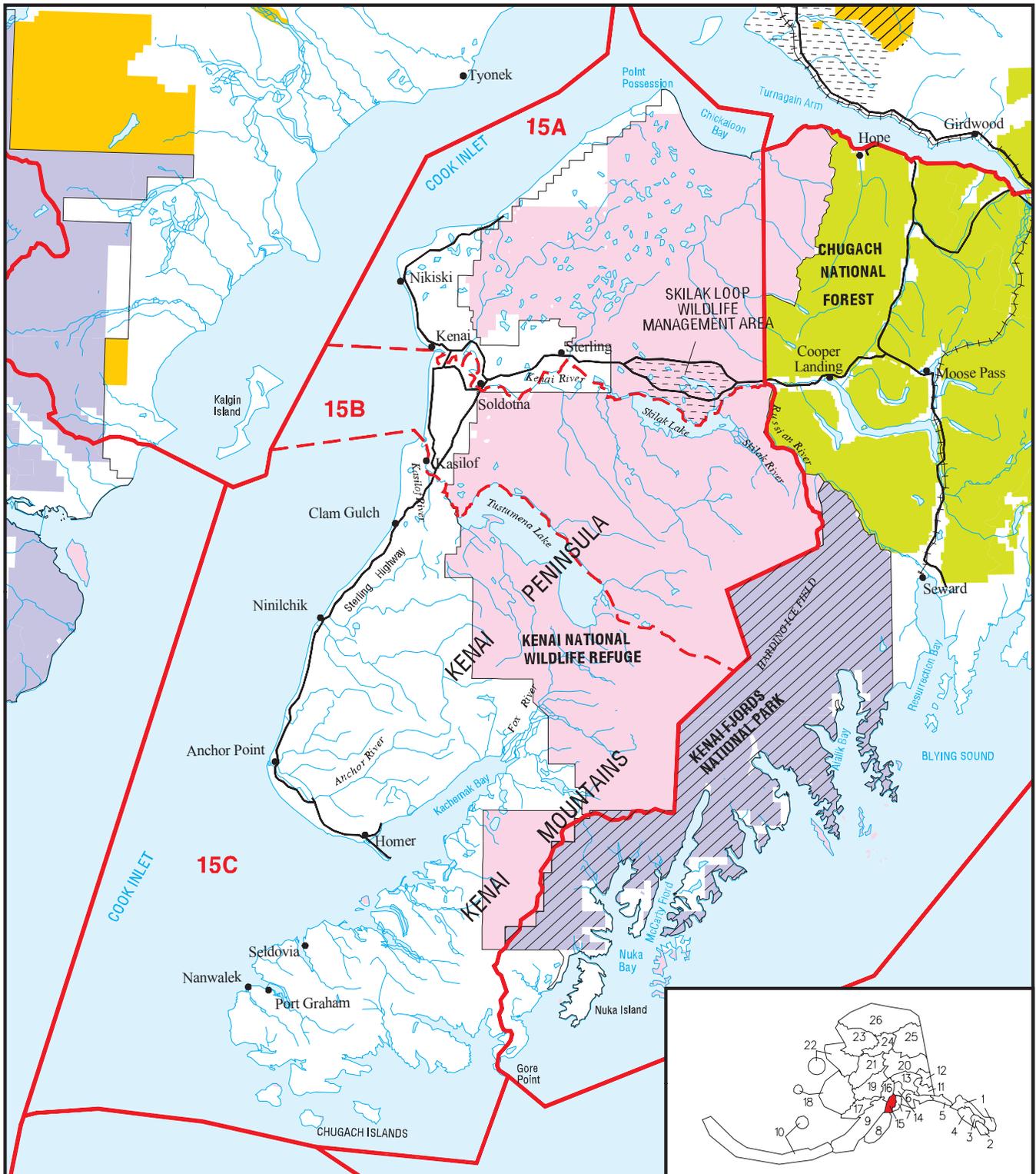
Federal Public Lands Open to Subsistence Use	
<span style="display:inline-block; width:15px; height:15px; background-color: #f8d7da;"></span> FWS Administered Land	<span style="display:inline-block; width:15px; border-bottom: 1px solid black;"></span> Closed to Subsistence
<span style="display:inline-block; width:15px; height:15px; background-color: #d1ecf1;"></span> NPS Administered Parks	<span style="display:inline-block; width:15px; border-bottom: 1px dashed black;"></span> Special Management & Controlled Use Areas
<span style="display:inline-block; width:15px; height:15px; background-color: #d1ecf1; border: 1px solid black;"></span> NPS Administered Preserves	<span style="display:inline-block; width:15px; border-bottom: 1px solid red;"></span> Unit Boundary
<span style="display:inline-block; width:15px; height:15px; background-color: #fff3cd;"></span> BLM Administered Land	<span style="display:inline-block; width:15px; border-bottom: 1px dashed red;"></span> Sub-Unit Boundaries
<span style="display:inline-block; width:15px; height:15px; background-color: #d4edda;"></span> USFS Administered Land	<span style="display:inline-block; width:15px; border-bottom: 1px solid black;"></span> Roads











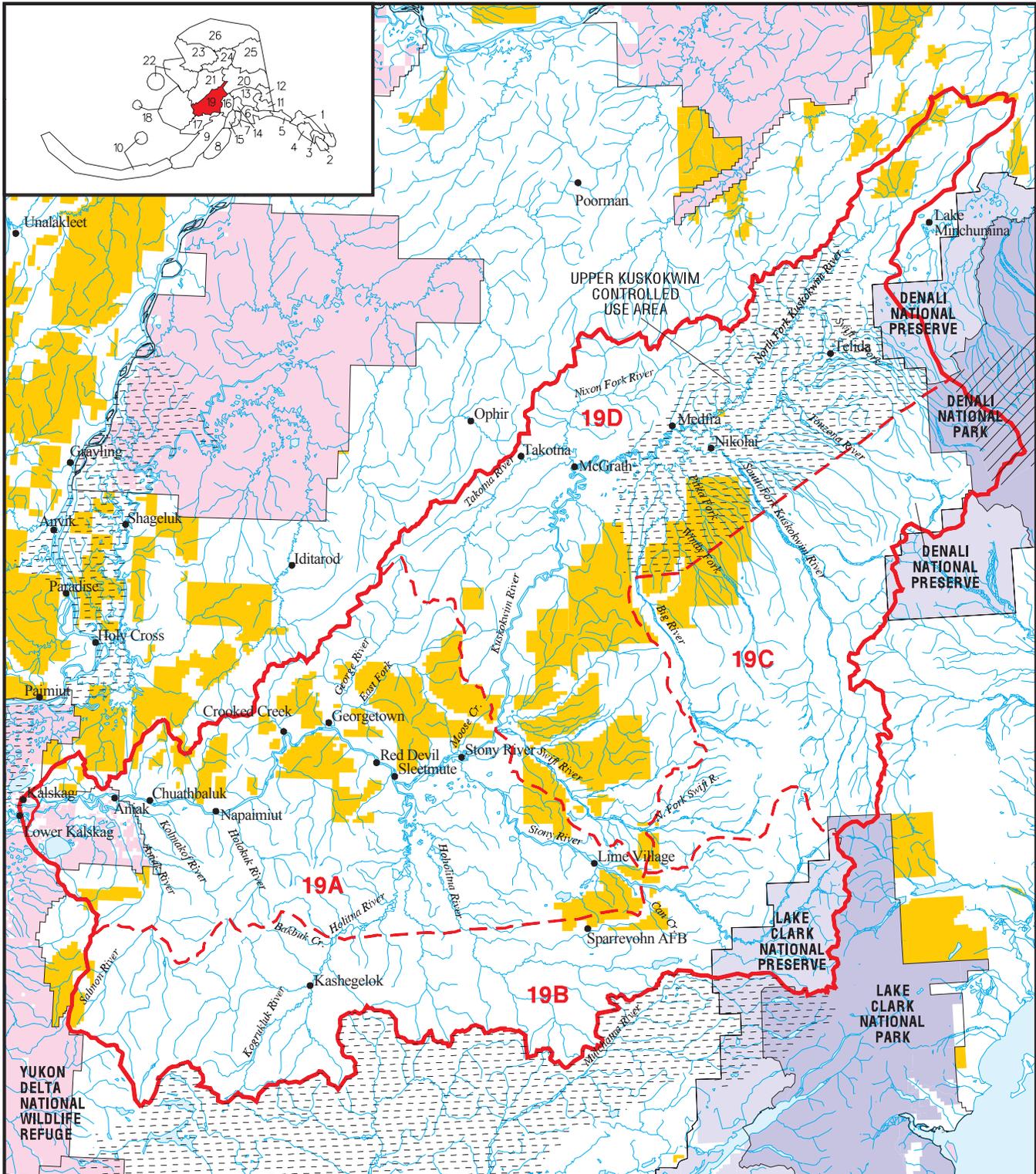
# Unit 15

Southcentral Region

# Kenai

- Federal Public Lands Open to Subsistence Use**
- FWS Administered Land
  - NPS Administered Parks
  - NPS Administered Preserves
  - BLM Administered Land
  - USFS Administered Land
  - Closed to Subsistence
  - Special Management & Controlled Use Areas
  - Unit Boundary
  - Sub-Unit Boundaries
  - Roads



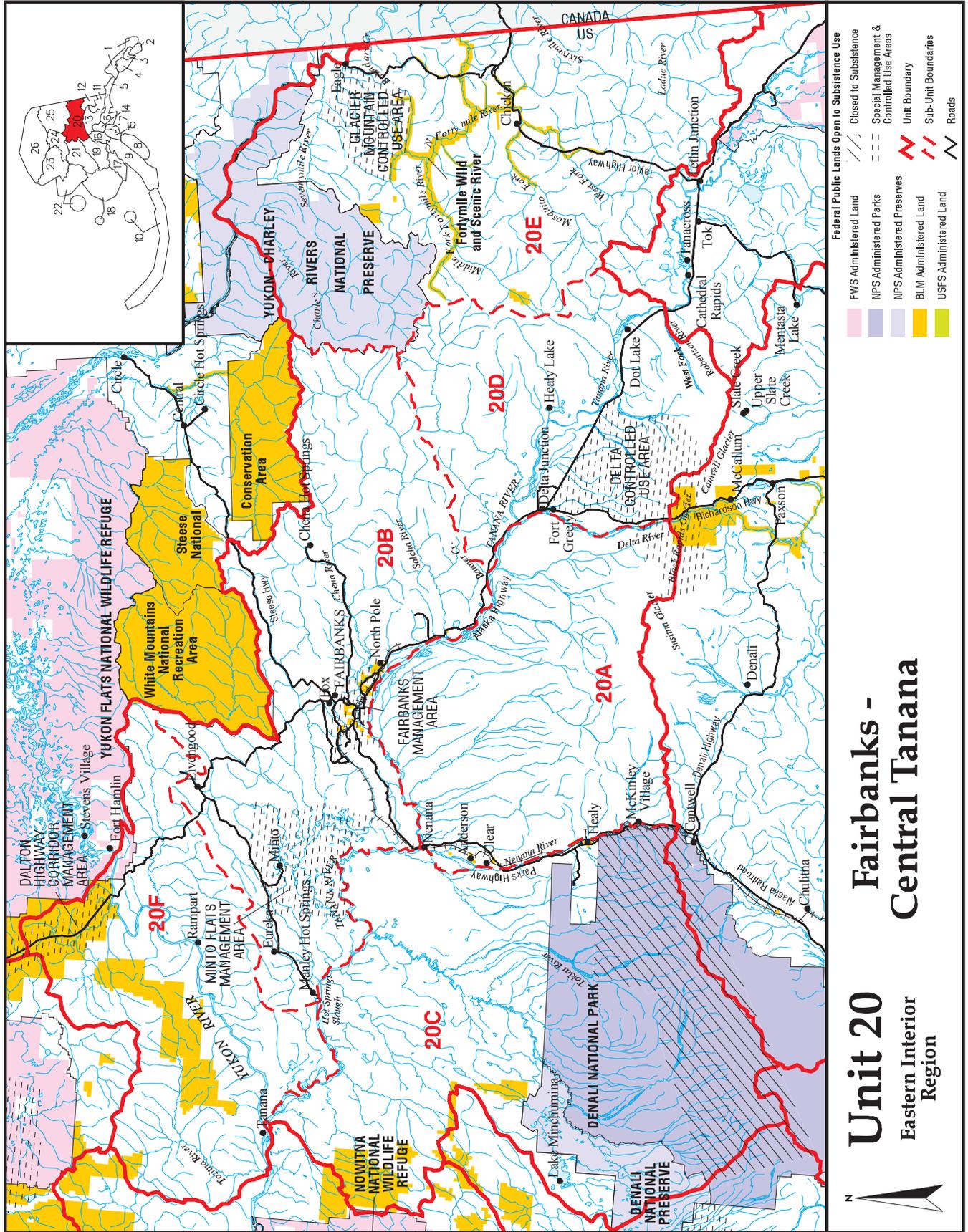


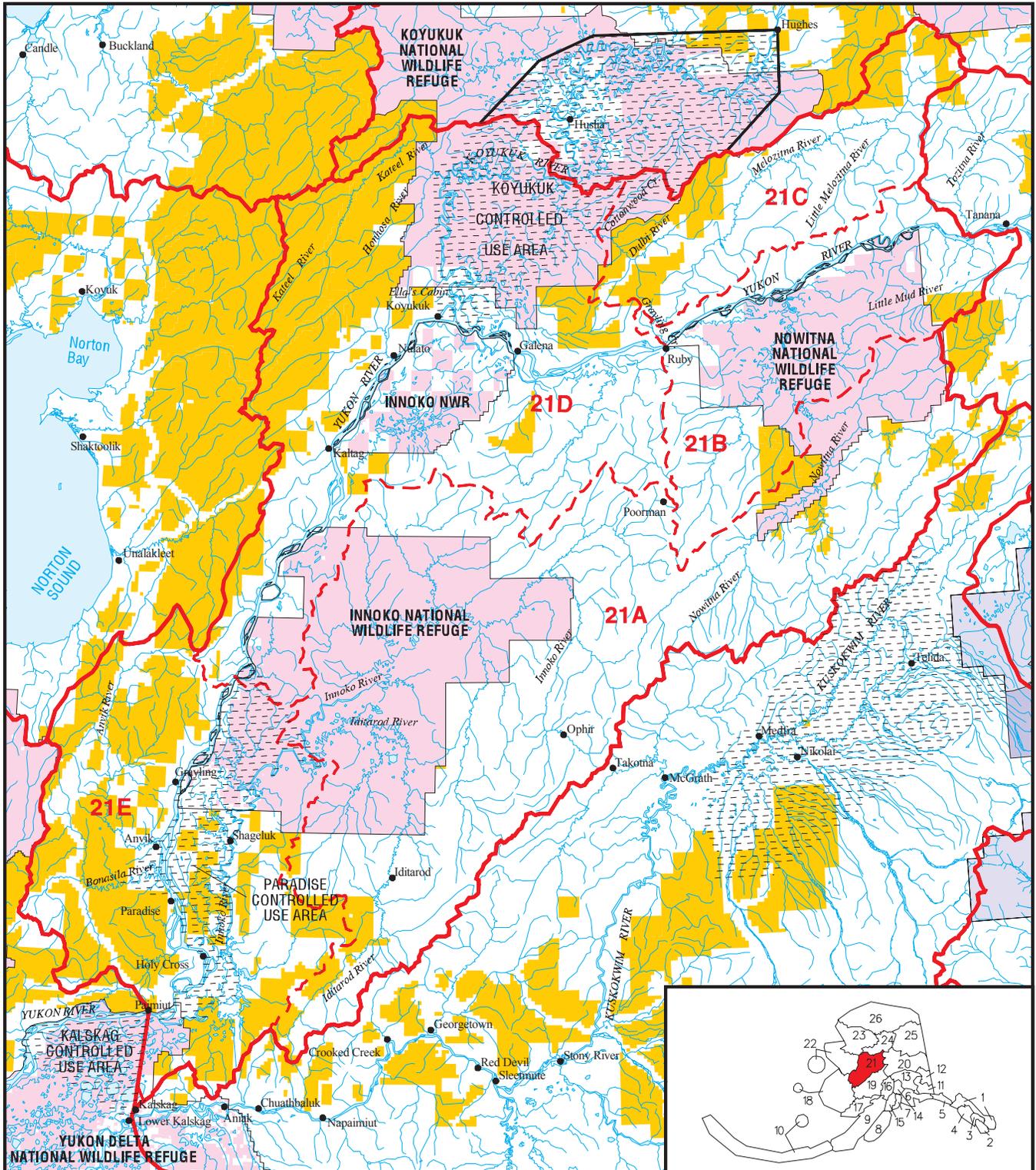
# Unit 19

Western Interior  
Region

# McGrath

- Federal Public Lands Open to Subsistence Use**
- FWS Administered Land
  - NPS Administered Parks
  - NPS Administered Preserves
  - BLM Administered Land
  - USFS Administered Land
  - Closed to Subsistence
  - Special Management & Controlled Use Areas
  - Unit Boundary
  - Sub-Unit Boundaries
  - Roads

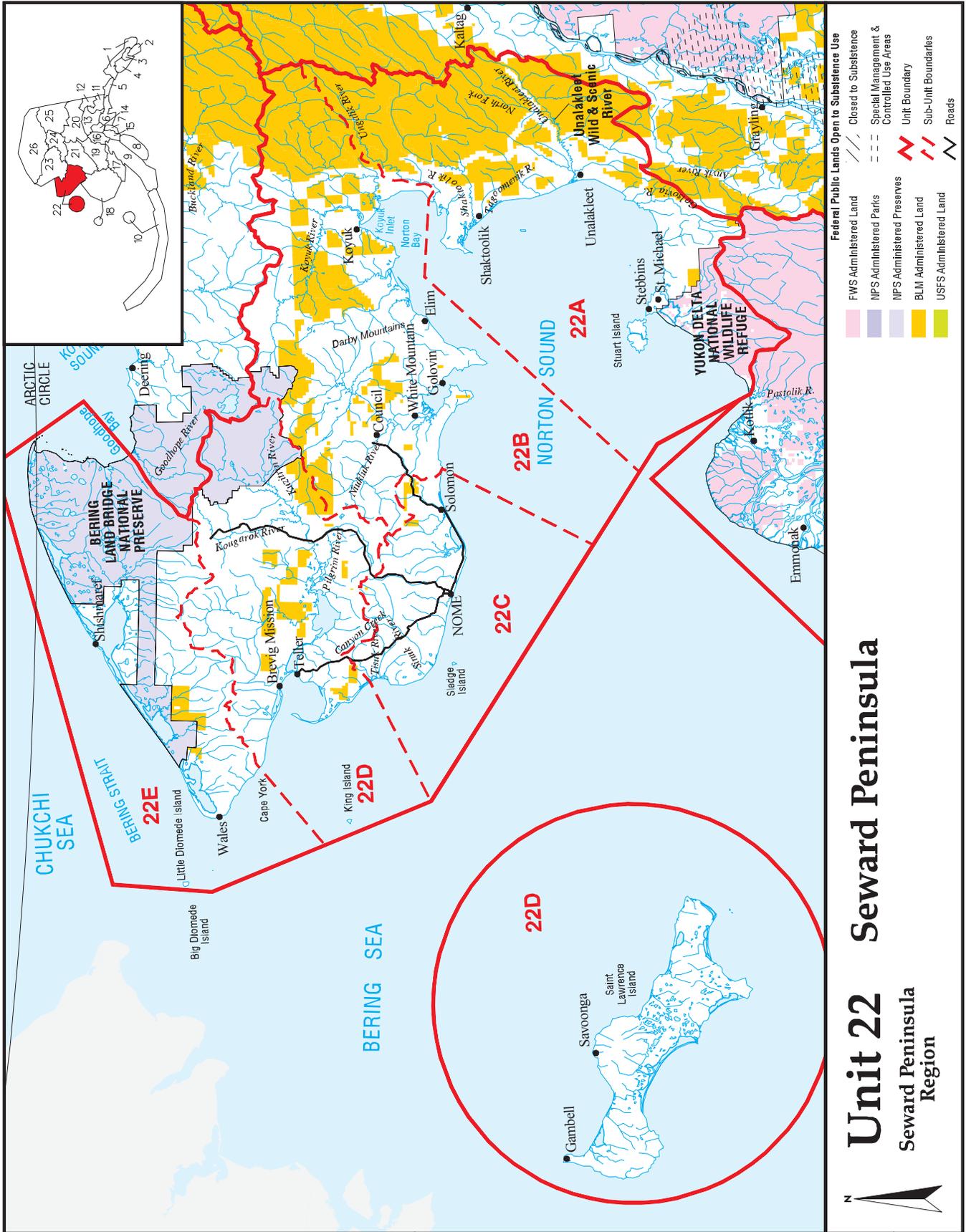




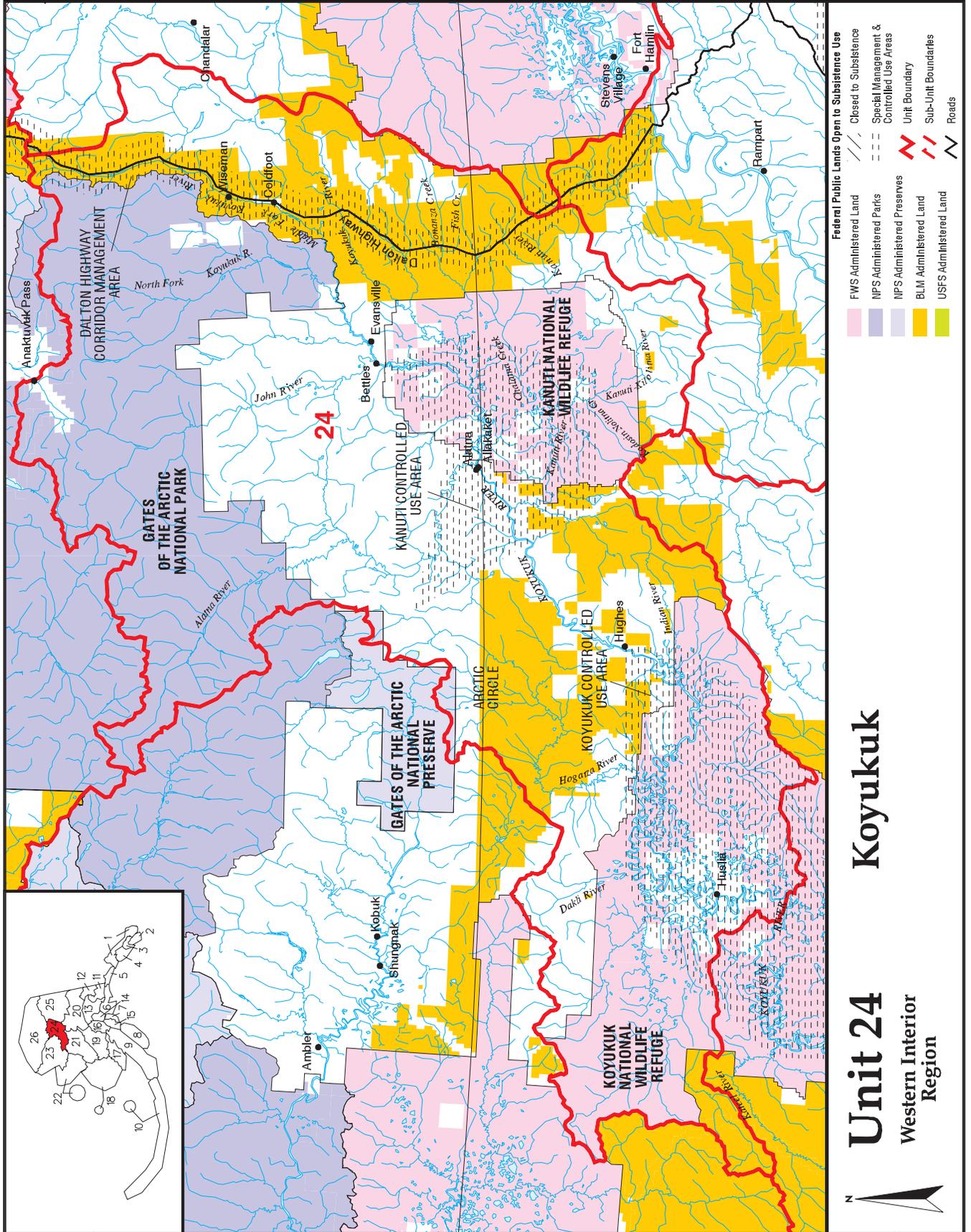
# Unit 21 Middle Yukon

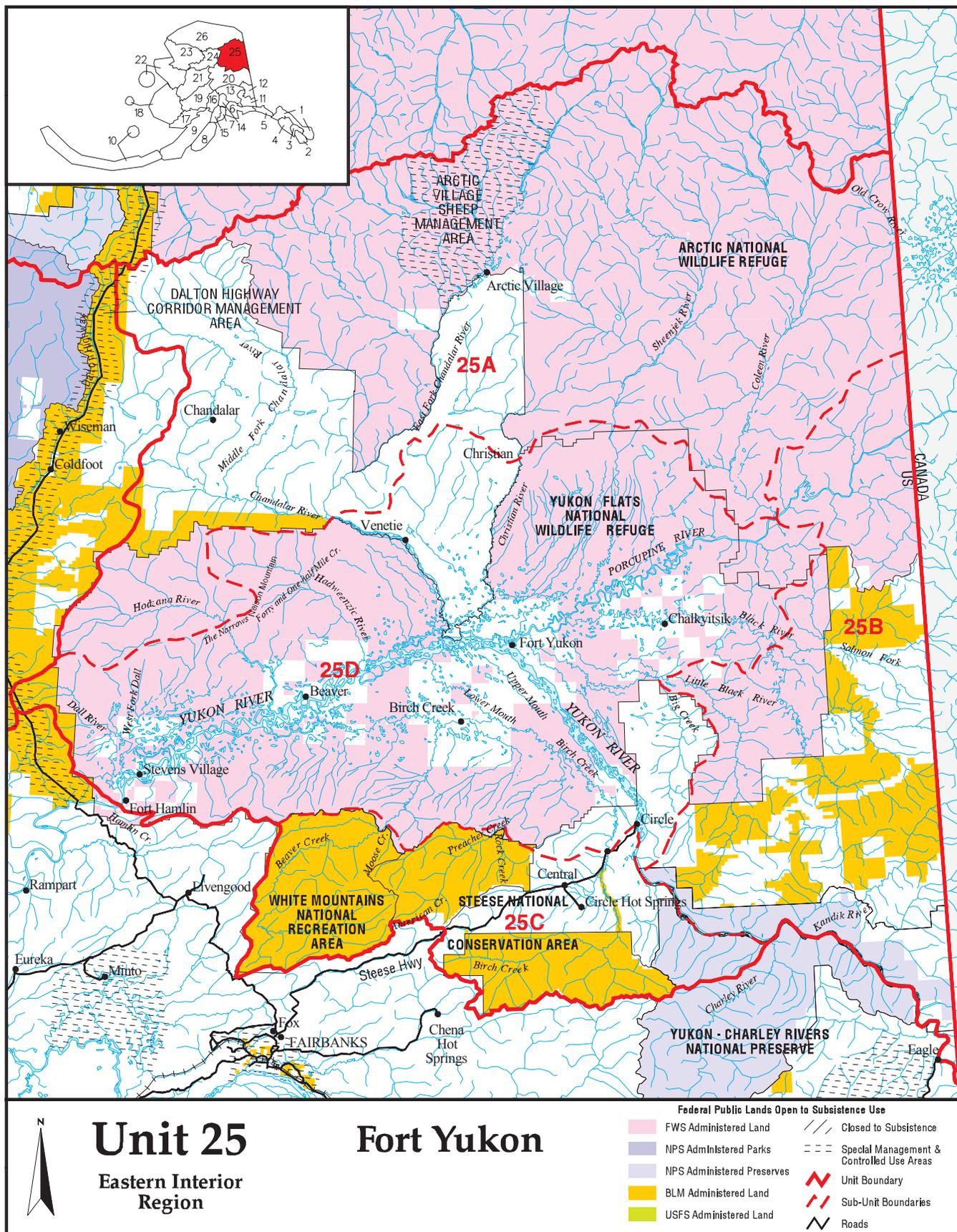
Western Interior Region

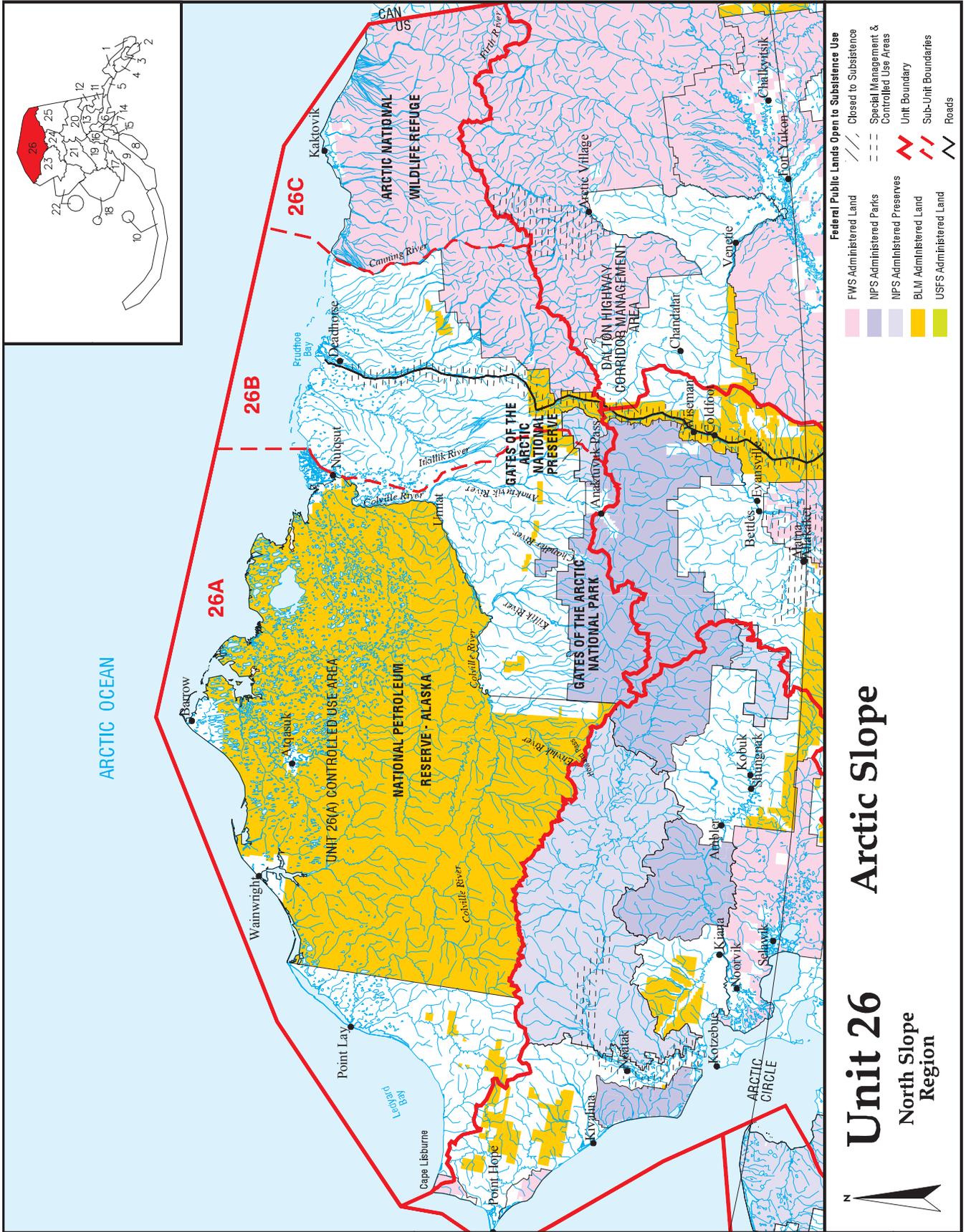
Federal Public Lands Open to Subsistence Use	
FWS Administered Land	Closed to Subsistence
NPS Administered Parks	Special Management & Controlled Use Areas
NPS Administered Preserves	Unit Boundary
BLM Administered Land	Sub-Unit Boundaries
USFS Administered Land	Roads











# Unit 26 Arctic Slope

North Slope Region