

**ALASKA DEPARTMENT OF FISH AND GAME**  
**STAFF COMMENTS**  
**CENTRAL/SOUTHWESTERN REGION PROPOSALS**  
**ALASKA BOARD OF GAME MEETING**  
**WASILLA, ALASKA**  
**JANUARY 21-29, 2022**



The following staff comments were prepared by the Alaska Department of Fish and Game for use at the Alaska Board of Game meeting, January 21-29, 2022 in Wasilla, Alaska, and are prepared to assist the public and board. The stated staff comments should be considered preliminary and subject to change, if or when new information becomes available. Final department positions will be formulated after review of written and oral testimony presented to the board.

**PROPOSAL 1- 5 AAC 85. 045. Hunting season and bag limits for moose.** Shift to a later moose hunting season in Units 13 &14.

**PROPOSED BY:** Sean S. McKenney

**WHAT WOULD THE PROPOSAL DO?** This proposal would change the Unit 13 and 14 moose season ending dates to October 9 from September 20 and September 25, respectively.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations for Game Management Units (GMUs) 13 and 14 can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

Under current regulations in Unit 14 A&B resident and nonresident hunters may take 1 bull moose with spike-fork antlers, or 50-inch antlers, or antlers with three or more brow tines on at least one side with a bow and arrow only from August 10–17; or under general hunt rules from August 25–September 25. In Unit 14C (Southcentral Region II) where general harvest moose seasons are available, there is no early archery season and under general hunt rules the season dates are September 1–30. Under the current regulations in Unit 13 resident hunters may take 1 bull moose with spike-fork antlers, or 50-inch antlers, or antlers with 4 or more brow tines on at least one side under general hunt rules from September 1–20.

There is a positive customary and traditional use (C&T) finding in Unit 13 and an amount reasonably necessary for subsistence (ANS) of 300-600 moose. All of Unit 14 is within the Anchorage-Matsu-Kenai Nonsubsistence Area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal if adopted would extend the general moose season 14 days in Units 14A&B and 19 days in Unit 13. Unit 14C in the Southcentral Region II is not on the call for this Board of Game (BOG) cycle. These would be the only units on the road system with an open general moose season during this period and would receive an enormous amount of hunting pressure with a likely commensurate increase in harvest. Moose harvest during the rut may result in wanton waste because bull hides are often saturated in mud and urine during the rut, which is challenging to keep off the meat while field dressing.

**BACKGROUND:** General moose seasons are adjusted on a GMU basis to maintain adequate bull-to-cow ratios with consideration of aligning seasons when possible. The current season end date of September 25 in Units 14A&B was first instituted in regulatory year (RY) 2009. General season moose harvest in Unit 13 has remained relatively steady with an end date of September 20<sup>th</sup>, and hunter success in 2019 was high despite an unusually warm, dry summer and fall (Table 1-1).

The department has not identified any ungulate population whose natural history has been affected by a shift in climate. Climate is long-term weather patterns in a particular area often defined by

periods greater than 30 years. While moose rutting behavior can be influenced to some degree by annual variation in weather, the hormonal control of the rut in moose is influenced by the pineal gland which responds to changes in photoperiod. Moose will enter the rut at roughly the same time each year regardless of variation in seasonal weather patterns.

**Table 1-1.** Units 13 and 14A&B moose hunter participation, harvest, and success, RY2011–19.

Regulatory Year	Unit 13 General Season Harvested	Unit 13 General Season Hunters	Unit 13 Harvest Success Rate	Units 14A/B General Season Harvested	Units 14A/B General Season Hunters	Units 14A/B Harvest Success Rate
2010	764	4,179	16%	594	3,752	16%
2011	724	3,808	19%	595	3,510	17%
2012	508	4,253	12%	366	3,032	12%
2013	443	4,051	11%	480	3,438	14%
2014	666	3,713	18%	559	3,752	15%
2015	772	4,358	18%	588	3,709	16%
2016	757	4,866	16%	525	2,823	19%
2017	689	4,340	16%	564	3,449	16%
2018	552	3,970	14%	482	3,425	14%
2019	638	3,404	19%	439	3,048	14%

**DEPARTMENT COMMENTS:** The department is **OPPOSED** to this proposal because the later season would increase vulnerability of moose by extending the season into the rut, which will lead to higher harvest of bull moose and reduce bull-to-cow ratios below objectives creating a biological concern. Hunting and harvest of moose during this time may disrupt the rut and reduce productivity and ultimately the harvestable surplus in these large GMUs. Because these would be the only areas on the mainland road system open to general season moose harvest during this period, the areas mentioned would receive an enormous amount of hunting pressure and commensurate increase in harvest. While the department could use EO authority to close the season if necessary, the rate of harvest is difficult to predict and there is high potential for overharvest. Moose harvest during the rut is more likely to result in wanton waste because bull hides are often saturated in mud and urine during the rut, which is difficult to keep off the meat while field dressing.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 2 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep.** Establish an archery-only registration hunt for Dall sheep in Units 9B, 11, 13, 14A, 14B and 16.

**PROPOSED BY:** Paul Forward

**WHAT WOULD THE PROPOSAL DO?** This proposal would create an archery-only registration hunt for Dall sheep in Game Management Units 9B, 11, 13, 14A, 14B, and 16 from August 1–5 with a bag limit of 1 full-curl ram or larger for certified resident and nonresident bowhunters. As an option the proponent suggests a “choose your weapon” whereby any hunter participating in this registration archery hunt may only hunt sheep with bow and arrow during that regulatory year in the Unit where they hunted the registration hunt, including during the general season from August 10 through September 20.

**WHAT ARE THE CURRENT REGULATIONS?** The current sheep hunting regulations can be found in 5 AAC 85.055 and in the *2020–2021 Alaska Hunting Regulations*.

Opportunity for all residents and nonresidents in Units 9B, 11, 13, 14A&B, and 16 are as follows:

- Resident and nonresident hunters may hunt using general season harvest tickets in most of the region during August 10–September 20 to harvest 1 full-curl ram.
- Nonresident hunters may harvest 1 full-curl ram every 4 regulatory years.
- Resident and nonresident youth age 10-17 accompanied by an adult may hunt using general season harvest tickets during August 1–5. The bag limit counts against the accompanying resident adult. Hunter education is required for the participating youth.
- Nonresident hunters require a guide or a resident relative age 19 years or older within second degree of kindred.
- From August 10–September 20 aircraft may only be used by and for sheep hunters to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep. A person may not use or employ an aircraft to locate sheep or direct hunters to sheep during the open sheep hunting season.
- In Unit 11, 1 sheep can be taken annually under federal subsistence permit August 10–September 20.

There is a positive customary and traditional finding for Dall sheep in Unit 11 with an amount necessary for subsistence of 60–75 sheep.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal creates an archery-only sheep season in all harvest ticket hunt areas throughout Region IV with a season of August 1–5. The new season would overlap the youth sheep hunt (August 1–5) which is not weapons restricted. This proposal is not likely to affect sheep populations because the current full-curl bag limit adequately guards against overharvest. Allocating additional hunting opportunity could increase sheep harvest, but it is difficult to predict how many hunters will participate in the hunt and how successful they will be. Hunters participating in the registration hunt would not be affected by the aircraft restriction pertaining to locating sheep but would be required to wait until 3 am the day following flying to harvest a ram.

**BACKGROUND:** The Central/Southwest Region has both full-curl and any-ram hunting opportunities. The full-curl bag limit provides maximum participation in sheep hunts and has not been linked to any negative effects on the sheep population or lamb production. Some sheep hunts have season dates and bag limits that provide a reasonable opportunity for success in harvesting a sheep for subsistence uses. All these hunts are by harvest ticket or drawing permit.

Outside of the youth season over half of the annual total sheep harvest season occurs in the first 10 days of the season with most of this occurring in the first five days. Annual ram harvest in Region IV is detailed in Table 2-1.

**Table 2-1.** Total Dall sheep ram harvest in the Central/Southwest Region by unit, RY2015–2019.

Reg. Year	Unit 9B	Unit 11	Unit 13	Units 14A&B	Unit 16	Total
2015	0	47	62	35	16	160
2016	0	51	92	28	8	179
2017	0	48	94	42	7	191
2018	0	68	78	34	10	190
2019	0	73	82	13	20	188
Total	0	287	408	152	61	908

Dall sheep populations throughout Region IV are considered stable. A recent decline was observed in portions of the Chugach and Talkeetna mountains (Unit 13), largely due to harsh winter conditions with high avalanche activity during the winter of 2019/20. Portions of the Wrangell Mountains (Units 11 & 13) have had stable to increasing sheep populations and have also had an increase in hunting pressure.

In 2016, the board passed a prohibition on the use of aircraft from August 10–September 20 (5 AAC 92.085(8)). Aircraft may not be used by or for any person to locate Dall sheep for hunting or direct hunters to Dall sheep. If this proposal were to go into effect, registration sheep hunters would be allowed to use aircraft for spotting and locating sheep. This could give an advantage to archery hunters which could increase harvest.

Although the department is neutral on allocation, the proposed season dates will also coincide with the youth sheep hunting season which could add additional hunting pressure on sheep populations. It is unknown how many archers will participate in these hunt areas but there have been over 23,000 archers certified in the State.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of sheep hunting opportunity between archers and hunters who use other methods of taking sheep. No biological concerns are addressed or created by this proposal because the requirement to harvest full-curl rams should prevent overharvest from affecting sustainability of sheep populations. If adopted, the record should show that the board has determined that the new regulations continue to provide a reasonable opportunity for success in customary and traditional uses of Dall sheep in Unit 11 where a positive customary and traditional use determination has been made.

**COST ANALYSIS:** Adoption of this proposal would not result in significant additional costs for the department.

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**PROPOSAL 3 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep.** Establish an archery-only season for Dall sheep in Units 13, 14A, 14B and 16.

**PROPOSED BY:** Herb Mansavage

**WHAT WOULD THE PROPOSAL DO?** This proposal would create an archery-only season for Dall sheep in Units 13, 14A, 14B and 16 from September 21–October 10 (20 days). The bag limit is not discussed in this proposal.

**WHAT ARE THE CURRENT REGULATIONS?** The current sheep hunting regulations can be found in 5 AAC 85.055 and in the *2020–2021 Alaska Hunting Regulations*.

Opportunity for all residents and nonresidents in Units 13, 14A, 14B and 16 are as follows:

- Resident and nonresident hunters may hunt using general season harvest tickets in most of the region during August 10–September 20 to harvest 1 full-curl ram.
- Nonresident hunters may harvest 1 full-curl ram every 4 regulatory years.
- Resident and nonresident youth accompanied by an adult may hunt using general season harvest tickets during August 1–5. The bag limit counts against the accompanying resident adult. Hunter education is required for the participating youth.
- Nonresident hunters require a guide or a resident relative age 19 year or older within second degree of kindred.
- From August 10–September 20 aircraft may only be used by and for sheep hunters to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep. A

person may not use or employ an aircraft to locate sheep or direct hunters to sheep during the open sheep hunting season.

- In Unit 13, resident may harvest 1 full-curl sheep and nonresidents may harvest 1 ram every 4 regulatory years through drawing permits with 2 different season dates of August 10–25 and August 26–September 20 depending hunt area.
- In Unit 14A-Chugach, resident hunters may harvest 1 ram by drawing permit August 10–September 20. Nonresident hunters may harvest 1 ram every 4 regulatory years by drawing permit August 10–September 20.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would create an archery-only sheep season through most of Region IV with a season of September 21–October 10 thereby extending the general season for archers by 20 days. Allocating additional hunting opportunity could increase sheep harvests, but it is difficult to predict how many resident hunters will participate in the hunt and how successful they will be. The proposal does not state what the bag limit would be.

**BACKGROUND:** The Central/Southwest Region has both full-curl and any-ram hunting opportunities. The full-curl bag limit provides maximum participation in sheep hunts and has not been linked to any negative effects on the sheep population or lamb production. All these hunts are by harvest ticket or drawing permit. The recent annual ram harvest in Region IV in is Table 3-1.

**Table 3-1.** Total Dall sheep ram harvest in the Central/Southwest Region by unit, 2015–2019.

Reg. Year	Unit 13	Unit 14A&B	Unit 16	Total
2015	62	35	16	113
2016	92	28	8	128
2017	94	42	7	143
2018	78	34	10	122
2019	82	13	20	115
Total	408	152	61	621

Outside of the youth season over half of the annual total sheep harvest occurs in the first 10 days of the season with most of this occurring in the first five days.

Dall sheep populations throughout Region IV are considered stable. A recent decline was observed in portions of the Chugach and Talkeetna mountains (Unit 13), largely due to harsh winter conditions with high avalanche activity during the winter of 2019/20. Portions of the Wrangell Mountains (Units 11 & 13) have had stable to increasing sheep populations and have also had an increase in hunting pressure.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of sheep hunting opportunity between archers and hunters who use other methods of taking sheep. If adopted the department recommends a bag limit of one ram. However, consideration should be given to limiting harvest to prevent ram-to-ewe ratios from dropping low enough to cause a conservation concern.

**COST ANALYSIS:** Adoption of this proposal would not result in significant additional costs for the department.

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**PROPOSAL 4 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep.** Establish an archery-only registration hunt for Dall sheep in Units 9, 11, 13A, 13B remainder, 13C remainder, 14A remainder, 14B and 16.

**PROPOSED BY:** Alaska Bowhunters Association

**WHAT WOULD THE PROPOSAL DO?** This proposal would create an archery-only registration hunt for Dall sheep in Units 9, 11, 13A, 13B remainder, 13C remainder, 14A remainder, 14B and 16 with season dates of September 21– October 10, and a bag limit of 1 full-curl ram or larger, for archery certified resident hunters, and 1 full-curl ram or larger every 4 regulatory years for archery certified nonresidents.

**WHAT ARE THE CURRENT REGULATIONS?** The current Dall sheep hunting regulations can be found in 5 AAC 85.055 and in the *2020–2021 Alaska Hunting Regulations*.

Opportunity for all residents and nonresidents in Units 9B, 11, 13, 14A&B, and 16 are as follows:

- Resident and nonresident hunters may hunt using general season harvest tickets in most of the region during August 10–September 20 to harvest one full-curl ram.
- Nonresident hunters may harvest 1 full-curl ram every 4 regulatory years.
- Resident and nonresident youth age 10-17 accompanied by an adult may hunt using harvest tickets during August 1–5. The bag limit counts against the accompanying resident adult. Hunter education is required for the participating youth.
- Nonresident hunters require a guide or a resident relative age 19 years or older within second degree of kindred.
- In Unit 11, 1 sheep can be taken annually under a federal subsistence permit August 10–September 20.



There is a positive customary and traditional finding for Dall sheep in Unit 11 with an amount necessary for subsistence of 60–75 sheep.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal creates an archery-only sheep season in all harvest ticket hunt areas where sheep occur throughout Region IV with a 20-day season of September 21–October 10. The new season would begin the day after the 42-day general sheep season closes; archery equipment is not prohibited during the general season. This proposal is not likely to affect sheep populations because the current full-curl bag limit adequately guards against overharvest. Allocating additional hunting opportunity could increase sheep harvests, but it is difficult to predict how many certified archery hunters will participate in the hunt and how successful they will be.

**BACKGROUND:** The Central/Southwest Region has both full-curl and any-ram hunting opportunities. The full-curl bag limit provides maximum participation in sheep hunts and has not been linked to any negative effects on the sheep population or lamb production. Some sheep hunts have season dates and bag limits that provide a reasonable opportunity for success in harvesting a sheep for subsistence uses. All hunts are by harvest ticket or drawing permit.

Outside of the youth season over half of the annual total sheep harvest occurs in the first 10 days of the season with most of this occurring in the first 5 days.

**Table 4-1.** Dall sheep ram harvest in general season hunt areas in Central/Southwest Region by unit, 2015–2019.

Reg. Year	Unit 9	Unit 11	Unit 13A	Unit 13B Remainder	Unit 13C Remainder	Unit 14A Remainder	Unit 14B	Unit 16	Total
2015	0	47	22	0	7	6	7	16	136
2016	0	51	46	1	11	7	6	8	143
2017	0	48	35	1	11	10	7	7	136
2018	0	68	24	0	11	7	7	10	160
2019	0	73	25	0	10	3	7	20	176
Total	0	287	152	25	50	33	34	61	751

Dall sheep populations throughout Region IV are considered stable. A recent decline was observed in portions of the Chugach and Talkeetna mountains (Unit 13), largely due to harsh winter conditions with high avalanche activity during the winter of 2019/20. Portions of the Wrangell Mountains (Units 11 & 13) have had stable to increasing sheep populations and have also had an increase in hunting pressure.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of sheep hunting opportunity between archers and hunters who use other methods of taking sheep. No biological concerns are addressed or created by this proposal because the requirement to harvest

full-curl rams should prevent overharvest from affecting sustainability of sheep populations. If adopted, the record should show that the board has determined that the new regulations continue to provide a reasonable opportunity for success in customary and traditional uses of Dall sheep in Unit 11 where a positive customary and traditional use determination has been made.

**COST ANALYSIS:** Adoption of this proposal would not result in significant additional costs for the department.

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**PROPOSAL 5 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep.** Establish 3 separate archery-only registration hunts for Dall sheep in Units 9, 11, 13, 14A, 14B and 16 where there are general season hunts.

**PROPOSED BY:** John Frost

**WHAT WOULD THE PROPOSAL DO?** This proposal would create 3 separate archery-only registration hunts in general season areas for Dall sheep in Units 9, 11, 13, 14A, 14B and 16 from August 1–9, September 21–30, and October 1–10 with a bag limit of one full-curl ram (or 8 years old or with both tips broken) for archery certified resident and nonresident bowhunters.

**WHAT ARE THE CURRENT REGULATIONS?** The current sheep hunting regulations can be found in 5 AAC 85.055 and in the *2020–2021 Alaska Hunting Regulations*.

Opportunity for all residents and nonresidents in Units 9, 11, 13, 14A, 14B and 16 are as follows:

- Resident and nonresident hunters may hunt using general season harvest tickets in most of the region during August 10–September 20.
- Nonresident hunters may harvest one full-curl ram every four regulatory years.
- Resident and nonresident youth accompanied by an adult may hunt using general season harvest tickets during August 1–5. The bag limit counts against the accompanying resident adult. Hunter education is required for participating youth.
- Nonresident hunters require a guide or a resident relative age 19 years or older within second degree of kindred.
- From August 10–September 20 aircraft may only be used by and for sheep hunters to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep. A person may not use or employ an aircraft to locate sheep or direct hunters to sheep during the open sheep hunting season.
- In Unit 11, 1 sheep can be taken annually under a federal subsistence permit August 10–September 20.

There is a positive customary and traditional finding for Dall sheep in Unit 11 with an amount necessary for subsistence of 60–75 sheep.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal creates 3 separate archery-only sheep hunts in all harvest ticket hunt areas throughout Region IV (Units 9, 11, 13, 14A, 14B and 16 ) with respective season dates of August 1–9, September 21–30, and October 1–10. The bag limit would be one full-curl ram (or 8 years old or with both tips broken). Participants could register and participate in all three hunts but would have to register for each one separately after returning from the field. Participation in the general season would not preclude a hunter from participating in the proposed hunts.

The early season hunt (August 1–9) would overlap the entire youth sheep hunt period (August 1–5) which has no weapon restrictions. The early season hunt would occur before the date of the prohibition on the use of aircraft for Dall sheep hunting, which the board adopted in 2016. If the proposal were to go into effect, registration sheep hunters would be allowed to use aircraft for spotting and locating sheep. Hunters may not harvest an animal until 3 am the following day if aircraft were used.

The mid-season hunt would create a 10-day season that would begin a day after the 42-day general season closes. The proposed late season hunt would overlap the mid-season hunt for 10 days in October (October 1–10). This proposal is not likely to affect sheep populations because the current full-curl bag limit adequately guards against overharvest. Allocating additional hunting opportunity could increase sheep harvests.

**BACKGROUND:** The Central/Southwest Region has both full-curl and any-ram hunting opportunities. The full-curl bag limit provides maximum participation in sheep hunts and has not been linked to any negative effects on the sheep population. Some sheep hunts have season dates and bag limits that provide a reasonable opportunity for success in harvesting a sheep for subsistence uses. All these hunts are by harvest ticket or drawing permit.

Outside of the youth season over half of the annual total sheep harvest occurs in the first 10 days of the season.

**Table 5-1.** Total Dall sheep ram harvest in the Central/Southwest Region by unit, 2015–2019.

Reg. Year	Unit 9B	Unit 11	Unit 13	Units 14A&B	Unit 16	Total
2015	0	47	62	35	16	160
2016	0	51	92	28	8	179
2017	0	48	94	42	7	191
2018	0	68	78	34	10	190
2019	0	73	82	13	20	188
Total	0	287	408	152	61	908

Dall sheep populations throughout Region IV are considered stable. A recent decline was observed in portions of the Chugach and Talkeetna mountains (Unit 13), largely due to harsh winter conditions with high avalanche activity during the winter of 2019/20. Portions of the Wrangell Mountains (Units 11 & 13) have had stable to increasing sheep populations and have also had an increase in hunting pressure.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of sheep hunting opportunity between archers and hunters who use other methods of taking sheep. No biological concerns are addressed or created by this proposal because the requirement to harvest full-curl rams should prevent overharvest from affecting sustainability of sheep populations.

**COST ANALYSIS:** Adoption of this proposal would not result in significant additional costs for the department.

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Proposal 6: Reauthorize the brown bear tag fee exemptions for the Central/Southwest Region was replaced by Proposal 197.

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**PROPOSAL 7 – 5 AAC 85.015 Hunting seasons and bag limits for black bear.** Increase the bag limit for black bears in Units 13D & 16.

**PROPOSED BY:** Dan Montgomery

**WHAT WOULD THE PROPOSAL DO?** Increase the hunting bag limit for black bears in Units 13D and 16 from 3 bears per regulatory year to 5 bears per regulatory year.

**WHAT ARE THE CURRENT REGULATIONS?** The current black bear hunting regulations can be found in 5 AAC 85.015 and in the *2020–2021 Alaska Hunting Regulations*.

Current resident and nonresident hunters in Units 13D and 16 are allowed 3 bears per regulatory year under general season harvest ticket with no closed season in Unit 13D, no closed season in

16 remainder, and season dates of September 15–May 31 in a portion of 16B (Wolverine Creek area). The harvest of cubs and females accompanied by cubs is prohibited.

There is a positive customary and traditional use (C&T) finding for black bears in Units 11 and 13 with an amount reasonably necessary for subsistence (ANS) of 20-50 bears; there is a positive C&T finding for black bears in Unit 16B with an ANS of 15-40 bears. Unit 16A is entirely within the Anchorage-Matsu-Kenai Nonsubsistence Area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would allow both resident and nonresident hunters to harvest an additional two black bears per regulatory year. Passage of this proposal may result in additional bears taken because an increased bag limit indicates additional opportunity and no biological concerns for the population. It is unlikely that many hunters will take five bears within the units covered by this proposal. Additional black bear harvest in Unit 13 could result in population declines in a unit where hunters anecdotally have had difficulty finding black bears in recent years.

### **BACKGROUND:**

#### **Unit 13**

Black bears are numerous in portions of Unit 13 with suitable forested habitat. Harvest data have been available since 1973, when the sealing of black bears became mandatory. Black bear harvests averaged 67 per year during the 1970s, 81 in the 1980s, and 93 in the 1990s. During the 2000s the average yearly black bear harvest in Unit 13 increased to 132, and in the last decade (RY10–19) yearly harvest averages 143 animals per year. The percentage of hunters harvesting more than one black bear ranges from 6-15% over the last decade (Table 7-1). The percentage of hunters harvesting their full limit of 3 bears is very low (<5%) (Table 7-1).

A black bear population estimate was conducted in 1985 along a portion of the upper Susitna River in conjunction with the Susitna Hydroelectric Project. Results indicated a density estimate of 90 black bears/1,000 km<sup>2</sup>. Females had an observed mean litter size of 2.1 (range = 1–4) cubs of the year, or 1.9 (range = 1–3) yearlings. However, the study area was considered marginal black bear habitat and not indicative of bear densities in more favorable forested habitat within the unit. Field observations and harvest data indicate black bears are abundant in large portions of Subunits 13D and 13E, and to a lesser extent in Subunit 13C. A population estimate for Unit 13 has not been attempted because density estimates for bears in more favorable or typical forested habitat within the unit are not available. Black bear densities in the favorable habitats within Unit 13 are thought to be like densities in other portions of Southcentral Alaska. Trends in bear density or abundance have not been documented. The harvest suggests there is not a biological concern for black bears in Unit 13 currently (Figure 7-1). Anecdotally, however, some hunters have expressed difficulty finding black bears in Unit 13 in recent years.

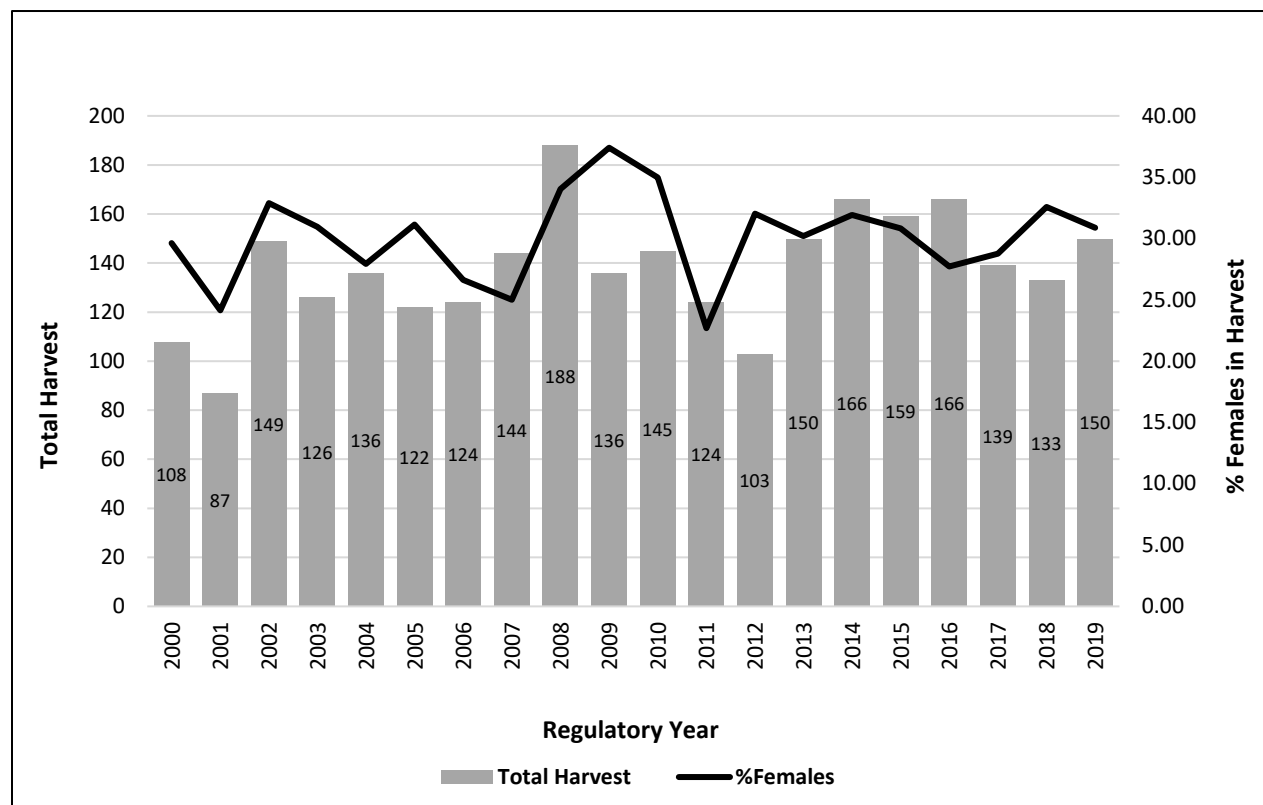
**Table 7-1.** Number of hunters who harvested multiple bears in Unit 13 by regulatory year, RY2000–2019.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 <sup>1</sup>
1 Bear	90	79	114	106	118	95	107	119	162	96
2 Bears	9	4	13	4	6	9	4	8	10	11
3 Bears	0	0	3	4	2	3	3	3	2	6

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
1 Bear	113	109	78	120	120	112	120	107	103	121
2 Bears	13	6	11	12	17	13	17	10	12	13
3 Bears	2	1	1	2	4	7	4	4	2	1

<sup>1</sup> 2009 was the first year that harvest tickets were implemented and the sealing requirement was removed.



**Figure 7-1.** Unit 13 black bear harvest and percent females in harvest, RY2000–2019.

### Unit 16

In 2007 line transect surveys for bears in Unit 16B showed a black bear population of  $3,500 \pm 300$ . There was an intensive management program for moose that targeted predation by black bears in Unit 16 beginning in 2007. The goal of the bear reduction program was to reduce the black bear population to 600–800 bears within the predation control area. Bear harvests increased initially under the program but have since returned to their pre-control levels. Modelling by the department showed that the predator control program had little effect on the black bear population in Unit 16 and was suspended in November 2016.

As a component of the predation control program in Unit 16, permittees could harvest an unlimited number of black bears. At that time hunters interested in participating in the program were required to obtain a predation control permit. Also, under that program same day airborne hunting was allowed as long as permittees were 300 feet from the airplane and permittees could take any bear including cubs and sows with cubs.

The number of individuals who harvest multiple black bears in a regulatory year is typically low. and Outside of the years of control (2000–2006 and 2017–2019) an average of 16.5 hunters took 2 bears and 2.6 hunters took 3 bears. The number of hunters who harvest more than 3 bears in a regulatory year averaged 4.25 during the 8 years when it was allowed under control. The maximum number of hunters who harvested more than 3 bears in a regulatory year was 15 in 2010 but interest declined later in the program and in 2015 only 1 person harvested 4 bears and no hunters harvested more than 4 (Table 7-2).

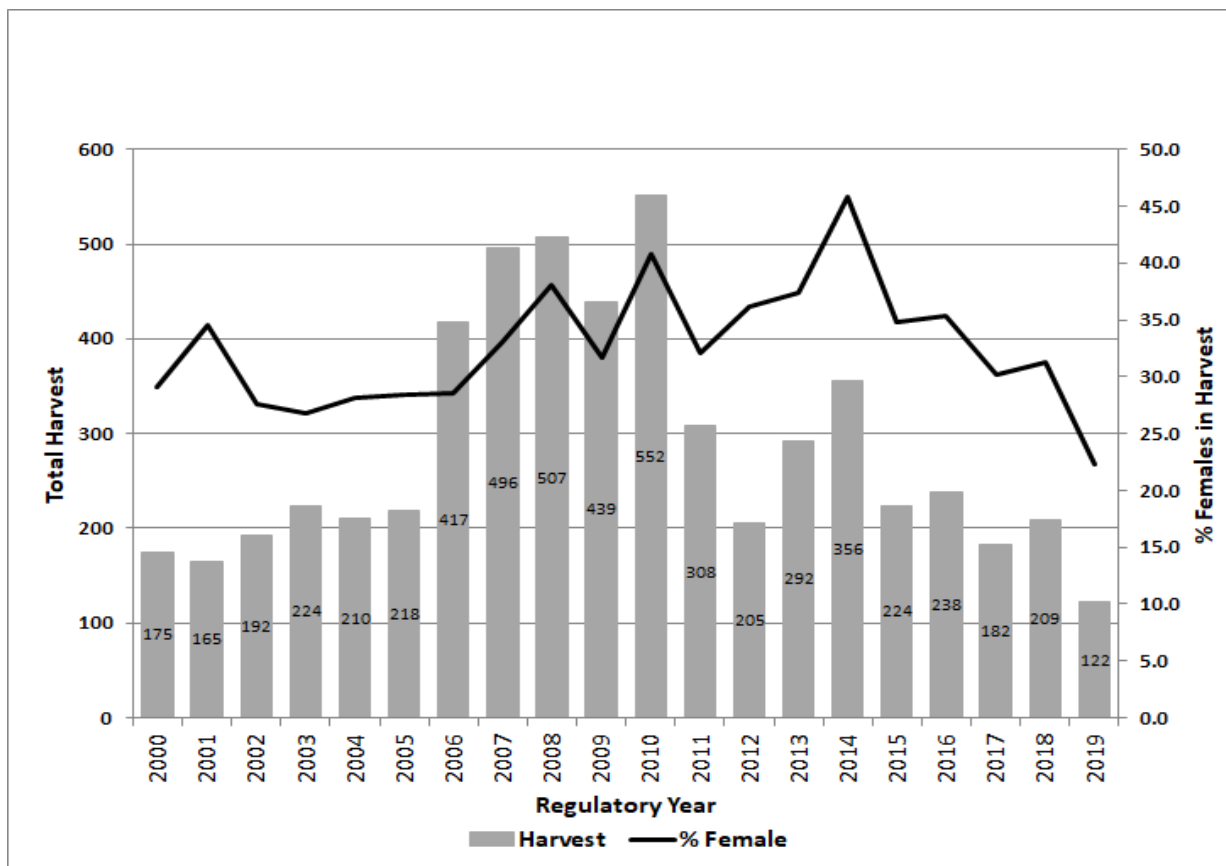
**Table 7-2.** The number of hunters who harvested multiple bears in Unit 16, by regulatory year, RY2000–2019.

<b>No. bears</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
2 bears	10	18	12	22	24	12	33	49	57	38
3 bears	0	2	2	2	3	3	11	16	13	11
4 bears	0	0	0	0	0	0	0	6	3	3
> 4 bears	0	0	0	0	0	0	0	3	8	8

<b>No. Bears</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
2 bears	49	23	12	14	32	21	22	11	11	12
3 bears	8	9	6	6	6	4	4	1	2	0
4 bears	6	3	1	4	2	1	0	0	1	0
> 4 bears	9	4	2	1	5	0	0	0	0	0





**Figure 7-2.** Unit 16 black bear harvest and percent females in harvest, 2000–2019.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal because it has not identified a biological concern for bears in Unit 13D or 16. Adoption of this proposal is not expected to increase harvest of black bears significantly. Very few hunters harvest more than one black bear annually even with a bag limit of 3 bears per year, although this change could draw additional black bear hunters to Units 13D and 16 and increase overall harvest. If the increased bag limit is limited to 13D then no biological concern is likely to arise for Unit 13, but anecdotally black bears have been difficult for some hunters to find outside of baiting season in recent years.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 8 – 5 AAC 84.270 (2). Furbearer Trapping for Coyote.** Reduce the coyote trapping season in Units 9, 13, 14B, 16 and 17.

**PROPOSED BY:** Tom Lessard

**WHAT WOULD THE PROPOSAL DO?** This proposal would shorten the coyote trapping season in Units 9, 13, 14B, 16 and 17 and align season dates to a 142-day period consistent with most other furbearers in the region as follows:

- Unit 9 November 10–March 31 (shortened by 70 days)
- Units 13 & 16 November 10–March 31 (shortened by 50 days)
- Units 14B & 17 November 10–March 31 (shortened by 30 days)

**WHAT ARE THE CURRENT REGULATIONS?** The current coyote trapping regulations can be found in 5 AAC 84.270 (2) and in the *2020–2021 Alaska Trapping Regulations*.

- *It is against the law to trap a coyote in Units 9, 13, 14B, 16, and 17 during April or October and in Units 13 and 16 from November 1–November 9, with a steel trap or with a snare smaller than 3/32 inch in diameter.*
- You may shoot a coyote on the same day that you have flown in an airplane if the coyote is either caught in a trap or snare or you are more than 300 feet from the airplane.

There is currently no bag limit for coyote under trapping regulations and no closed season under hunting regulations in Region IV. Trapping seasons in the proposed units are as follows:

- Unit 9 (October 1–April 30)
- Units 13 and 16 (October 15–April 30)
- Units 14B and 17 (November 10–April 30)

Except for Units 14B and 16A, which are in the Anchorage-Matsu-Kenai nonsubsistence area, there is a positive C&T finding for coyotes in the other units, and an ANS of 90% of the harvestable portion.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal intends to align the trapping season throughout the region to the more traditional dates when pelt primeness is best. These seasons would also avoid the denning period. While aligning trapping seasons with other Units in Region IV, such as Unit 11, thereby simplifying trapping regulations, coyote trapping seasons would be reduced by 70 days in Unit 9, 50 days in Units 13&16 and 40 days in Units 14B&17. Although harvest rates for coyotes are not expected to be impacted by this change, and there are no conservation concerns, reasonable opportunity for success in harvesting coyote for subsistence uses may be reduced. This proposal would be expected to reduce by-catch and animals left to waste in areas where break-up prevents trap retrieval. This change would also reduce the potential for user conflict that arises between trappers and other user groups using trails in some areas during early and late coyote trapping season (bird or small game hunters with dogs, hikers, skiers, etc.). Hunting season for coyotes would remain open during this time.

**BACKGROUND:** Coyotes were first noted in Alaska shortly after the turn of the 20<sup>th</sup> century on the mainland of Southeast Alaska and then slowly expanded northward into the upper Tanana Valley from which they radiated in all directions. A population peak occurred around 1940; since

that time numbers have declined in many areas. Portions of the state with the highest densities of coyotes are the Kenai Peninsula, the Matanuska and Susitna valleys and the Copper River Valley.

Coyotes are opportunistic hunters, feeding mostly on snowshoe hares, microtines (mice and voles), carrion and other small fish, mammals, and insects. Coyotes form a strong pair bond with a typical social structure of a mated pair and offspring; most offspring disperse in the first year. In Alaska, coyotes are found mostly as mated pairs with an established territory. Lone coyotes are not unusual but are generally transients without established territories. Packs of coyotes are unusual in many places in Alaska, but territories have been documented as large as 40 square kilometers.

The natural history and reproductive cycle of coyotes is similar to wolves—sharing the same periods of mating (February–March) and pupping (April–May). One unique difference is that it is not uncommon for coyotes to move pups to new dens during spring, making denning coyotes susceptible to harvest in April.

Sealing of coyotes is not required in Region IV, therefore we have limited information acquired through the trapper questionnaire, one-on-one discussions with hunters and trappers, and periodic household surveys. A review of household surveys conducted in various single years from 2004–2014 indicate a wide range across the units in the harvest, use, and effort of residents to acquire coyote for subsistence uses. A few communities reported no harvest, use, or effort for coyote, but many others reported quite a few animals harvested and used. For example, in 2013 in Tazlina, an estimated 47 coyote were harvested, 5% of households used them, 6% of households attempted to harvest them, and 5% were successful. In Kenny Lake/Willow Creek in 2014, an estimated 25 animals were harvested; 8% of households used them, 10% of households attempted to harvest them, and 8% were successful. In Beluga in 2005/06, an estimated 10 coyote were harvested, and 21% of households used, attempted to harvest, and harvested them. In King Salmon in 2007, an estimated 14 coyote were harvested, and 4% of households used, attempted to harvest, and harvested coyote. In 2004 in Pedro Bay, survey respondents noted that the coyote population had increased, and that they thought the animals were responsible for reductions in grouse, hares, and foxes. Cantwell residents in 2012 reported that small mammal populations had decreased due to the coyote population. During a community review meeting of household survey results in Nelchina in 2013, participants commented that they believe that area hare, wolf, coyote, and lynx populations were down that year due to a low cycle in their long-term population patterns. Residents believed that they would see more of all of these species in the area in the future. More details about these household survey data are available upon request.

Currently most areas of the state provide trapping opportunity for wolves through the month of April but harvest over the last 5 years represents only 5% of total annual statewide wolf harvest (4% for April). Low wolf harvest indicates limited participation or difficulty in taking wolves through both trapping and hunting during this period. This may be due to the difficulty in accessing

many areas due to break-up. Pelt quality typically remains high in April but deteriorates quickly as spring progresses.

The department often receives requests by the public to align trapping seasons to simplify regulations and limit bycatch and supports these requests when biologically appropriate.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal. The department supports aligning seasons and simplifying regulations for similar species in similar or adjacent areas where appropriate. The board should consider whether adoption of this proposal continues to provide a normally diligent person a reasonable opportunity for success in harvesting coyote for subsistence uses.

**COST ANALYSIS:** Adoption of this proposal would not result in significant additional costs for the department.

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**PROPOSAL 9 – 5 AAC 84.270 (13). Furbearer Trapping for Wolves.** Extend the wolf trapping season in Units 13 and 16.

**PROPOSED BY:** Herb Mansavage

**WHAT WOULD THE PROPOSAL DO?** This proposal would extend the wolf trapping season in Units 13 and 16 by 31 days from April 30 to May 31.

**WHAT ARE THE CURRENT REGULATIONS?** The current wolf trapping regulations for Units 13 & 16 can be found in 5 AAC 84.270(13) and in the *2020–2021 Alaska Trapping Regulations*.

- Trapping season dates are October 15 to April 30 with no limit.
- Wolves must be sealed within 30 days after the close of the season.
- Wolves may be shot using firearms under a trapping license in Units 13 & 16.
- You may not shoot or assist in shooting a wolf until after 3:00 a.m. following the day in which you have flown in an airplane. However, you may shoot a wolf caught in a trap or snare on the same day you have flown.
- It is against the law to trap a wolf in Units 13 & 16 between October 15–November 9, or in April, with a steel trap or with a snare smaller than 3/32 inch in diameter.
- In Units 13 and 16B the hunting season is from August 10 to April 30 with a bag limit of 10 wolves per day, open to both residents and nonresidents.
- In Unit 16A the hunting season is from August 10 to April 30 with a bag limit of 10 wolves, but only 5 wolves may be taken per day, open to both residents and nonresidents.

There is a positive customary and traditional finding for wolves in Units 13 and 16B with amounts necessary for subsistence of 8–24 wolves and 0–5 wolves, respectively. Unit 16A is within the Anchorage-Matsu-Kenai nonsubsistence area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The wolf trapping season in Units 13 and 16 would be extended by 31 days from April 30 to May 31. Harvest rates for wolves are not expected to be impacted by this change and there is no conservation concern for wolves in Units 13 or 16. Extending the season into May will move further into the wolf denning period and den emergence. Pelt quality is satisfactory in April but deteriorates quickly as spring progresses. An increase in by-catch of nontarget species, including den-emerging brown and black bears, is expected, as will the number of animals left to waste in areas where break-up prevents trap retrieval. In more developed areas, this change would likely increase the potential for user conflicts that arise between trappers and other user groups using trails during a late wolf trapping season (bear baiters, bird or small game hunters with dogs, hikers, skiers, etc.).

**BACKGROUND:** Units 13 and 16 have a long history of wolf management. Prior to regulatory year (RY) 1988 same day land-and-shoot (SDA) was allowed under general trapping regulations and was a common method for taking wolves in Unit 13. Land-and-shoot has been specifically differentiated from ground-shooting in the sealing process only since RY86; therefore, the specific impacts of the land-and-shoot method were not monitored prior to RY86. When land-and-shoot was discontinued in RY88, the Unit 13 wolf population increased, despite consistent harvest pressure. The moose population soon began to decline due to harsh winters with deep snow (1988–1994) and increased wolf predation.

In January 2000, a Unit 13 wolf control plan was initiated under intensive management to benefit the moose population, though land-and-shoot harvest was not allowed until January 2004 (RY2003) when the current management objectives were instituted. Aerial shooting of wolves was allowed under wolf control permit conditions starting in RY2006. The Unit 13 wolf population has since declined and has been maintained at or near objective levels since the spring of 2006.

Wolves in Unit 13 are currently managed to reduce predation on ungulate populations by maximizing public wolf harvest when wolf numbers are within or above the population objective. Wolves are recognized as an integral part of the ecosystem throughout Unit 13 and are managed to ensure that human harvest does not eliminate the species from the management area.

In 2003 a wolf control implementation plan was initiated Unit 16B in response to declining moose numbers and a high wolf population. Initially, implementation of the plan included the use of snowmachines to take wolves; however, land-and-shoot wolf control began in December 2004 and was amended in February 2005 to include same-day aerial shooting (SDA) of wolves by permittees. In 2006 the SDA program boundaries were expanded to include a portion of 16A. Harvest in subsequent years from hunters, trappers, and SDA teams reduced the population to levels near the intensive management (IM) population objective.

Harvest rates for wolves are not expected to be impacted by this change and there is no conservation concern for wolves in Units 13 or 16 (Table 9-1). Currently most areas of the state provide trapping opportunity for wolves through the month of April. Harvest is low and represents only 5% of total annual statewide wolf harvest over the last 5 years reported through trapping surveys. This is likely due to the difficulty in accessing many areas due to break-up. Only 2 wolves have been reported trapped in April in Unit 13 over the last 5 years (12 wolves through hunting). In Unit 16, there are no reports of wolves taken through hunting through sealing records, and 1 report of a wolf taken through trapping in April.

Table 9-1. Total reported wolf harvest in Units 13 and 16, RY2015–2019, sealing records and trapping reports.

Reg. Year	Unit 13	Unit 16	Total
2015	56	4	60
2016	95	11	106
2017	89	6	95
2018	97	6	103
2019	73	17	90
Total	549	44	593

A review of household surveys conducted in various single years from 2005–2014 indicate a wide range across the two units in the harvest, use, and effort of residents to acquire wolves for subsistence uses. A few communities reported no harvest, use, or effort for wolves, but some other communities reported quite a few animals harvested and used. For example, in Gakona in 2012, an estimated 55 wolves were harvested; 2% of households used wolves, 5% attempted to harvest them, and 2% were successful. In 2012 in Cantwell, an estimated 2 wolves were harvested; 2% of households used wolves, 6% attempted to harvest, and 2% were successful. In Beluga in 2005–2006, an estimated 6 wolves were harvested; 29% of households used wolves, 36% of households attempted to harvest them, and 29% were successful. More details about these household survey data are available upon request.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** with regards to using trapping as a method of taking wolves in Units 13 and 16. extending the wolf trapping season further into break-up has the potential to prevent trappers from retrieving traps, which may result in leaving animals left to waste during pupping. It is expected that there will be an increase in by-catch of nontarget species, particularly black and brown bears who will have emerged from their dens during the late season. In more developed areas, this change would also likely increase the potential for user conflicts that arise between trappers and other user groups using trails during a late wolf trapping season (bear baiters, bird or small game hunters with dogs, hikers, skiers, etc.). The department **SUPPORTS** an increase in harvest opportunity when additional take does not

present a biological concern and recommends the board consider continuing to provide or extending late spring and summer hunting seasons for wolves if the public wants an increase in the opportunity to take wolves in units 13 and 16.

**COST ANALYSIS:** Adoption of this proposal would not result in significant additional costs for the department.

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**PROPOSAL 10** – 5 AAC 84.270 Furbearer Trapping & 92.095 Unlawful methods of taking furbearers; exceptions. Allow the harvest of beaver by bow and arrow under a trapping license in Units 9, 11, 13, 16 and 17.

**PROPOSED BY:** Alaska Bowhunters Association

**WHAT WOULD THE PROPOSAL DO?** This proposal would align regulations for taking beaver in Units 9, 11, 13, 16 and 17 by allowing archery throughout the trapping season provided the hide and/or meat is salvaged.

**WHAT ARE THE CURRENT REGULATIONS?** The current beaver trapping regulations can be found in 5 AAC 84.270 and in the *2020–2021 Alaska Trapping Regulations*.

- Beaver taken in Units 9,11, 13, 14A, 14B, and 17 must be sealed within 30 days after the close of the season.
- You may not disturb or destroy any beaver house or den.
- It is against the law to take beaver by any means other than a steel trap or snare except:
  - In Units 9 and 17 from April 15–May 31, a firearm may be used to take 2 beaver per day provided that the meat is salvaged for human consumption;
  - In Unit 17 a firearm or bow and arrow may be used to harvest beaver from December 1–April 14, provided that the meat is salvaged;
  - In Units 11, 13, and 16 from September 25–November 9, traps and snares must be submerged; and
  - In Unit 16 a firearm may be used to take beaver throughout the trapping season.

Unit	Season	Bag Limit
Units 9 and 17	Oct 10 – May 31	No limit
Units 9 and 17 <sup>1</sup>	Apr 15 – May 31 <sup>1</sup>	2 per day
Units 11, 13, and 16	Sept 25 – May 31	No limit

<sup>1</sup> During April 15–May 31 firearms may be used to take up to 2 beaver per day.

There is a positive customary and traditional use (C&T) finding for beaver in all units with a harvestable portion, and an amount reasonably necessary for subsistence (ANS) of 90% of the harvestable portion.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** By allowing beaver to be taken during the open trapping season with bow and arrow in Units 9, 11, 13, 16 and 17, the allowable method of take under trapping regulations would be aligned across the region.

Salvage may be difficult unless bowfishing gear is used because beaver that are shot in open water often sink, making retrieval difficult. Without sealing requirements in Unit 16, the additional legal incentive to salvage and the ability to track additional harvest under this method will not be possible.

**BACKGROUND:** Currently beaver may be harvested with a firearm under a trapping license in Units 1–5, 8, 9, 12, 17, 18, 19, 20A, 20C, 20E, 20F, 21, 22, 23, 24, and 25. In the early 2000s, a hunting season for beaver was established in Units 18, 21A, 21E, 22, and 23 with no closures and no bag limit. The addition of a hunting season was in response to an increase in the number of nuisance beaver requests from several local communities (i.e., Unit 18) and apparent range expansion (i.e., Units 22 & 23). Many of these game management units also allow archery as a legal a method for taking beaver under a trapping license (Units 12, 19, 20A, 20C, 20E, 20F, 21, 24 and 25). While many communities continue to consume beaver, most beavers are harvested for fur and as trapping bait.

Beaver sealing is still required in most of the region, which provides qualitative and quantitative assessments of beaver harvests; however, the sealing requirement for beaver taken in Unit 16 was eliminated in 2011 and no harvest information is available (Table 10-1).

**Table 10-1.** Annual beaver harvest under trapping regulations in Units 9, 11, 13, 16 and 17, and percent taken by ground shooting, RY 2015–19.

<b><u>Reg Year</u></b>	<b><u>Unit 9</u></b>	<b><u>Unit 11<sup>1</sup></u></b>	<b><u>Unit 13</u></b>	<b><u>Unit 16<sup>2</sup></u></b>	<b><u>Unit 17</u></b>
2015	117 (2%)	9	90 (8%)	45 (0%)	81 (10%)
2016	98 (2%)	3	142 (3%)	77 (5%)	66 (2%)
2017	71 (4%)	8	146 (0%)	14 (21%)	58 (9%)
2018	114 (2%)	12	104 (0%)	19 (5%)	38 (5%)
2019	42 (60%)	8	226 (4%)	1 (0%)	61 (7%)

<sup>1</sup> No beaver were taken with a firearm in Unit 11.

<sup>2</sup> Sealing of beavers is not required in Unit 16 and the number reported above reflects harvested beavers electively sealed by trappers or required to be sealed as a condition of a nuisance beaver permit.

The department does not have any conservation concerns for beavers in the proposed units. The amount of trapping effort across the region has declined, with some exceptions (i.e., Unit 13) and



appears to be a fraction of historical effort (harvest reflects that decline in effort). Observations of beaver sign during aerial surveys and activity as well as discussions with moose hunters, trappers, and department fisheries staff indicate that beavers are widely spread and abundant throughout most of the region.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this method and means proposal because it has not documented a biological concern for beaver populations in the proposed units. Anecdotal information suggests that beaver remain abundant across most of the region.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 11 – 5 AAC 92.095. Unlawful methods of taking furbearers; Exceptions.**

Allow archery as a legal method to take beaver under trapping regulations in Units 9, 11, 13, and 16.

**PROPOSED BY:** Alaska Bowhunters Association

**WHAT WOULD THE PROPOSAL DO?** This proposal would add archery as a legal means to take beaver under trapping regulations for food in GMUs 9 and 17 and throughout Units 9, 11, 13 and 16 for the entire trapping season. The hide or meat would be required to be salvaged.

**WHAT ARE THE CURRENT REGULATIONS?** The current beaver trapping regulations can be found in 5 AAC 84.270 and in the *2020–2021 Alaska Trapping Regulations*.

- Beaver taken in Units 9–11, 13, 14A, 14B, and 17 must be sealed within 30 days after the close of the season.
- You may not disturb or destroy any beaver house or den.
- It is against the law to take beaver by any means other than a steel trap or snare except:
  - In Units 9 and 17 from April 15–May 31, a firearm may be used to take 2 beaver per day provided that the meat is salvaged for human consumption;
  - In Unit 17 a firearm or bow and arrow may be used to harvest beaver from December 1–April 14, provided that the meat is salvaged;
  - In Units 11, 13, and 16 from September 25–November 9, traps and snares must be submerged; and
  - In Unit 16 a firearm may be used to take beaver throughout the trapping season.

Unit	Season	Bag Limit
Units 9 and 17 <sup>1</sup>	Oct 10 – May 31	No limit

	Apr 15 – May 31 <sup>1</sup>	2 per day
Units 11, 13, and 16	Sept 25 – May 31	No limit

<sup>1</sup> During April 15–May 31 firearms may be used to take up to 2 beaver per day.

There is a positive customary and traditional use (C&T) finding for beaver in all units with a harvestable portion, and an amount reasonably necessary for subsistence (ANS) of 90% of the harvestable portion.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal allows beaver to be taken by bow and arrow during the open trapping season from October 10–May 31 and April 15–May 31 in Units 9 & 17, and from September 25–May 31 in Units 11, 13 & 16. The hide and/or meat would need to be salvaged.

Salvage of beaver may be difficult unless bowfishing gear is used: beaver shot in open water often sink, making retrieval difficult. Without sealing requirements in Unit 16 the additional legal incentive to salvage is absent and tracking additional harvest under this method will not be possible.

**BACKGROUND:** Currently beaver may be harvested with a firearm under a trapping license in Units 1–5, 8, 9, 12, 17, 18, 19, 20A, 20C, 20E, 20F, 21, 22, 23, 24, and 25. In the early 2000s, a hunting season for beaver was established in Units 18, 21A, 21E, 22, and 23 with no closures and no bag limit. The addition of a hunting season was in response to an increase in the number of nuisance beaver requests from several local communities (i.e., Unit 18) and apparent range expansion (i.e., Units 22 & 23). Many of these game management units also allow archery as a legal a method for taking beaver under a trapping license (Units 12, 19, 20A, 20C, 20E, 20F, 21, 24 and 25). While many communities continue to consume beaver, most beavers are harvested for fur and as trapping bait.

Beaver sealing is still required in most of the region, which provides qualitative and quantitative assessments of beaver harvests; however, the sealing requirement for beaver taken in Unit 16 was eliminated in 2011.

**Table 11-1.** Annual beaver harvest under trapping regulations in Units 9, 11, 13 and 16, and percent taken by ground shooting, RY 2015–19.

Reg Year	Unit 9	Unit 11 <sup>1</sup>	Unit 13 <sup>3</sup>	Unit 16 <sup>2</sup>
2015	117 (2%)	9	90 (8%)	45 (0%)
2016	98 (2%)	3	142 (3%)	77 (5%)
2017	71 (4%)	8	146 (0%)	14 (21%)
2018	114 (2%)	12	104 (0%)	19 (5%)
2019	42 (60%)	8	226 (4%)	1 (0%)

<sup>1</sup> No beaver were taken with a firearm in Unit 11.

<sup>2</sup> Sealing of beavers is not required in Unit 16 and the number reported above reflects harvested beavers required to be sealed as a condition of a nuisance beaver permit or elective sealing by trapper.

<sup>3</sup> Unit 13 the number reported above as shot reflects harvested beavers required to be sealed as a condition of a nuisance beaver permit.

Recovering carcasses of beaver shot in the water can be difficult or impossible depending on water depth and clarity. Beaver must be shot through the skull (a very small target) or they usually dive and are not seen again, preventing salvage.

The department does not have any conservation concerns for beavers in the proposed units. The amount of trapping effort across the region has declined and appears to be a fraction of historical effort (harvest reflects that decline in effort), although effort and harvest has increased in Unit 13 in recent years. Observations of beaver sign during aerial surveys and activity as well as discussions with moose hunters, trappers, and department fisheries staff indicate that beavers are widely spread and abundant throughout most of the units.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this method and means proposal because it has not documented a biological concern for beaver populations in these proposed units. Anecdotal information suggests that beaver remain abundant in most units.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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Proposal 12: Reauthorize the antlerless moose season in Unit 17A was replaced by Proposal 200.

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**PROPOSAL 13 - 5 AAC 85.045. Hunting seasons and bag limits for moose.** Increase the number of nonresident draw hunt permits and extend the nonresident season in Unit 17A.

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** If adopted this proposal would extend the nonresident moose hunting season in Unit 17A under draw moose permit (DM) DM570 by 10 days and increase the “up to” number of permits from 50 to 100.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations for Unit 17A can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

	<b>Resident Open Season</b>	<b>Nonresident Open</b>
<b>Units and Bag Limits</b>	<b>(Subsistence &amp; General Hunts)</b>	<b>Season</b>

Unit 17(A)

Up to 2 moose per regulatory year, only as follows:

RESIDENT HUNTERS:

1 moose by regulatory permit only, or

Aug. 25–Sept. 25

(Subsistence hunt only)

1 antlered bull by registration permit; during the period Dec. 1–Last day of Feb. a season of up to 31 days may be announced by emergency order; or

Winter season to be announced by emergency order

(Subsistence hunt only)

1 antlerless moose by registration permit; during the period Dec. 1–Last day of Feb. a season of up to 31 days may be announced by emergency order;

Winter season to be announced by emergency order

(Subsistence hunt only)

NONRESIDENT HUNTERS:

1 bull with 50-inch antlers or antlers with 4 or more brow

tines on one side, by drawing permit only; up to 50 permits may be issued.

Sept. 5–Sept. 15

...

- Nonresidents must complete an orientation that requires viewing the ADF&G videos “Is This Moose Legal” and “Field Care of Big Game” and complete a quiz prior to hunting if not accompanied in the field by an Alaska-licensed guide or resident family member within the second-degree of kindred.
- Aircraft access is restricted for 2 miles on either side of the Togiak River, Togiak National Wildlife Refuge Lake, Izavieknik River, Upper Togiak Lake (Second Lake), Ongivinuk River, and along the lower five miles of both the Kemuk (also known as Narogurum) and Nayorurun (also known as Nagugun or Kashaiaik) rivers. For the Nayorurun and Kemuk rivers, this restriction only applies to the lower 5 miles of these rivers (Figure 13-1).

There is a positive customary and traditional use (C&T) finding for moose in Unit 17 with an amount reasonably necessary for subsistence (ANS) of 100–150 moose.

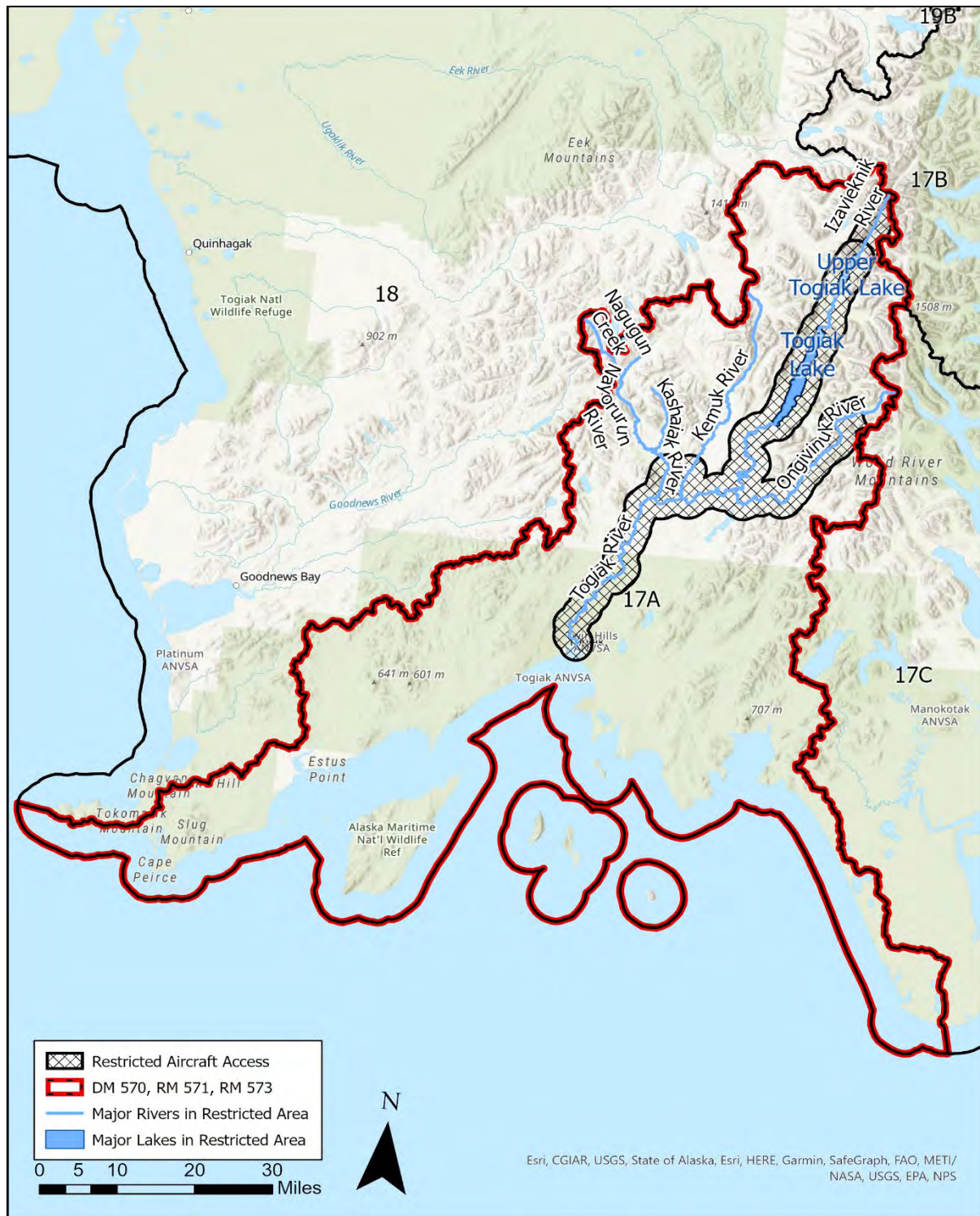
The board has found that the moose population in GMU 17A does not provide for high levels of harvest for human consumption.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** By extending the nonresident hunting season by 10 days and increasing the “up to” number of drawing permits from 50 to 100, we anticipate additional and consistent bull harvest from a robust moose population that is above objectives. The season end date of September 25 coincides with resident registration moose permits RM571 and RM573 season end dates. Nonresident hunters are required to complete a hunter orientation if not accompanied in the field by an Alaska-licensed guide or resident family member within the second-degree of kindred.

**BACKGROUND:** Moose are relative newcomers to much of Unit 17A, with only about 35 animals found to be present along the eastern border in 1980. Since then, moose have continued to increase in population size and expand throughout Unit 17A and west into Unit 18. Moose management in Unit 17A has been guided by the Unit 17A Moose Management Group, consisting of members from the Bristol Bay Federal Subsistence Regional Advisory Council, the Nushagak and Togiak Fish and Game advisory committees, the Togiak National Wildlife Refuge, and the Alaska Department of Fish and Game. This group produced a Unit 17A Moose Management Plan that went through several iterations during 1996–2013, and while the board did not adopt the plan, it did take information in the plan into consideration to set the existing hunt structure. The population objective for Unit 17A listed in the plan is 800–1,200 moose.

The Unit 17A moose population is above population objective (N=2,370). Unit 17A provides quality moose habitat that supports a robust moose population. The 2013 Moose Management group established a population objective of 800–1,200 moose to prevent the population from increasing to numbers above what the landscape can support.

The Unit 17A 2019 spring moose population estimate was 2,139 moose ( $\pm 495$ ). The moose population in Unit 17A continues to grow and can sustain additional harvest, especially because winter hunt quotas have rarely been met in the last 4 years. Out of concern for over-browsing, which would impact the quality and quantity of forage available for moose in 17A, additional harvest opportunities are warranted by extending the non-resident hunting season by 10 days and increasing the “up to” number of permits from 50 to 100. Management objectives for this population recognize the importance of this population expanding into neighboring areas to provide additional harvest opportunities. This population is likely responsible in part for the recent growth of adjacent populations, particularly in the north and west.



**Figure 13-1.** Riparian areas of restricted aircraft access for hunting in Unit 17A.

**DEPARTMENT COMMENTS:** The department **SUPPORTS** this proposal to increase harvest opportunity for nonresident hunts. The moose population in Unit 17A remains above objectives and has good productivity.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 14 - 5 AAC 85.045 Hunting seasons and bag limits for moose.** Establish fixed-season dates for resident registration moose hunts RM575 & RM576 in Unit 17A.

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** This proposal would change the *to be announced* registration moose hunts (RM575 and RM576) from an up to 31-day period between December 1 and the last day of February to a fixed-season of January 1 to the last day of February. Hunts would still close by emergency order (EO) when quotas are reached.

**WHAT ARE THE CURRENT REGULATIONS?**

<b>Units and Bag Limits (15)</b>	<b>Resident Open Season (Subsistence and General Hunts)</b>	<b>Nonresident Open Season</b>
Unit 17(A)		
Up to 2 moose per regulatory year only as follows:		
RESIDENT HUNTERS:		
1 moose by registration permit only; or	Aug. 25–Sept. 25 (Subsistence hunt only)	
1 antlered bull by registration permit; during the period Dec. 1 –Last day of Feb. a season of up to 31 days may be announced by emergency order; or	Winter Season to be Announced by Emergency Order (Subsistence hunt only)	
1 antlerless moose by registration permit; during the period Dec. 1 –Last day of Feb. a season of up to 31 days may be announced by emergency order;	Winter Season to be Announced by Emergency Order (Subsistence hunt only)	
NONRESIDENT HUNTERS:		



1 bull with 50-inch antlers or antlers  
with 4 or more brow tines on one  
side, by drawing permit only; up to  
50 permits may be issued.

Sept. 5–Sept. 15

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- Nonresidents must complete an orientation that requires viewing the ADF&G videos “Is This Moose Legal” and “Field Care of Big Game”, and complete a quiz prior to hunting if not accompanied in the field by an Alaska-licensed guide or resident family member within the second-degree of kindred.
- Aircraft access is restricted for 2 miles on either side of the Togiak River, Togiak National Wildlife Refuge Lake, Izavieknik River, Upper Togiak Lake (Second Lake), and Ongivinuik River, and along the lower five miles of both the Kemuk (also known as Narogurum) and Naylorun (also known as Nagugun or Kashaiaik) rivers. For the Naylorun and Kemuk rivers, this restriction only applies to the lower 5 miles of these rivers.

There is a positive customary and traditional use (C&T) finding for moose in Unit 17 with an amount reasonably necessary for subsistence (ANS) of 100–150 moose.

The board has found that the moose population in GMU 17A does not provide for high levels of harvest for human consumption.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would change the *to be announced* registration moose hunts RM575 & 576 from an up to 31-day period between December 1 and the last day of February to a fixed-season of January 1 to the last day of February. Hunts would still close by emergency order when quotas are reached. The fixed season provides a 60-day season that should capture a period conducive to travelling, although taking an antlered bull in January–February will likely be difficult due to antler drop.

**BACKGROUND:** Moose are relative newcomers to much of Unit 17A, with only about 35 animals found to be present along the eastern border in 1980. Since then, moose have continued to increase in population size and expand throughout Unit 17A and west into Unit 18. Moose management in Unit 17A has been guided by the Unit 17A Moose Management Group, consisting of members from the Bristol Bay Federal Subsistence Regional Advisory Council, the Nushagak and Togiak Fish and Game advisory committees, the Togiak National Wildlife Refuge, and the Alaska Department of Fish and Game. This group produced a Unit 17A Moose Management Plan that went through several iterations during 1996–2013, with the 2013 plan being used as the guiding document today. This plan has goals and objectives for hunter opportunity, harvest allocation, habitat mapping and population monitoring. The population objective for Unit 17A listed in the plan is 800–1,200 moose.

Minimum counts of moose in Unit 17A were conducted in 14 different years during the period of 1991–2011, revealing a steady increase in moose numbers over time, with 1,166 moose counted in March 2011. During 2012–2015, surveys were not conducted due to inadequate snow conditions. Beginning in fall 2016, a Geospatial Population Estimator (GSPE) replaced the minimum count for enumerating moose in Unit 17A. In spring 2017, this survey technique produced an estimate corrected for sightability of 2,370 moose, ( $\pm 563$ ).

The department is currently managing this population with antlered registration and drawing hunts, as well as antlerless registration hunts (Table 14-1). Registration hunts RM575 and RM576 were created by the BOG in 2011 with the intent of targeting 1 antlered bull (RM575) and 1 antlerless moose (RM576). These hunts are opened by EO each year and may only be extended up to 31 days by EO to target weather conditions suitable for travel. Since 2012 these hunts have been extended by emergency order every year (except the 2015–2016 winter season) because poor winter travelling conditions have prevented users from accessing moose in the first 31-day period. Harvest under RM575 remains low but consistent with annual participation, averaging 34 hunters and a stable harvest of average of 7 moose harvested annually between 2015–2019 (Table 14-2). The harvest under RM576 has increased from an average of 17 moose per year to 29 moose during this period (Table 14-3). Participation has increased in RM576 from an average of 40 to 56 hunters since 2015 for a success rate of 48%.

**Table 14-1.** Annual moose harvest in Unit 17A, regulatory years 2015–2019<sup>a</sup>.

Reg. Year	Successful Hunters	Unsuccessful Hunters	Male	Female	Unk.	Total Permits	Total Harvest
2015	60	146	50	10	0	207	60
2016	85	158	65	20	0	243	85
2017	73	157	55	18	0	231	73
2018	65	301	42	23	0	366	65
2019	108	289	65	40	3	399	108

<sup>a</sup> RM 571, RM 573, RM575, RM576 and DM570

**Table 14-2.** Annual harvest under winter registration moose permit RM575, Unit 17A, regulatory years 2015–2019.

Reg. Year	Successful Hunters	Unsuccessful Hunters	Male	Female	Unk. Sex	Total Permits	Total Harvest
2015	7	24	0	7	0	31	7
2016	7	26	0	7	0	33	7
2017	7	35	0	7	0	42	7
2018	8	32	0	8	0	40	8
2019	5	47	0	5	0	52	5

**Table 14-3.** Annual harvest under winter registration moose permit RM576, Unit 17A, regulatory years 2015–2019.

Reg. Year	Successful Hunters	Unsuccessful Hunters	Male	Female	Unk. Sex	Total Permits	Total Harvest
2015	11	21	0	1	10	32	11
2016	22	26	0	2	20	48	22
2017	21	26	0	3	18	47	21
2018	15	26	0	0	15	41	15
2019	43	27	1	7	35	70	43

**DEPARTMENT COMMENTS:** This department **SUPPORTS** this proposal. Given that the 17A population is robust and continues to remain above objectives, the department recommends administering these hunts by registration permit but with a set season; these hunts will continue to be closed by emergency order when the established harvest quota is reached. This hunt structure allows hunters the flexibility to engage in hunting activities as soon as conditions are appropriate, for longer periods, and facilitates our ability to bring this population within objectives.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 15 – 5 AAC 85.045 Hunting seasons and bag limits for moose.** Establish a resident registration archery hunt for bull moose in 17B.

**PROPOSED BY:** Mike Harris

**WHAT WOULD THE PROPOSAL DO?** Creates a 10-day registration moose hunt for bull moose limited to resident certified bowhunters only within Unit 17B with season dates of September 16 to September 25. Residents are subject to the same bag limit and reporting requirements as outlined for RM583. RM583 is an existing resident-only hunt that is open to any weapon from August 20 to September 15 for 1 bull in Units 17B and 17C.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

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**Units and Bag Limits**

**Resident  
Open Season**

**Nonresident  
Open Season**

Unit 17(B), that portion in the  
Unit 17(B) nonresident closed  
area

RESIDENT HUNTERS:

1 bull by registration permit only;	Aug. 20 – Sept. 15
However, during the period Sept.	Dec. 1 – Dec. 31
1 – Sept. 15, spike fork bulls and bulls	
with 50-inch antlers or antlers with 3	
or more brow tines on one side may be	
taken with a harvest ticket;	

1 antlered bull by registration permit only	Dec. 1 – Dec. 31
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Remainder of Unit 17(B)

RESIDENT HUNTERS:

1 bull by registration permit only;	Aug. 20 – Sept. 15
however, during the period	Dec. 1 – Dec. 31
Sept. 1 – Sept. 15, spike-fork bulls and	
bulls with 50-inch antlers or antlers with	
3 or more brow tines on one side	
may be taken with a harvest ticket; or	

1 antlered bull by registration permit only	Dec. 1 – Dec. 31
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Nonresident moose hunting opportunity in Unit 17B is limited to RM587 with a bag limit of 1 bull with 50-inch antlers or 4 or more brow tines on at least 1 side. Dates are September 5–15 and nonresident orientation is required. There is a general season in Unit 17B remainder.

The Board of Game (BOG) has identified moose in Unit 17B as important for providing high levels of harvest for consumptive use and has established a population objective of 4,900–6,000 and a harvest objective of 200–400 moose. The Unit 17 moose population has a positive C&T finding. The unit wide ANS is 100–150 moose.

The Upper Mulchatna Controlled Use Area, which is the full extent of Unit 17B, is closed to the use of any motorized vehicle for hunting purposes including transportation of hunting gear, or

parts of big game from August 1 to November 1 except that the use of a boat or aircraft is not prohibited and using a motorized vehicle in a hunting camp is not prohibited.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If the proposal were adopted an additional 10-day registration moose hunt for resident certified bow hunters in Unit 17B would be created from September 16–25 after all other moose hunts in Unit 17B have closed. The proposed hunt period will be further entering the rut and the susceptibility of bulls to calling increases. Only 3 moose have been reported taken with a bow and arrow in Unit 17B since 2015; therefore, harvest is not expected to increase considerably.

**BACKGROUND:** Unit 17 encompasses diverse habitats ranging from several mountain ranges (Ahklun, Wood River, and Neacola mountains), to the Nushagak Hills that make up the northern portion of Unit 17B, to large expanses of wet meadow and tundra habitat scattered throughout the unit. Unit 17B is defined by 2 large river systems, the Nushagak and Mulchatna rivers, which converge near the southern border of 17B and continue on as the Nushagak River, defining a major portion of Unit 17C. These river corridors contain excellent moose habitat with willows (*Salix spp.*), cottonwood (*Populus balsamifera*), alder (*Alnus spp.*), and spruce (*Picea spp.*). Numerous tributaries to the Nushagak and Mulchatna rivers provide additional riparian habitat that is utilized by moose.

Unit 17 has historically been a difficult place to obtain meaningful moose population information. Early winter trend counts have been unreliable because lack of snow limits the ability to detect moose. Abundance estimates have been nearly as difficult due to the lack of snow and weather that allows for a stratification survey followed by survey effort, which requires a 7–8 day period of decent survey conditions. Moose surveys in Unit 17B are done every 3 years due to short weather windows and the large geographical area. The most recent survey in 17B was completed in the spring of 2017 and only covered the western zone (17B-West) and therefore does not provide enough information to determine if the population is in objective within Unit 17B (Table 18-1). Given that the estimate for this survey in 17B-West was 1,137 moose in RY09 and the historical estimates for 17B-East have been fewer than 2,000 animals, it is likely that the population remains below the IM population objectives for 17B (4,900–6,000) when combining the east and west portions of the unit. The data do suggest that the population remains stable.

**Table 18-1.** Unit 17 moose population estimation surveys, regulatory years 2000–2019.

Survey Area	Regulatory year	Population Estimate	Moose/mi <sup>2</sup>	Minimum % Calves
17B-West <sup>a</sup>	RY00	1,202 ( $\pm$ 141)	0.22	5
	RY05	1,210 ( $\pm$ 120)	0.22	13
	RY09	1,137 ( $\pm$ 159)	0.21	8
	RY17	1,497 ( $\pm$ 186)	0.38	16
17B-East <sup>b</sup>	RY01	1,953 ( $\pm$ 254)	0.46	4
	RY08 <sup>c</sup>	1,466 ( $\pm$ 424)	0.37	8

<sup>a</sup> That area of the Nushagak River drainage upstream of the confluence of the Nushagak and Mulchatna rivers.

<sup>b</sup> That area of the Mulchatna River drainage upstream of the confluence of the Nushagak and Mulchatna rivers.  
(Does not include that area of Lake Clark National Park within Unit 17B).

<sup>c</sup> Estimate for entire survey area; however, high winds/turbulence prevented counting in some selected sample units, especially some considered High Density strata in riparian areas of the lower Mulchatna River.

Moose hunting opportunities in Unit 17B for residents are currently managed under both the general season harvest ticket and registration permit hunts RM583 and RM585 (see Proposal 18 and Table 15-2). RM583 and RM585 hunt areas cover both Unit 17B and Unit 17C. For the past few years RM585 opportunity during the month of December has been listed as “may be announced” due to population concerns in Unit 17C. Under the RM583 fall season, the legal bag limit is 1 bull.

**Table 15-2.** Annual reported harvest and method of take for resident moose hunts in Unit 17B, RY2015–2019.

Regulatory Year	Reported Hunting	Successful Harvest	Method of Take			Success Rate
			Rifle	Bow	Unknown	
2015	129	43	39	0	4	33%
2016	160	55	52	0	3	34%
2017	158	40	39	0	1	25%
2018	164	40	40	0	0	24%
2019	159	50	49	1	0	31%

Fall moose harvest by residents in Unit 17B increases slightly as the season progresses and has averaged 46 moose annually over the last 5 years. Hunter participation has increased during this period from 129 to 164 with a declining hunter success (Table 15-2; average 30%).

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of moose hunting opportunity to archery hunters; however, creating a 10-day registration hunt for hunters beyond the general season, when other hunts have concluded and bulls are increasingly susceptible to calls, may increase the harvest pressure on a population seemingly not meeting IM objectives, depending on hunter interest.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 16 – 5 AAC 85.045. Hunting seasons and bag limits for moose.** Establish a registration bull moose hunt open to nonresident certified bowhunters only within Unit 17B remainder.

**PROPOSED BY:** Mike Harris

**WHAT WOULD THE PROPOSAL DO?** This proposal would establish a registration moose hunt (RM) for only nonresident certified bowhunters for 1 bull moose with 50-inch antlers, or antlers with at least 4 or more brow tines on at least 1 side in Unit 17B remainder. The season would be September 16–September 25 and nonresident hunters would have to complete the nonresident hunter orientation prior to hunting.

**WHAT ARE THE CURRENT REGULATIONS?** The remainder of Unit 17B is defined as the area of Unit 17B outside of the closed river corridors of the Nushagak and Mulchatna rivers (and portions of their tributaries) that is the Unit 17B Nonresident Closed Area established to restrict the take of caribou by nonresidents and reduce hunter conflicts (Figure 16-1). Currently nonresident opportunity is available under a general season moose harvest ticket (GM) with a season date of September 5–September 15.

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<b>Units and Bag Limits</b>	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
Unit 17(B), that portion in the Unit 17(B) nonresident closed area		

**RESIDENT HUNTERS:**

1 bull by registration permit only; However, during the period Sept. 1 – Sept. 15, spike fork bulls and bulls with 50-inch antlers or antlers with 3 or more brow tines on one side may be taken with a harvest ticket;	Aug. 20 – Sept. 15 Dec. 1 – Dec. 31
1 antlered bull by registration permit only	Dec. 1 – Dec. 31

NONRESIDENT HUNTERS:

Sept. 5 – Sept. 15

1 bull with 50-inch antlers  
or antlers with 4 or more brow  
tines on one side, by registration  
permit only; up to 75 permits  
may be issued.

Remainder of Unit 17(B)

RESIDENT HUNTERS:

1 bull by registration permit only;      Aug. 20 – Sept. 15  
however, during the period      Dec. 1 – Dec. 31  
Sept. 1 – Sept. 15, spike-fork bulls and  
bulls with 50-inch antlers or antlers with  
3 or more brow tines on one side  
may be taken with a harvest ticket; or

1 antlered bull by registration permit only      Dec. 1 – Dec. 31

NONRESIDENT HUNTERS:

Sept. 5 – Sept. 15

1 bull with 50-inch antlers  
or antlers with 4 or more brow  
tines on one side

...

Nonresidents must complete an orientation that requires viewing the ADF&G videos “Is This Moose Legal” and “Field Care of Big Game” and complete a quiz prior to hunting if not accompanied in the field by an Alaska-licensed guide or resident family member within the second-degree of kindred.

Additional nonresident opportunity exists in Unit 17B under registration moose permit RM587, which is open from September 1 to September 15 with a bag limit of 1 bull moose with 50-inch antlers or antlers with at least 4 or more brow tines on at least 1 side

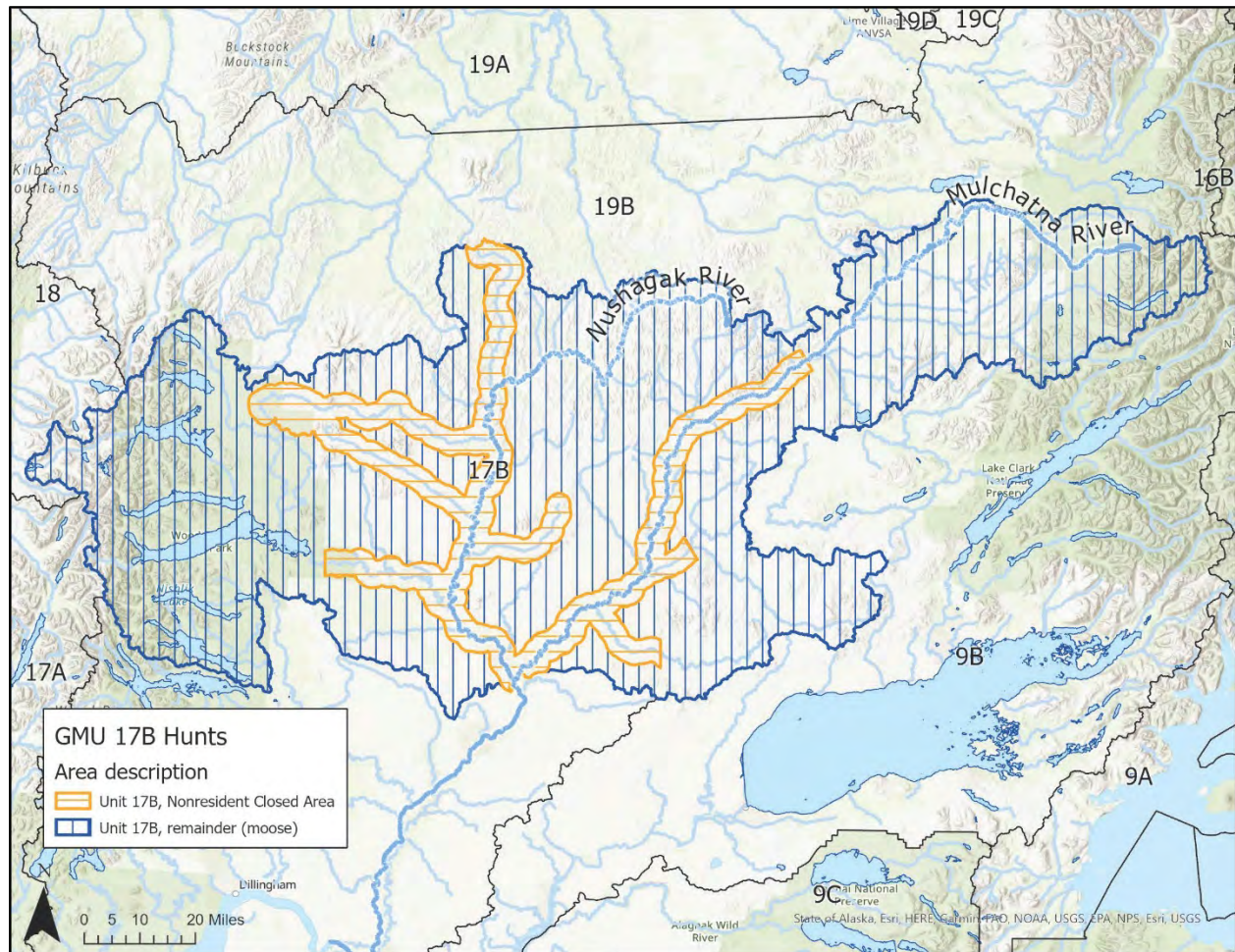
For residents there are 3 hunting options – two of which are in the fall. The general season is September 1–15 (spike-fork, 50-inch, 3 or more brow tines) and registration moose hunt RM583 has a season of August 20–September 15 for 1 bull moose.

The Board of Game (BOG) has identified moose in Unit 17B as important for providing high levels of harvest for consumptive use and has established a population objective of 4,900–6,000 and a



harvest objective of 200–400 moose. The Unit 17 moose population has a positive C&T finding. The unitwide ANS is 100–150 moose.

The Upper Mulchatna Controlled Use Area, which is the full extent of Unit 17B, is closed to the use of any motorized vehicle for hunting purposes, including transportation of their hunting gear, or parts of big game, from August 1 to November 1, except that the use of a boat or aircraft is not prohibited and use of motorized vehicles in a hunting camp is not prohibited.



**Figure 16-1.** Location of Unit 17B remainder and the Nonresident Closed Area in Unit 17B, southwest Alaska.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If this proposed nonresident late season archery hunt of September 16–25 is adopted, nonresident certified bowhunters would have a noncompetitive opportunity to harvest bulls in Unit 17B remainder that will be increasingly susceptible to calling. Only 3 moose have been reported taken with a bow and arrow in Unit 17B since 2015; therefore, harvest is not expected to increase considerably.

**BACKGROUND:** Unit 17 encompasses diverse habitats ranging from several mountain ranges (Ahklun Mountains, Wood River Mountains, and Neacola Mountains), to the Nushagak Hills that make up the northern portion of Unit 17B, to large expanses of wet meadow and tundra habitat scattered throughout the unit. Unit 17B is defined by 2 large river systems, the Nushagak and Mulchatna rivers, which converge near the southern border of 17B and continue on as the Nushagak River, defining a major portion of Unit 17C. These river corridors contain excellent moose habitat with willows (*Salix spp.*), cottonwood (*Populus balsamifera*), alder (*Alnus spp.*), and spruce (*Picea spp.*). Numerous tributaries to the Nushagak and Mulchatna rivers provide additional riparian habitat that is utilized by moose.

Unit 17 has historically been a difficult place to obtain meaningful moose population information. Early winter trend counts have been unreliable because lack of snow limits the ability to detect moose. Abundance estimates have been nearly as difficult due to the lack of snow and weather that allows for a stratification survey followed by survey effort, which requires a 7–8 day period of decent survey conditions. Moose surveys in Unit 17B are done every 3 years due to short weather windows and the large geographical area. The most recent survey in 17B was completed in the spring of 2017 and only covered the western zone (17B-West) and therefore does not provide enough information to determine if the population is in objective within Unit 17B (Table 16-1). Given that the estimate for this survey in 17B-West was 1,137 moose in RY09 and the historical estimates for 17B-East have been fewer than 2,000 animals, it is likely that the population remains below the IM population objectives for 17B (4,900–6,000) when combining the east and west portions of the unit. The data do suggest that the population remains stable.

**Table 16-1.** Unit 17B moose population estimation surveys, regulatory years 2000–2017.

Survey Area	Regulatory year	Population Estimate	Moose/mi <sup>2</sup>	Minimum % Calves
17B-West <sup>a</sup>	RY00	1,202 ( $\pm$ 141)	0.22	5
	RY05	1,210 ( $\pm$ 120)	0.22	13
	RY09	1,137 ( $\pm$ 159)	0.21	8
	RY17	1,497 ( $\pm$ 186)	0.38	16
17B-East <sup>b</sup>	RY01	1,953 ( $\pm$ 254)	0.46	4
	RY08 <sup>c</sup>	1,466 ( $\pm$ 424)	0.37	8

<sup>a</sup> That area of the Nushagak River drainage upstream of the confluence of the Nushagak and Mulchatna rivers.

<sup>b</sup> That area of the Mulchatna River drainage upstream of the confluence of the Nushagak and Mulchatna rivers. (Does not include that area of Lake Clark National Park within Unit 17B).

<sup>c</sup> Estimate for entire survey area; however, high winds/turbulence prevented counting in some selected sample units, especially some considered High Density strata in riparian areas of the lower Mulchatna River.

Nonresident moose hunting opportunities in Unit 17B are offered under both a general season and a registration hunt RM587. User conflicts and competition for moose in Unit 17B led to changes in the permit hunt structure for nonresident hunters. Instead of a harvest ticket, the river corridors of the Mulchatna and Nushagak rivers in Unit 17B require a registration permit for nonresident hunters with a current limit of 75 permits. This lessens the potential pressure for nonresident moose hunting along the rivers where local residents focus their efforts for their subsistence moose harvest. However, outside the two-mile river corridors, nonresidents can hunt with a general season moose harvest ticket with no restrictions on the number issued.

Nonresident harvest under general season in Unit 17B increases slightly as the season progresses and has averaged 23 moose annually over the last 5 years (Table 16-2). Participation has essentially doubled during this period, from 29 to 74, with the success rate decreasing by approximately 2%.

**Table 16-2.** Annual nonresident moose hunters reported harvest under general season moose harvest for RY2015–2019 in Unit 17B remainder.

Regulatory Year	Reported Hunting	Successful Harvest	Method of Take			Success Rate
			Rifle	Bow	Unknown	
2015	29	13	13	0	0	45%
2016	40	19	19	0	0	48%
2017	55	20	20	0	0	36%
2018	74	31	31	0	0	42%
2019	64	30	29	1	0	47%

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of moose hunting opportunity to nonresident archery hunters; however, creating a 10-day registration hunt for hunters beyond the general season, when other hunts have concluded and bulls are increasingly susceptible to calls, may increase the harvest pressure on a population seemingly not meeting IM objectives, depending on hunter interest.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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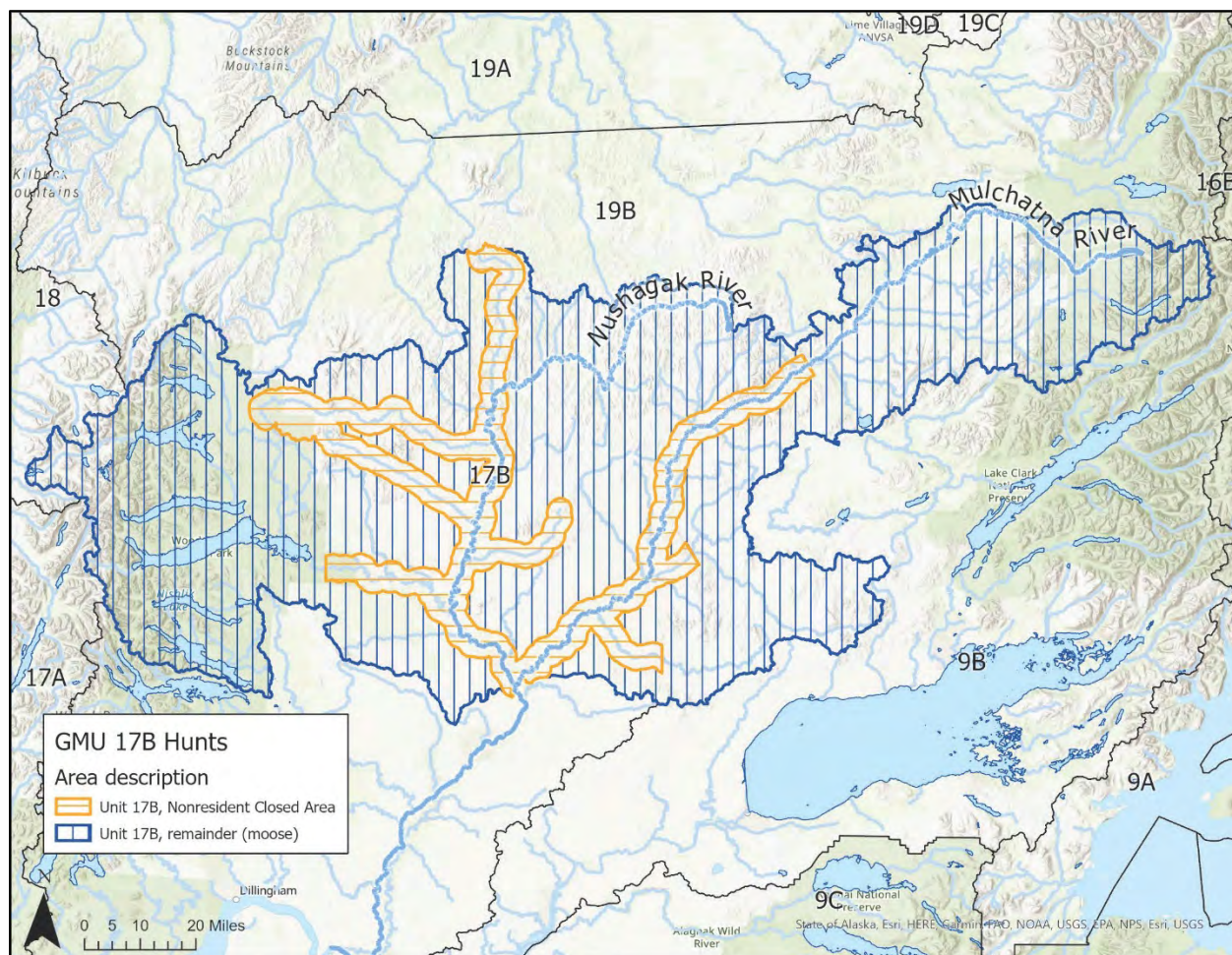
**PROPOSAL 17 – 5 AAC 85.045 Hunting seasons and bag limits for moose.** Establish a registration bull moose archery only hunt for certified bowhunters in Unit 17B.

**PROPOSED BY:** Alaska Bowhunters Association

**WHAT WOULD THE PROPOSAL DO?** Creates a 10-day registration moose hunt for bull moose limited to certified bowhunters within Unit 17B with season dates of September 16 to



September 25. Resident bag limit is 1 bull and nonresidents would be allowed to harvest 1 bull moose with 50-inch antlers or 4 or more brow tines on at least 1 side.



**Figure 17-1.** Location of Unit 17B remainder and the Nonresident Closed Area in Unit 17B, southwest Alaska.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.045 and in the *2020-2021 Alaska Hunting Regulations*.

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#### Units and Bag Limits

#### Resident Open Season

#### Nonresident Open Season

Unit 17(B), that portion in the  
Unit 17(B) nonresident closed  
area

RESIDENT HUNTERS:

1 bull by registration permit only; Aug. 20 – Sept. 15  
However, during the period Sept. Dec. 1 – Dec. 31  
1 – Sept. 15, spike fork bulls and bulls  
with 50-inch antlers or antlers with 3  
or more brow tines on one side may be  
taken with a harvest ticket;

1 antlered bull by registration permit only Dec. 1 – Dec. 31

NONRESIDENT HUNTERS:

Sept. 5 – Sept. 15

1 bull with 50-inch antlers  
or antlers with 4 or more brow  
tines on one side, by registration  
permit only; up to 75 permits  
may be issued.

Remainder of Unit 17(B)

RESIDENT HUNTERS:

1 bull by registration permit only; Aug. 20 – Sept. 15  
however, during the period Dec. 1 – Dec. 31  
Sept. 1 – Sept. 15, spike-fork bulls and  
bulls with 50-inch antlers or antlers with  
3 or more brow tines on one side  
may be taken with a harvest ticket; or

1 antlered bull by registration permit only Dec. 1 – Dec. 31

NONRESIDENT HUNTERS:

Sept. 5 – Sept. 15

1 bull with 50-inch antlers  
or antlers with 4 or more brow  
tines on one side

...

Nonresidents must complete an orientation that requires viewing the ADF&G videos “Is This Moose Legal” and “Field Care of Big Game” and complete a quiz prior to hunting if not accompanied in the field by an Alaska-licensed guide or resident family member within the second-degree of kindred.

Additional nonresident opportunity exists in Unit 17B under registration moose permit RM587 which is open from September 1 to September 15 with a bag limit of 1 bull moose with 50-inch antlers or antlers with at least 4 or more brow tines on at least 1 side

For residents there are 3 hunting options – 2 of which are in the fall. The general season is September 1–15 (spike-fork, 50-inch, 3 or more brow tines) and registration moose hunt RM583 has a season of August 20–September 15 for 1 bull moose.

The Board of Game (BOG) has identified moose in Unit 17B as important for providing high levels of harvest for consumptive use and has established a population objective of 4,900–6,000 and a harvest objective of 200–400 moose. The Unit 17 moose population has a positive C&T finding. The unitwide ANS is 100–150 moose.

The Upper Mulchatna Controlled Use Area, which is the full extent of Unit 17B, is closed to the use of any motorized vehicle for hunting purposes, including transportation of their hunting gear, or parts of big game, from August 1 to November 1, except that the use of a boat or aircraft is not prohibited and use of a motorized vehicle in a hunting camp is not prohibited.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If the proposal is adopted, a 10-day registration permit for certified bowhunters would be offered to both resident and nonresident hunters for Unit 17B. The season would commence after the general season and RM583 hunt has ended. The season would be September 16–September 25 with a resident bag limit of 1 bull, nonresidents would be restricted to 1 bull with 50-inch antlers or 3 or more brow tines on at least 1 side. Nonresidents would still be required to obtain a Unit 17B-specific hunter orientation certification prior to hunting or be accompanied in the field by a guide or resident relative. Only 3 moose have been reported taken with a bow and arrow in Unit 17B since 2015; therefore, harvest is not expected to increase considerably.

**BACKGROUND:** Unit 17 encompasses diverse habitats ranging from several mountain ranges (Ahklun Mountains, Wood River Mountains, and Neacola Mountains) to the Nushagak Hills that make up the northern portion of Unit 17B, to large expanses of wet meadow and tundra habitat scattered throughout the unit. Unit 17B is defined by 2 large river systems, the Nushagak and Mulchatna rivers, which converge near the southern border of 17B and continue on as the Nushagak River, defining a major portion of Unit 17C. These river corridors contain excellent moose habitat with willows (*Salix spp.*), cottonwood (*Populus balsamifera*), alder (*Alnus spp.*), and spruce (*Picea spp.*). Numerous tributaries to the Nushagak and Mulchatna rivers provide additional riparian habitat that is utilized by moose.

Unit 17 has historically been a difficult place to obtain meaningful moose population information. Early winter trend counts have been unreliable because lack of snow limits the ability to detect

moose. Abundance estimates have been nearly as difficult due to the lack of snow and weather that allows for a stratification survey followed by survey effort, which requires a 7–8 day period of decent survey conditions. Moose surveys in Unit 17B are done every 3 years due to short weather windows and the large geographical area. The most recent survey in 17B was completed in spring 2017 and only covered the western zone (17B-West) and therefore does not provide enough information to determine if the population is in objective within Unit 17B (Table 17-1). Given that the estimate for this survey in 17B-West was 1,137 moose in RY09 and the historical estimates for 17B-East have been fewer than 2,000 animals, it is likely that the population remains below the IM population objectives for 17B (4,900–6,000) when combining the east and west portions of the unit. The data do suggest that the population remains stable.

**Table 17-1.** Unit 17 moose population estimation surveys, regulatory years 2000–2017.

Survey Area	Regulatory year	Population Estimate	Moose/mi <sup>2</sup>	Minimum % Calves
17B-West <sup>a</sup>	RY00	1,202 ( $\pm$ 141)	0.22	5
	RY05	1,210 ( $\pm$ 120)	0.22	13
	RY09	1,137 ( $\pm$ 159)	0.21	8
	RY17	1,497 ( $\pm$ 186)	0.38	16
17B-East <sup>b</sup>	RY01	1,953 ( $\pm$ 254)	0.46	4
	RY08 <sup>c</sup>	1,466 ( $\pm$ 424)	0.37	8

<sup>a</sup> That area of the Nushagak River drainage upstream of the confluence of the Nushagak and Mulchatna rivers.

<sup>b</sup> That area of the Mulchatna River drainage upstream of the confluence of the Nushagak and Mulchatna rivers. (Does not include that area of Lake Clark National Park within Unit 17B).

<sup>c</sup> Estimate for entire survey area; however, high winds/turbulence prevented counting in some selected sample units, especially some considered High Density strata in riparian areas of the lower Mulchatna River.

Moose hunting opportunities in Unit 17B for residents are currently managed under both a general season harvest ticket and registration permit hunts RM583 and RM585 (see Proposal 18). RM583 and RM585 hunt areas cover Units 17B and 17C. For the past few years RM585 opportunity during the month of December has been listed as “may be announced” due to population concerns in Unit 17C. Under the RM583 fall season, the legal bag limit is 1 bull. Resident participation in fall moose hunting has been increasing, which is reflected in the harvest data (Table 17-2).

**Table 17-2.** Annual reported harvest and method of take by residents in Unit 17B, RY2015–2019.

Regulatory Year	Reported Hunting	Successful Harvest	Method of Take			Success Rate
			Rifle	Bow	Unknown	
2015	129	43	39	0	4	33%
2016	160	55	52	0	3	34%
2017	158	40	39	0	1	25%
2018	164	40	40	0	0	24%
2019	159	50	49	1	0	31%

Fall moose harvest by residents in Unit 17B increases slightly as the season progresses and has averaged 46 moose annually over the last 5 years. Hunter participation has increased during this period from 129 to 164 with a generally declining hunter success (average 30%).

Nonresident moose hunting opportunities in Unit 17B are offered under both the general season and a registration hunt RM587. User conflicts and competition for moose in Unit 17B led to changes in the permit hunt structure for nonresident hunters. Instead of a harvest ticket, the river corridors of the Mulchatna and Nushagak rivers in Unit 17B require a registration permit for nonresident hunters with a current limit of 75 permits. This lessens the potential pressure for nonresident moose hunting along the rivers where local residents focus their efforts for their subsistence moose harvest. However, outside the two-mile river corridors, nonresidents can hunt with a general season moose harvest ticket with no restrictions on the number issued.

**Table 17-3.** Annual reported harvest and method of take by nonresidents in Unit 17B, RY2015–2019.

Regulatory Year	Reported Hunting	Successful Harvest	Method of Take			Success Rate
			Rifle	Bow	Unknown	
2015	52	13	13	0	0	25%
2016	65	31	30	1	0	48%
2017	80	34	34	0	1	43%
2018	107	41	41	0	0	38%
2019	93	43	42	1	0	46%

Nonresident harvest in Unit 17B increases slightly as the season progresses and has averaged 32 moose annually over the last 5 years (Table 17-3). Nonresident participation has doubled during this period from a low of 52 to a high of 107 (average=79 hunters) with the success rates increasing by approximately 5% to an average of over 40%.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of moose hunting opportunity to archery hunters; however, creating a 10-day registration hunt for hunters



beyond the general season, when other hunts have concluded and bulls are increasingly susceptible to calls, may increase the harvest pressure on a population seemingly not meeting IM objectives, depending on hunter interest.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 18 – 5 AAC 85.045 Hunting seasons and bag limits for moose.** Extend the resident open season for the winter moose hunt in 17B & 17C.

**PROPOSED BY:** Moxie Andrew Jr.

**WHAT WOULD THE PROPOSAL DO?** Extend the resident-only registration moose hunt (RM585) season in Units 17B and 17C from December 31 to January 31, increasing the hunt by 31 days.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

Registration moose hunt RM585 is a “*may be announced*” hunt for 1 antlered bull.

...

<b>Units and Bag Limits</b>	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
Unit 17(B), that portion in the Unit 17(B) nonresident closed area		

**RESIDENT HUNTERS:**

1 bull by registration permit only; However, during the period Sept. 1 – Sept. 15, spike fork bulls and bulls with 50-inch antlers or antlers with 3 or more brow tines on one side may be taken with a harvest ticket;	Aug. 20 – Sept. 15 Dec. 1 – Dec. 31
--	--

1 antlered bull by registration permit only	Dec. 1 – Dec. 31
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...

#### Remainder of Unit 17(B)

##### RESIDENT HUNTERS:

1 bull by registration permit only;                      Aug. 20 – Sept. 15  
however, during the period                                      Dec. 1 – Dec. 31  
Sept. 1 – Sept. 15, spike-fork bulls and  
bulls with 50-inch antlers or antlers with  
3 or more brow tines on one side  
may be taken with a harvest ticket; or

1 antlered bull by registration permit only      Dec. 1 – Dec. 31

#### Unit 17(C)

##### RESIDENT HUNTERS:

1 bull by registration permit only;                      Aug. 20 – Sept. 15  
however, during the period                                      Dec. 1 – Dec. 31  
Sept. 1 – Sept. 15, spike-fork bulls and  
bulls with 50-inch antlers or antlers with  
3 or more brow tines on one side  
may be taken with a harvest ticket; or

1 antlered bull by registration permit only      Dec. 1 – Dec. 31

....

Nonresident moose hunting opportunity in Units 17 B&C is limited to a general season harvest ticket with a bag limit of 1 bull with 50-inch antlers, or 4 or more brow tines on at least 1 side. Dates are September 5–15 for 17B and September 1–15 for 17C. Nonresidents may also obtain registration moose permit (RM587) for Unit 17B, which has a season length of September 5–15 and a bag limit of 1 bull with 50-inch antlers, or 4 or more brow tines on at least 1 side. Nonresident orientation is required if not accompanied in the field by an Alaska-licensed guide or resident family member within the second-degree of kindred.

The Upper Mulchatna Controlled Use Area in Unit 17B is closed to the use of any motorized vehicle for hunting purposes, including transportation of hunting gear or parts of big game from August 1 to November 1, except that the use of a boat or aircraft is not prohibited and motorized vehicles in a hunting camp are not prohibited.

The Board of Game (BOG) has identified moose in Unit 17B as important for providing high levels of harvest for consumptive use and has established a population objective of 4,900–6,000 and harvest objective of 200–400 moose. The Unit 17 moose population has a positive C&T finding. The unitwide ANS is 100–150 moose.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted, this proposal will extend and solidify season dates in the may be announced resident-only registration moose hunt (RM585) from December 1–December 31 to December 1–January 31, adding 31 days to the season, which may provide additional subsistence opportunity. However, although this hunt opens on December 1, it typically reaches its quota and is closed by emergency order by the third week in December. Because this hunt is for 1 antlered bull, the number of eligible bulls will quickly diminish as January approaches. Managing this hunt with a quota will prevent overharvest of moose but will not likely provide hunting opportunity into January any time in the near future, based on population indicators and current harvest rates in this hunt.

**BACKGROUND:** Unit 17 encompasses diverse habitats ranging from several mountain ranges (Ahklun, Wood River, and Neacola mountains) to the Nushagak Hills that make up the northern portion of Unit 17B, to large expanses of wet meadow and tundra habitat scattered throughout the unit. Unit 17B is defined by 2 large river systems, the Nushagak and Mulchatna rivers, which converge near the southern border of 17B and continue on as the Nushagak River, defining a major portion of Unit 17C. These river corridors contain excellent moose habitat with willows (*Salix spp.*), cottonwood (*Populus balsamifera*), alder (*Alnus spp.*), and spruce (*Picea spp.*). Numerous tributaries to the Nushagak and Mulchatna rivers provide additional riparian habitat that is utilized by moose.

Unit 17 has historically been a difficult place to obtain meaningful moose population information. Early winter trend counts have been unreliable because lack of snow limits the ability to detect moose. Abundance estimates have been nearly as difficult due to the lack of snow and weather that allows for a stratification survey followed by survey effort, which requires a 7-8 day period of decent survey conditions.

Moose surveys in Unit 17B are done every 3 years due to short weather windows and the large geographical area. The most recent survey in 17B was conducted in the spring of 2017 and provided an estimate of 1,497 ( $\pm 186$ ) and only covered the western zone, and therefore does not provide enough information to determine if the population is in objective within Unit 17B (Table 18-1). Given that the estimate for this survey in 17B west was 1,137 moose in RY09 and the historical estimates for 17B-East have been fewer than 2,000 animals, it is likely that we are below the IM population objectives for 17B (4,900–6,000) when combining the east and west portions of the unit; however, the population remains stable.

In 17C, population estimates from RY2013 of 4,642 ( $\pm 1,314$ ) to the most recent estimate in RY2019 of 2,758 ( $\pm 400$ ) describe a declining population that is likely still within the IM population objective of 2,800–3,500 moose. The percentage of calves in all of these surveys has been relatively low (average = 12). Investigations evaluating productivity and survival of moose in Unit 17C have identified good productivity but vary over the last 2–3 years. Brown bears have been identified as a primary source for calf mortality early in life. The survival to fall 3-year average is only 15.6%. In 2018, the only year to attain a survival to 10-months information, only 11.5% percent of the observed calf crop survived. A feasibility assessment for the intensive management of moose in Unit 17 will be presented to the BOG at this Central/Southwest meeting.

**Table 18-1.** Unit 17 moose population estimation surveys, regulatory years 2000–2019.

Survey Area	Regulatory year	Population Estimate	Moose/mi <sup>2</sup>	Minimum % Calves
17B-West <sup>a</sup>	RY00	1,202 ( $\pm 141$ )	0.22	5
	RY05	1,210 ( $\pm 120$ )	0.22	13
	RY09	1,137 ( $\pm 159$ )	0.21	8
	RY17	1,497 ( $\pm 186$ )	0.38	16
17B-East <sup>b</sup>	RY01	1,953 ( $\pm 254$ )	0.46	4
	RY08 <sup>c</sup>	1,466 ( $\pm 424$ )	0.37	8
17C	RY03	3,670 ( $\pm 542$ )	0.67	11
	RY07	3,235 ( $\pm 354$ )	0.59	12
	RY13	4,642 ( $\pm 1,314$ )	0.85	14
	RY17	3,438 ( $\pm 1,523$ )	0.65	15
	RY19	2,758 ( $\pm 400$ )	0.53	11

<sup>a</sup> That area of the Nushagak River drainage upstream of the confluence of the Nushagak and Mulchatna rivers.

<sup>b</sup> That area of the Mulchatna River drainage upstream of the confluence of the Nushagak and Mulchatna rivers. (Does not include that area of Lake Clark National Park within Unit 17B).

<sup>c</sup> Estimate for entire survey area; however, high winds/turbulence prevented counting in some selected sample units, especially some considered High Density strata in riparian areas of the lower Mulchatna River.

Registration moose permit RM585 historically closes within the month of December to avoid overharvest (Table 18-2). There is considerable hunting pressure in the more developed areas of 17C, such as Dillingham, where the road system provides substantial hunter access. Annual harvest has ranged 17–41 bull moose over the last 5 years and averaged 26.6, which approximates the quota, with consideration to unreported harvest (Table 18-3). Hunter success is decreasing to an average of 13.8%. Harvest in Unit 17B comprises only 8% of the total RM585 harvest since 2015. No cows have been reported taken under RM585.

**Table 18-2.** Chronology of December moose harvest through RM585 in Units 17B&17C, regulatory years 2015–2019.

Reg. Year	Week 1	Week 2	Week 3	Week 4
2015	13.9%	19.4%	30.6%	36.1%
2016	16.7%	8.3%	33.3%	41.7%
2017	15.8%	52.6%	31.6%	–
2018	25.0%	32.1%	21.4%	21.4%
2019	23.5%	5.9%	17.6%	52.9%

**Table 18-3.** Registration moose permit RM585 issuance and hunter success, regulatory years 2015–2019.

Regulatory Year	Total Permits	Reported	Males Killed	Hunted	Did Not Hunt	Hunter Success
2015	337	328	41	215	113	19.1%
2016	281	278	26	169	109	15.4%
2017	276	264	21	143	121	14.7%
2018	306	299	28	176	123	15.9%
2019	228	222	17	123	99	13.8%

**DEPARTMENT COMMENTS:** While the department supports providing reasonable opportunity for success in harvesting moose for subsistence uses in Unit 17, the department is **OPPOSED** to extending the RM585 moose season. The department is sensitive to the importance of appropriate travel conditions during early winter hunts to be successful, which is the basis for Proposal 14; however, increased seasons and increased quotas are not justified at this time due to low recruitment and a declining population in 17C. If this proposal is adopted the quota hunt structure of RM585 will prevent the overharvest of moose but will not likely extend into January until the current allocations of the moose populations can support additional harvest of bulls.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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Proposal 19

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Proposal 20

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**PROPOSAL 21:** 5 AAC 92.111 Intensive Management Plan I – Establish a second predation control area for Mulchatna caribou on federal lands in Game Management Units 17&18

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** The proposal would expand the area available for wolf predation control under the intensive management plan for the Mulchatna Caribou herd (MCH) and allow the plan to expand into additional units – specifically Unit 18.

**WHAT ARE THE CURRENT REGULATIONS?** The current caribou hunting regulations can be found in 5 AAC 85.025 and in the *2020–2021 Alaska Hunting Regulations*.

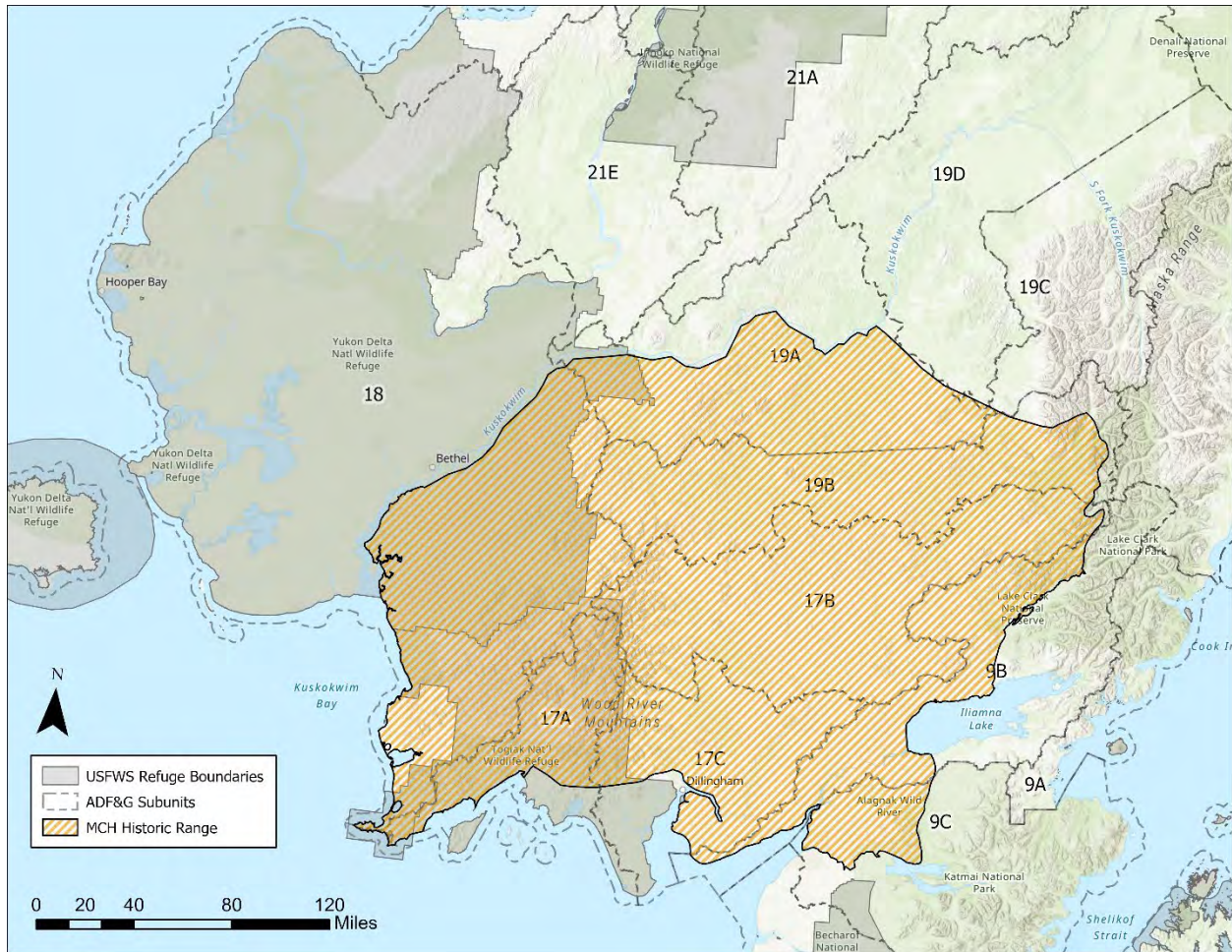
The MCH has been identified by the Board of Game (BOG) as important for high levels of human consumptive use, with an intensive management (IM) population objective of 30,000–80,000 and harvest objective of 2,400–8,000 caribou. There is also a positive customary and traditional use (C&T) finding for caribou (MCH) in Units 9A, 9B, 17, 18, 19A south of the Kuskokwim River, and 19B with an amount reasonably necessary for subsistence (ANS) of 2,100–2,400 caribou.

The Mulchatna Caribou Herd Predation Management Area (MCHPMA) encompasses approximately 39,683 square miles of historical range across multiple units (Figure 21-1). Multiple predator control areas may be utilized for same-day-airborne (SDA) take of wolves within the management area; however, the current active control area(s) is limited to a total of 10,000 square miles, which is 25 percent of the management area. Currently, 10,000 square miles is allocated in portions of Units 9B, Unit 17B&C, and 19B (Figure 21-2).

State-sponsored predation control has not been allowed on federal lands while there is federal predator removal on federal refuges in the Central/Southwest Region.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would expand the area available for wolf predation control, providing additional area where the plan can be implemented, such as Unit 18. The anticipated effect is that an additional wolf predation control area on the calving grounds in Unit 18, where almost half the herd currently resides, will provide an opportunity to remove wolves and increase caribou calf survival.

If this proposal is authorized by the board, it would still require concurrence from the Department of Interior for implementation on federal lands. If there is no concurrence, some opportunity to expand targeted control areas still exists but not on federal lands.

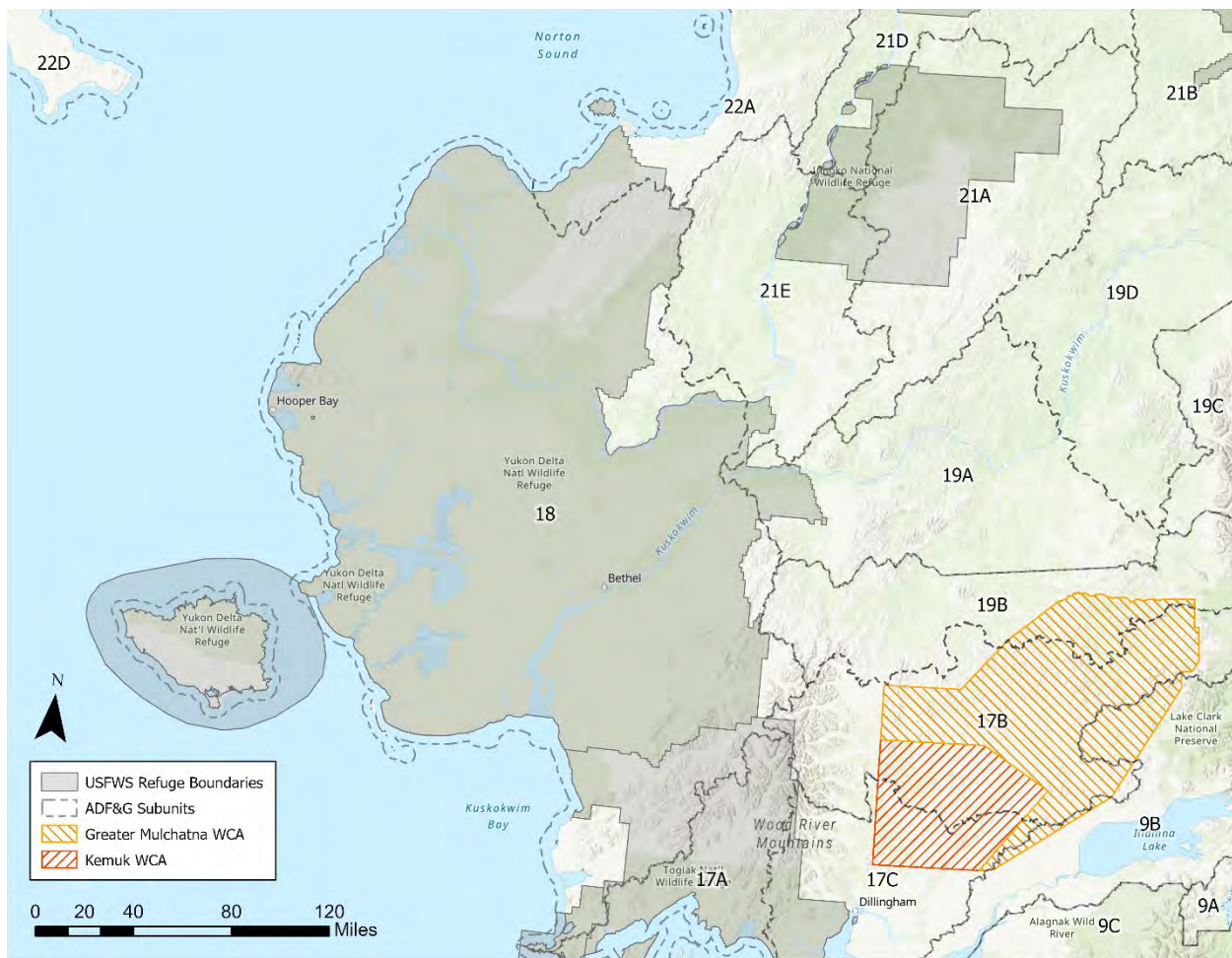


**Figure 21-1.** The historical range of the Mulchantna Caribou Herd in Units 9,17, 18, and 19.

**BACKGROUND:** Wolves are a major predator of caribou in the range of the MCH and are an important factor limiting caribou. The wolf population objective for the MCHPCMA is to annually reduce the number of wolves in predator control areas to a level that results in increased calf survival and recruitment. A reduction of wolf predation can reasonably be expected to aid in achieving objectives using recognized, prudent active management techniques based on scientific information.

The MCHPMA was first established in 2011 to increase the caribou herd’s population size and human harvest by reducing wolf predation on caribou. It is expected to contribute to achieving the IM population objective of 30,000–80,000 caribou and harvest objective of 2,400–8,000 across the range (Units 9B, 17B, 17C, 18, 19A and 19B). These IM objectives were based on historical information regarding abundance, habitat limitations, human use, and sustainable harvests. The MCHPMA encompasses approximately 39,683 square miles; however, the current active control areas are limited to a total of 10,000 square miles, which is approximately 25 percent of the





**Figure 21-2.** The location of the Greater Mulchatna and Kemuk WCAs in portions of Units 9B, 17B, 17C and 19B relative to Unit 18

management area. Two control areas were created in portions of Units 9B, 17B&C, and 19B, termed the Kemuk and Greater Mulchatna Wolf Control areas (GMWCA; 6,853 square miles). The Kemuk is 2,870 square miles within the GMWCA that has a delayed control opening date of February 1 to allow local hunters and trappers the first opportunity to take wolves through hunting and trapping regulations.

The population and harvest for the MCH are still well below the IM objectives throughout the herd's range and state and federal hunts have been affected, with bag limit changes and an early closure to the 2019 and 2020 seasons. The combined calf-to-cow ratio of 25 calves:100 cows in RY2019 was lower than RY2018, and below management objectives of 30:100. The combined bull-to-cow ratio was 42 bulls:100 cows and was above objectives (35:100) for the first time since the IM program was instated.

Reducing wolf predation, specifically on calving grounds, is effective in increasing caribou numbers through increased calf survival and recruitment. To date, the program has been affected



by the limitations of flying and tracking conditions and hampered to a degree by an inability to reduce predation on large portions of federal land where much of the MCH range (Table 21-1).

**Table 21-1.** Wolf harvest in the Kemuk and Greater Mulchatna Wolf Control areas through SDA control and non-SDA harvest, Regulatory years 2011–2019.

Period <sup>a</sup>	RY	Non-SDA Harvest removal from WCAs		SDA Public control removal from WCAs	Total removal <sup>b</sup> from WCAs	Total Removal in Units 17B & C, and Western 9B	Minimum Spring abundance (variation) WCAs
		Trap	Hunt				
Year 1	2011	14	52	11	77	102	14
Year 2	2012	17	0	0	17	35	–
Year 3	2013	0	10	0	10	26	–
Year 4	2014	0	0	0	0	6	–
Year 5	2015	19	2	0	21	27	–
Year 6	2016	26	28	3	57	67	–
Year 7	2017 <sup>c</sup>	30	10	30	70	86	–
Year 8	2018	12	0	11	23	29	–
Year 9	2019	16	14	28	69	78	-

<sup>a</sup> Each respective year of data is from the ADF&G WinfoNet database: Fur Sealings, Fur Sealing Lookup.

<sup>b</sup> Additional removal may be Defense of Life and Property, vehicle kill, etc.

<sup>c</sup> In 2017 the WCA was expanded to 9,844 mi<sup>2</sup>.

In Winter 2020 the Secretary of the Interior communicated to the Commissioner of Fish & Game that the Division of Wildlife Conservation should draft a plan for predation control on federal lands in Units 17 & 18 to address the declining caribou population. This proposal seeks to establish additional predation control area(s) by expanding the current authorized limit of 10,000 mi<sup>2</sup> for implementation on federal lands. In addition, the department has requested permission to conduct control activities on federal lands within the range of the Mulchatna caribou herd.

**DEPARTMENT COMMENTS:** The department is in **SUPPORT** of this proposal and recognizes it requires concurrence from the Department of Interior for implementation on federal lands.

**COST ANALYSIS:** Adoption of this proposal is expected to result in some administrative costs to the department to manage this program.

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Proposal 22

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**PROPOSAL 23 - 5 AAC 92.080(4)(B)(i). Unlawful methods of taking big game.** Allow the use of a snowmachine for positioning wolf or wolverine in Unit 17.

**PROPOSED BY:** Nushagak Fish and Game Advisory Committee

**WHAT WOULD THE PROPOSAL DO?** This proposal would add Unit 17 to a list of Game Management Units where a snowmachine could be used to position a wolf or wolverine for harvest, and wolves or wolverines could be shot from a stationary snowmachine.

**WHAT ARE THE CURRENT REGULATIONS?** Currently in Unit 17 a snowmachine can be used to position a hunter to select individual wolves for harvest, and wolves may be shot from a stationary snowmachine. However, it is not legal to use a snowmachine to position wolves or wolverines.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If this proposal were adopted, it would allow hunters to pursue wolves and wolverine with a snowmachine to position them for harvest in Unit 17. The snowmachine would have to be stationary to take an animal. This activity could also enhance the harvest of wolves to help meet our intensive management objectives for moose and caribou in portions of Unit 17.

**BACKGROUND:** This proposed change would replicate the regulations for this method and means that have previously been adopted for Units 18, 22, 23 and 26A.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal. Currently most wolves that are taken in Unit 17 are done so with the use of snowmachines. Allowing hunters to position the animals for harvest would enhance their success.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 24 – 5 AAC 85.065. Hunting seasons and bag limits for small game.** Modify the season and bag limit for Alaska hares in Unit 17.

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** Create a season (November 1–January 31), harvest limit (1 per day, 4 per season), and salvage requirement (hide or meat) for Alaska hare in Unit 17.

**WHAT ARE THE CURRENT REGULATIONS?** Currently there is no closed season, no harvest limit, or salvage requirement for Alaska hares in Unit 17.

In 2018, the board determined there was a customary and traditional use for Alaska hares in Unit 17.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal will create a season and bag limit for Alaska hares that matches the season and bag in Unit 9. The salvage requirements will match those for Alaska hares in the rest of the state. The hunting public would lose 9 months of hunting opportunity, be restricted to a 1 per day, 4 per season harvest limit, and be required to salvage either meat or hide of Alaska hare taken in Unit 17.

**BACKGROUND:** Currently there are season dates, daily and annual bag limits, and salvage requirement for Alaska hare (locally known as “jackrabbit”) throughout the species range in Alaska (Units 9, 18, 22, and 23) except Unit 17. Given the ongoing research, continued low abundance, and public concern about this species it is important to consider a cohesive and comprehensive management framework for this species across its entire range in Alaska. Many rural residents have reported seeing far fewer Alaska hares in the past 1-2 decades throughout their local areas, and reconnaissance of Alaska hares by department staff in Unit 17 have yielded few observations. The Board of Game has made positive customary and traditional use findings for Alaska hares throughout their range in Alaska.

The current Alaska hare salvage requirement is described as human use. We recommend this categorization also be used in Unit 17. The human use requirement would be met as long as some portion of the carcass is used for human consumption, trapping, sewing, dog training, dog food, etc. This proposal would simply prohibit the harvest of an Alaska hare with no attempt to recover, eat, or in any way attempt to use part or all of the carcass. Trappers would be allowed to use a whole or portion of a carcass for trapping bait.

**DEPARTMENT COMMENTS:** The department submitted and **SUPPORTS** this proposal.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 25 – 5 AAC 92.108 Identified big game prey populations and objectives.** Review the intensive management findings for Unimak caribou.

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** Review the finding for high levels of human consumptive use for Unimak Island caribou (UCH), and recommend appropriate population and harvest objectives for the UCH.

**WHAT ARE THE CURRENT REGULATIONS?** The current caribou hunting regulations can be found in 5 AAC 85.025 and in the *2020–2021 Alaska Hunting Regulations*. The current findings can be found in 5AAC 92.108. Since 2008 there have been no open state hunting seasons and fewer than 3 subsistence permits per year are issued through federal wildlife special actions to residents of False Pass.

Under the Intensive Management (IM) plan in 5 AAC 92.112 (which expired in May 2020), the management population objective for the UCH is to maintain a population of 1,000 caribou with a bull-to-cow ratio of at least 35 bulls:100 cows; the amount necessary for subsistence is 100–150 annually and includes caribou harvested from the Southern Alaska Peninsula caribou herd (SAP) in Unit 9D.

There is currently no finding for high levels of human consumptive use for the UCH in 5 AAC 92.108. The nearby SAP has a positive finding for human consumptive use and currently has liberal seasons and bag limits for resident hunters.

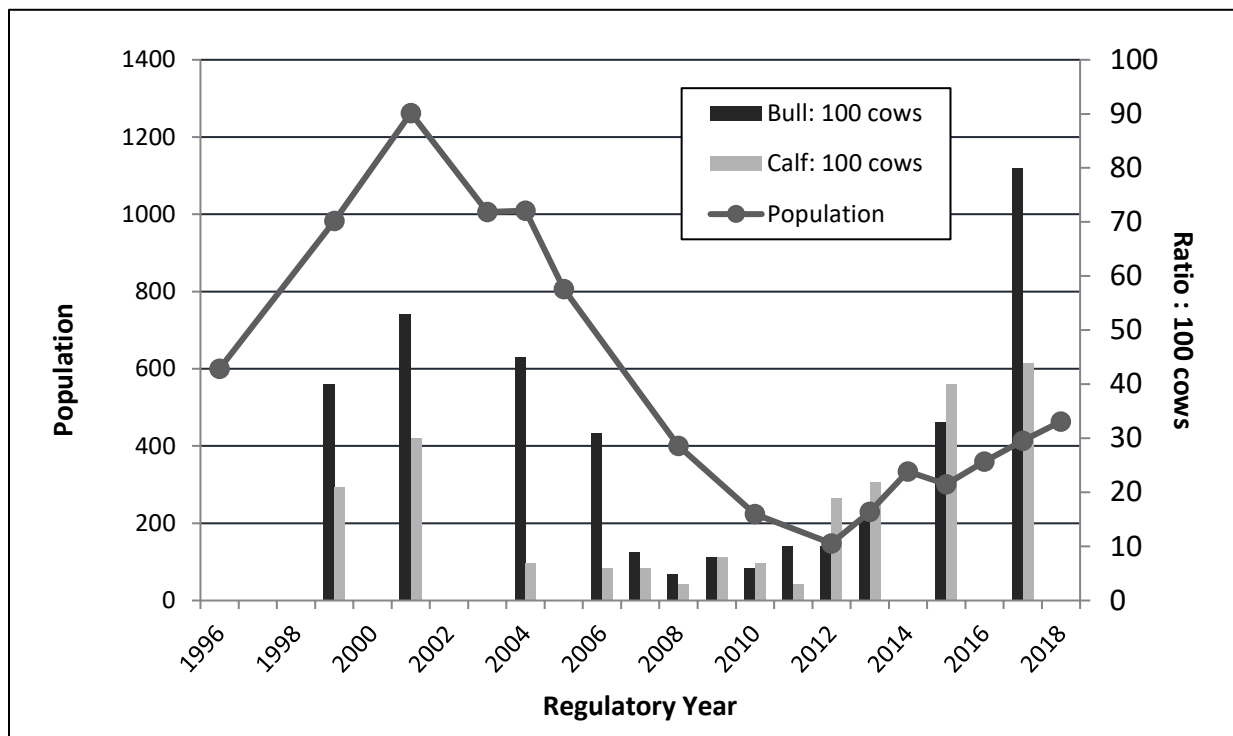
**5AAC 92.108 Identified big game prey populations and objectives.**

Caribou Herds	Finding	Population Objective	Harvest Objective
...			
Southern Alaska Peninsula	Positive	1,500–4,000	150–200
Unimak Island	—	—	—
...			

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This will depend on findings: if the Board of Game determines a negative IM finding for the UCH, then the chapter addressing the Unimak Wolf Management Area in 5 AAC 92.112 should be repealed from regulation. If the board’s IM finding is positive under 5 AAC 92.108 for the UCH, then population and harvest objectives should be developed and a revision to the IM plan in 5 AAC 92.112 should be considered.

**BACKGROUND:** There is a biological concern for the UCH because of low population size, which is why state hunting remains closed. Prior to 2000, the Unimak Island caribou herd was considered part of the Southern Alaska Peninsula caribou herd; therefore, the population and

harvest objectives from 5 AAC 92.108 applied to the combined mainland and island herds. As biologists learned more about herd distribution, movement, disparate calving areas, and genetics, it became apparent that the two herds were separate. In the last decade movement between these herds, based on collared caribou monitored in both herds, has been almost nonexistent. The UCH population began declining in the early 2000s and bottomed out in 2012 at about 220 caribou (Figure 25-1). UCH caribou tend to have a lower pregnancy rate than the mainland SAP. The herd has doubled in size but remains well below the population objective of 1,000 (numbering approximately 430–460 caribou) in 5 AAC 92.112; however, the herd began increasing recently at a rate of about 10% per year. Bull- and calf-to-cow ratios exceeded objectives in 5 AAC 92.112(c)(4)(D)(i-ii) as of fall 2018 (80 bulls and 44 calves per 100 cows) without predation control (Figure 25-1). Average annual wolf harvest by hunters and trappers is 3 wolves, 62% of which are taken by nonresident bear hunters. Wolf harvest has been encouraged by waiving the nonresident tag fee and providing liberal seasons and bag limits.



**Figure 25-1.** Unimak Island caribou herd population size with sex and age ratios, RY1996–2019.

Options to manage predator populations on Unimak Island are limited because most lands are designated federal wilderness. Unsuccessful negotiations with the U.S. Fish and Wildlife Service to allow wolf removal on federal lands ended in a court decision upholding federal restrictions on Wilderness Lands.

The department and USFWS staff of Izembek National Wildlife Refuge maintain separate population and composition monitoring of the two herds. The agencies worked cooperatively to

draft a plan to specifically manage the UCH in 2008, although the plan was not completed. We recommend distinguishing between the two herds in regulation. To manage the UCH we recommend a harvest range of 4 to 15% once the population reaches the objective of 1,000; however, Unimak Island is so remote that there is little chance of exceeding a harvest of 20 in the foreseeable future.

False Pass, population 46, is the only community on Unimak Island. False Pass residents have reported limited hunting activity on the UCH (Figure 25–2) and SAP in the last two decades. The number of UCH hunters who reported from False Pass ranged from zero to eight, with an average of 1.4 hunters per year during that period. Although False Pass residents have boat access to the SAP, no hunting participation in state hunts was reported on the SAP during the recent six years that state hunts have been open and liberalized. Izembek National Wildlife Refuge staff issues federal subsistence permits to False Pass residents and reported that recent subsistence harvest on the SAP ranges from one to six per year. Reported caribou harvest on the UCH does not meet the threshold in 5 AAC 92.106(1)(A)(i)(which is 100) as a population necessary for providing high levels of human consumptive use: the current level of hunter demand is low.



**Figure 25– 2.** Annual caribou harvest on Unimak Island, Unit 10, RY1997–2019.

**DEPARTMENT COMMENTS:** The department submitted and **SUPPORTS** this proposal. The department recommendations for population and harvest objectives are a minimum population of 1,000 caribou, a ratio of 35 bulls:100 cows, and annual harvest of 40–255 (4-15% of population). With a positive IM finding (complete with population and harvest objectives) the board will need

to provide direction to the department with regard to the expired IM plan. A negative IM finding will result in the need to repeal the IM plan for Unimak at 5 AAC 92.112 (c).

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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Proposal 26

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**PROPOSAL 27 – 5 AAC 92.111 Intensive Management Plans I.** Reauthorize the Northern Alaska Peninsula Caribou Herd Intensive Management Plan.

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** Reauthorize and replace language in the Northern Alaska Peninsula Caribou Herd (NAP) Intensive Management Plan (IM):

(a) **Plans established.** Intensive management plans for the following areas are established in this section:

...

(b) Northern Alaska Peninsula Herd Management Area is entirely deleted and replaced by the following:

(b) **Northern Alaska Peninsula Herd Predation Management Area: to facilitate growth in the Northern Alaska Peninsula (NAP) caribou herd on the mainland portions of Units 9(C) and 9(E) to aid in achieving intensive management objectives in an area encompassing approximately 19,461 square miles (50,403 square kilometers); the wolf reduction area includes all Alaska Peninsula drainages south of the south bank of the Naknek River and the southern boundary of Katmai National Park to a line from the southernmost head of Port Moller Bay to the head of American Bay, encompassing approximately 10,734 square miles (27,802 square kilometers);**

(1) **This is a continuing control program that was first authorized by the board in March 2010 for wolf control; it is currently designed to increase caribou abundance and harvest by reducing predation on caribou by wolves and is expected to make a contribution to achieving the intensive management (IM) objectives in Units 9(C) and 9(E).**

(2) **Caribou and wolf objectives are as follows:**

(A) **the intensive management objective for the NAP herd as established in 5 AAC 92.108 is 6,000–15,000 caribou; these objectives were based on historical information regarding population numbers, habitat limitations, human use, and sustainable harvests;**

- (B) the caribou harvest objective for the NAP herd as established in 5 AAC 92.108 is 600–1,500 caribou;
  - (C) the wolf population objective for Unit 9 is to maintain a wolf population that can sustain a three-year annual harvest of 50 wolves;
  - (D) the brown bear population objective for Unit 9 is to maintain a high-density bear population with a sex and age structure that can sustain a harvest composed of 60 percent males, with 50 males eight years of age or older during combined fall and spring seasons;
- (3) Board findings concerning populations and human use are as follows:
- (A) The board has designated the NAP herd as important for providing high levels of human consumptive use;
  - (B) the board established objectives for population size and annual sustained harvest of caribou in Units 9(C) and 9(E) consistent with multiple use and principles of sound conservation and management of habitat and all wildlife species in the area;
  - (C) the population and harvest for the NAP herd are below IM objectives throughout the range;
  - (D) wolves are a major predator of caribou in the range of the NAP herd and are an important factor in failing to achieve these objectives;
  - (E) a reduction of predation can reasonably be expected to aid in achieving the objectives;
  - (F) nutrition is not considered to be the primary factor limiting caribou population growth;
  - (G) reducing predation is likely to be effective and feasible using recognized and prudent active management techniques and based on scientific information;
  - (H) reducing predation is likely to be effective given land ownership patterns, and;
  - (I) reducing predation is in the best interests of subsistence users.
- (4) Authorized methods and means are as follows:
- (A) hunting and trapping of wolves by the public in treatment areas during the term of the management program may occur as provided in the hunting and trapping regulations set out elsewhere in this title, including the use of motorized vehicles as provided in 5 AAC 92.080;



(B) the commissioner may issue public aerial shooting permits, public land and shoot permits, or ground-based shooting permits, allow agents of the state, or department employees to conduct aerial, land and shoot, or ground-based shooting as a method of wolf removal under AS 16.05.783, including the use of any type of aircraft;

(C) the commissioner may authorize the use of state employees or agents or state owned, privately owned, or chartered equipment, including helicopters, as a method of wolf removal under AS 16.05.783;

**(5) Time frame is as follows:**

(A) through June 30, 2031, the commissioner may authorize the removal of wolves in the NAP Predation Management Area;

(B) annually, the department shall, to the extent practicable, provide to the board a report of program activities conducted during the preceding 12 months, including implementation activities, the status of caribou and wolf populations, and recommendations for changes, if necessary, to achieve the objectives of the plan;

**6) The commissioner will review, modify or suspend program activities as follows:**

(A) when the mid-point the IM population and harvest objectives for the NAP herd are sustained or the population can grow at a sustained rate of five percent annually;

(B) if after three years, the harvest of wolves is not sufficient to make progress towards the intensive management population objectives for wolves;

(C) if after three years, there is no detectable increase in the total number of caribou in the control area;

(D) if after three years, bull-to-cow ratios show no appreciable increase or remain below 20 bulls per 100 cows;

(E) if after three years, fall calf-to-cow ratios show no appreciable increase or can be sustained at 25 or more calves per 100 cows;

(F) if after three years, any measure consistent with significant levels of nutritional stress in the caribou population are identified;

(G) when the caribou population and harvest objectives within the NAP Predation Management Area have been met; or

**(H) upon expiration of the period during which the commissioner is authorized to reduce wolf numbers in the wolf reduction areas.**

**WHAT ARE THE CURRENT REGULATIONS?** The current caribou hunting regulations for the NAP herd can be found in 5 AAC 85.025 and in the 2020–2021 *Alaska Hunting Regulations*.

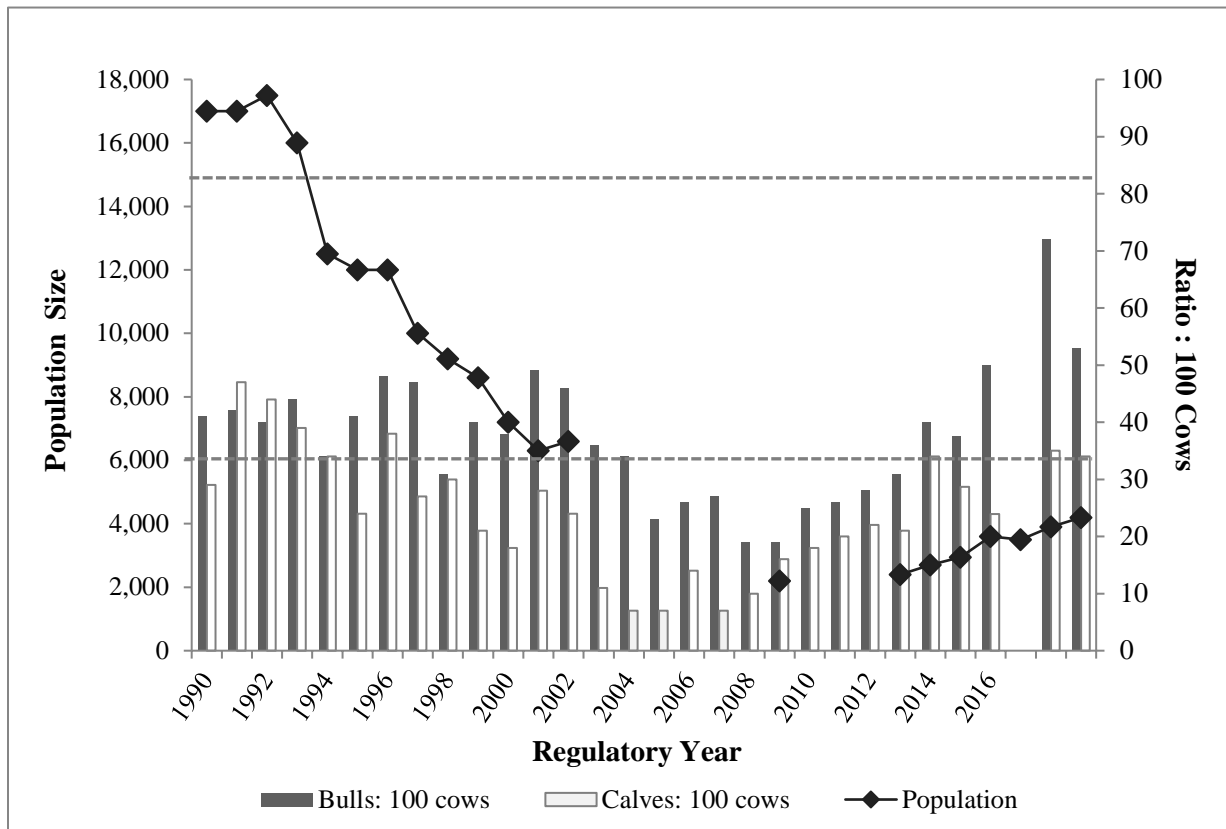
Hunting is by Tier II permit only, in Unit 9C during August 10–September 20 and November 15– February 28, and in Unit 9E during August 10–September 20 and November 1– April 30. The bag limit is 1 caribou. Three hundred permits are available.

Under 5 AAC 92.111, an IM plan for the NAP herd was established to facilitate growth in the caribou herd on the mainland portions of Units 9C and 9E to aid in achieving intensive management objectives, which may include wolf population reduction. The NAP herd Intensive Management (IM) population objective is 6,000–15,000 caribou and the IM harvest objective is 600–1,500.

There is a positive C&T finding for the NAP herd in Units 9C&E and an ANS of 1,200-1,900.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The NAP herd IM Plan would be reauthorized for a time certain and updated with the simplified language detailed above to comply with protocols.

**BACKGROUND:** The NAP herd IM Plan expired on June 30, 2020. IM objectives for the NAP herd have not been achieved because the caribou population has not recovered sufficiently. Wolf harvest has not been sufficient to reduce mortality of caribou.



**Figure 27-1.** Population size, and sex and age ratios, for the NAP herd in Units 9C&E, 1990–2019. Dotted lines represent the upper and lower limits of the population objective.

During the 7 years that the IM program was active, a total of 16 wolves (5%) were removed via public control (i.e., same-day-airborne) and 275 (95%) taken from the wolf assessment area by hunters and trappers. The most effective action taken for the NAP herd was likely the waiving of the nonresident wolf tag requirement. As a result, much of the hunting harvest is taken by guided nonresident bear hunters during e odd-numbered regulatory years when the bear seasons are open for them. Since 2011, the NAP herd has been increasing by an average of about 7.3% per year and is currently near 4,300 caribou (Figure 27-1). At this rate, the NAP population should reach the lower end of objectives in 5–6 years. Hunting resumed in 2016 with a Tier II hunt (TC505) which is often undersubscribed; harvest is 80–100 per year.

**DEPARTMENT COMMENTS:** The Department **SUPPORTS** reauthorization. Currently, the department has no intention of issuing same-day-airborne predation control permits but supports waiving the nonresident tag fee for wolves and providing additional guide use areas to optimize harvest.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 28 – 5 AAC 85.020 Hunting seasons and bag limits for brown bears.** Increase the brown bear bag limit for resident hunters in Unit 9.

**PROPOSED BY:** Resident Hunters of Alaska

**WHAT WOULD THE PROPOSAL DO?** Allow resident hunters to take 1 brown bear per year during open biennial seasons in Unit 9,

**WHAT ARE THE CURRENT REGULATIONS?** The current brown bear hunting regulations for Unit 9 can be found in 5 AAC 85.020 and in the *2020–2021 Alaska Hunting Regulations*.

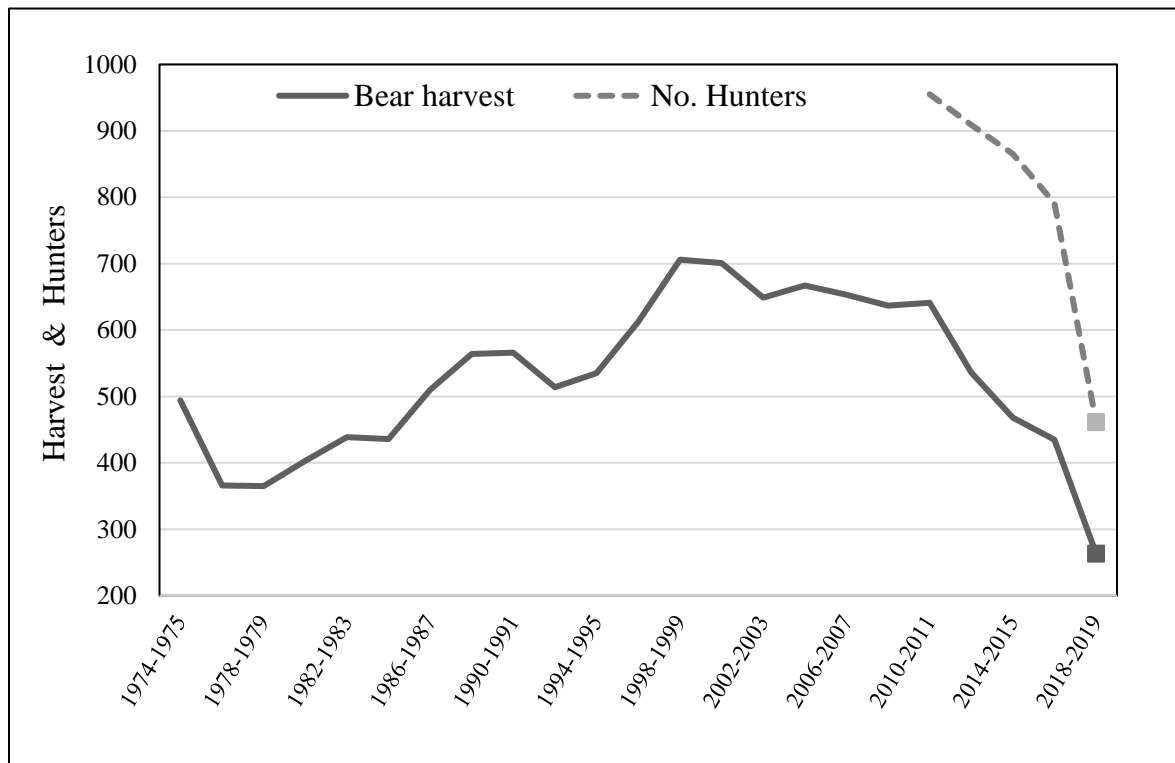
Brown bear regulations are 1 brown bear every 4 regulatory years, October 1–21 and May 10–31 in Unit 9A, September 20–October 21 and May 10–31 in Unit 9B, and October 7–21 and May 10–25 in the remainder of Unit 9. Biennial seasons are open every other year during odd years in the fall and even years in the spring. Residents and nonresidents have the same seasons and bag limits for registration permit hunts RB368, RB369, and RB370. Residents may also hunt bears near towns and villages of Unit 9 with a RB525 registration permit with no closed season and a 1 bear per year bag limit. There is also a subsistence brown bear registration hunt in Unit 9B from September 1 – May 31, and a subsistence brown bear registration hunt in a portion of Unit 9E from November 1 – December 31; both have a bag limit of one bear per year.

There is a negative customary and traditional use finding for brown bears in Units 9A, 9C, and 9D; a positive C&T finding in Unit 9B with an amount reasonably necessary for subsistence of 10–20; and a positive C&T finding in Unit 9E with an amount reasonably necessary for subsistence of 10–15.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Most Alaska residents who hunt brown bears in Unit 9 do not harvest more than 1 bear in the unit over the span of 2 or 3 decades. During 7 biennial hunts from 2005 to 2017 only 1.1% (38 hunters) of 3,466 successful resident bear hunters reported killing more than 1 bear in Unit 9. Therefore, the proposal would result in no significant increase in bear harvest in Unit 9. We expect little or no effect of the proposal on guided nonresident hunters.

Harvest increase would be minimal (0–2 bears per year), but a few resident hunters would take advantage of additional hunting opportunity in Unit 9. Perhaps more importantly, a 1 bear per year bag limit would allow successful Unit 9 hunters the opportunity to hunt in other areas of Alaska having a 1 bear per 4 years bag limit in successive years.

**BACKGROUND:** In Unit 9, the previous year's biennial harvest is a good predictor of harvest for the next open season. The bear harvest for biennial period 2016–2017 was 437 bears for an annual average harvest of 219 bears per year (Figure 28-1). This resulted in a harvest density of approximately 3.3 bears/1,000 km<sup>2</sup> per year, which is very low considering that in most of Unit 9 bear density is over 100 bears per 1,000 km<sup>2</sup>. The proportion of females in the harvest has been less than 30% since 2007, and cub production has been high during the last 3–4 years. Similar harvest levels can be expected in the next few open hunts, although this will be somewhat complicated with the postponement of the spring 2020 nonresident season (regulatory year 2019) to spring 2021 in RY2020.



**Figure 28-3.** Brown bear harvest and number of hunters in Unit 9, 1974–2019, in open 2-year hunt periods (closed–open). Square symbols note that regulatory year 2019 was curtailed with no spring 2020 season.

Biennial hunts and short spring and fall seasons have been effective in limiting bear harvest on the Alaska Peninsula. Bear harvest in Unit 9 began declining in the early 2000s and continued through 2017. Since 2011 when registration permits were implemented, we found that the number of hunters was also declining. This trend may have stabilized or reversed in fall 2019 when both harvest and hunter numbers increased slightly.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on increasing the resident brown bear bag limit, providing that biennial seasons remain. There are currently no conservation concerns for brown bears in Unit 9. Liberalizing the bag limit would increase subsistence opportunity in those subunits where there is a positive C&T finding for brown bears.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 29 - 5 AAC 84.270 Furbearer trapping & 92.095 Unlawful methods of taking furbearers; exceptions.** Lengthen the season and liberalize methods and means for trapping beavers in Unit 9.

**PROPOSED BY:** Dan Montgomery

**WHAT WOULD THE PROPOSAL DO?** Liberalize the beaver season and methods of take in Unit 9 (or Unit 9D & E only) as follows:

- no closed season, no bag limit; trapping license required;
- firearm bag limit is year-round and requires the hide or meat be salvaged;
- June 1–October 9, beavers may be taken with firearm only, trapping prohibited;
- beavers need only be sealed if sold as raw fur; and
- beaver dams may be destroyed, but not lodges or dens.

**WHAT ARE THE CURRENT REGULATIONS?** The current beaver trapping regulations can be found in 5 AAC 84.270 and in the *2020–2021 Alaska Trapping Regulations*.

The beaver trapping season in Unit 9 is October 10–May 31 with no bag limit. During April 15–May 31 up to 2 per day may be shot provided the meat is salvaged for human consumption. Sealing of the fur is required. There is a positive C&T finding for beavers in all units with a harvestable portion, and an ANS of 90% of the harvestable portion.

Currently, a permit from the Division of Habitat permit is required to disturb or destroy beaver dams by mechanical means such as a chainsaw.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would likely result in a few additional beavers harvested (shot) during the spring through fall months, although most Unit 9 residents' time is consumed by commercial fishing and big game hunting during these months. Adoption of this proposal will change the way beavers are managed. Currently, beavers are trapped for fur and bait and limited shooting for food in the spring. Not all beavers will be required to be sealed, beavers may be shot, and beaver dams destroyed.

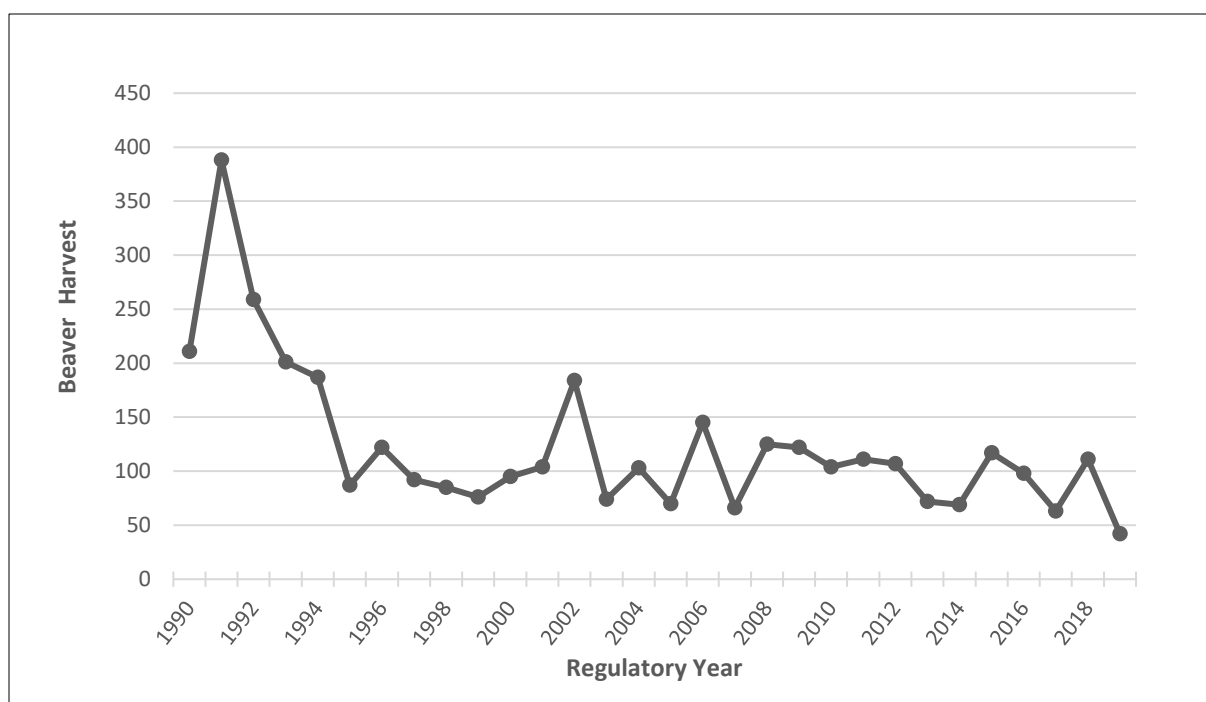
**BACKGROUND:** Current beaver harvest as reported on sealing records averages about 90 per year in Unit 9. In the last 10 years, only 2.3% (21 of 900) of the Unit 9 beaver trapping harvest occurred in May. Nine beavers (1%) were reported shot during April and May during the same decade. Beaver harvest has declined substantially since the late 1980s in Unit 9 (Figure 29-1), primarily because the number of trappers has declined. Since 2012 fewer than 40 trappers sealed

fur annually in Unit 9, compared to 118 in 1987. Except for the King Salmon/Naknek area in Unit 9C, the beaver population is naturally regulated in Unit 9.

A review of household surveys conducted in various single years from 2004–2018 in Unit 9 indicate a wide range in the harvest, use, and effort of residents to acquire beavers for subsistence uses. A few communities reported no harvest, use, or effort for beavers, but others reported quite a few animals harvested and used. For example, in King Salmon in 2007, an estimated 34 beavers were harvested, 4% of households used them, and 1% of households attempted to harvest them and were successful. In 2005 in Levelock, an estimated 16 beavers were harvested; 36% of households used them, and 21% attempted to harvest and were successful in harvesting them. In 2005 in Igiugig an estimated 13 beavers were harvested; 33% of households used, attempted to harvest, and harvested them. In 2004 in Nondalton an estimated 85 beavers were harvested; 37% of households used beavers, and 29% reported attempting to harvest and harvesting them. Beavers were seventh out of the top ten sources harvested in Nondalton that year. More details about these household survey data are available upon request.

Unit 9 is almost 34,000 mi<sup>2</sup> (about the size of Maine) of mostly unpopulated and remote land where hunters are unlikely to reduce the beaver population. Beavers are abundant and integral to many Alaska Peninsula watersheds; however, local concerns have been expressed regarding abundance and effects on salmon populations. In Nondalton in 2004, many people said that they no longer used some streams because of the presence of beaver dams. Key respondents in that community linked the quantity of spawning sockeye salmon in particular streams to beaver trapping. They said that rivers with thinner ice are productive spawning streams because trappers can cut through the ice and control the beaver population. One key respondent said “Before, they used to open up the beaver dam so the fish could go up to the lake and spawn and now nobody does that anymore, nobody even traps beaver, hardly, anymore. There’s a lot of beaver. They used to open it up [beaver dams] so the fish could go up the river.”

Beaver and salmon have long coexisted; however, local input about beaver-salmon relations raise concerns about salmon populations in localized stream settings, especially when exacerbated by environmental conditions. However, beaver can also provide important ecosystem services, such as fish rearing habitat.



**Figure 29-1.** Unit 9 beaver harvest, regulatory years 1990–2019.

management biologist confirmed that beaver colonization of the area is not considered a problem for salmon escapement. Beavers are often an alternative prey for bears and wolves.

Recovering carcasses of beavers shot in the water can be difficult or impossible depending on water depth and clarity. Beavers must be shot through the skull (a very small target) or they usually dive and are not seen again. Wounding loss and wasting of beavers would occur. The Unit 9 beaver season is set based on fur primeness and decreased likelihood of incidental catch of other species, such as river otter. Winter trapping seasons mitigate the risk of nontarget catch. Department staff have noted that open-water trapping in November in warmer, coastal areas of Alaska has resulted in incidental capture of the following species: bald eagle, trumpeter swan, mallard, merganser, gull, and coho salmon. These occurred in both Conibear and snare sets. Species such as brown bears and nesting and migratory waterfowl, loons and grebes are much more abundant in the spring and fall, and, in most cases use shore or near-shore habitats, making them candidates for incidental catch as well.

Human activities are also much greater in these same habitats in spring and fall. The “*Code of Ethics, A Trapper's Responsibility: #3 Promote trapping methods that will reduce the possibility of catching nontarget animals*” should be considered by managers, the board, and trappers.

Limited shooting is allowed where beavers are abundant (and people are not) or are becoming a nuisance by flooding roads or property. However, shooting at the water surface is potentially



hazardous. Hunter education students are taught to never shoot at the surface of the water as part of Rule #4 of firearms safety: Know your target and what is beyond.

**DEPARTMENT COMMENTS:** The Department is **NEUTRAL** on the liberalization of beaver seasons and methods of take in Unit 9 because there is no biological concern for the beaver population. However, there is concern for capture of nontarget species outside of winter months, potential for wounding loss of beavers, and human safety associated with shooting at water, and recreating near trap sets. The Department is opposed to the reduced sealing requirement because regular harvest information and contact between area managers and trappers would be lost.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 30 - 5 AAC 84.270 Furbearer trapping.** Shorten the trapping season for wolves in Units 9 & 10.

**PROPOSED BY:** Jeff Lucas

**WHAT WOULD THE PROPOSAL DO?** Shorten the trapping season for wolf by 61 days in Unit 9 from August 10–June 30 to August 10–April 30 and Unit 10 from November 10–June 30 to November 10–April 30.

**WHAT ARE THE CURRENT REGULATIONS?** The current wolf trapping regulations for Units 9 & 10 can be found in 5 AAC 84.270 and in the 2020–2021 *Alaska Trapping Regulations*.

Trapping season dates are August 10–June 30 in Unit 9 and November 10–June 30 for Unit 10 with no bag limit. Hunting season dates are August 10–June 30 in Units 9 and 10 with bag limit of 10 wolves per day, open to both residents and nonresidents.

Under 5 AAC 92.095:

- Taking of a wolf under using steel traps and snares smaller than 3/32 inch diameter is prohibited during October or April.

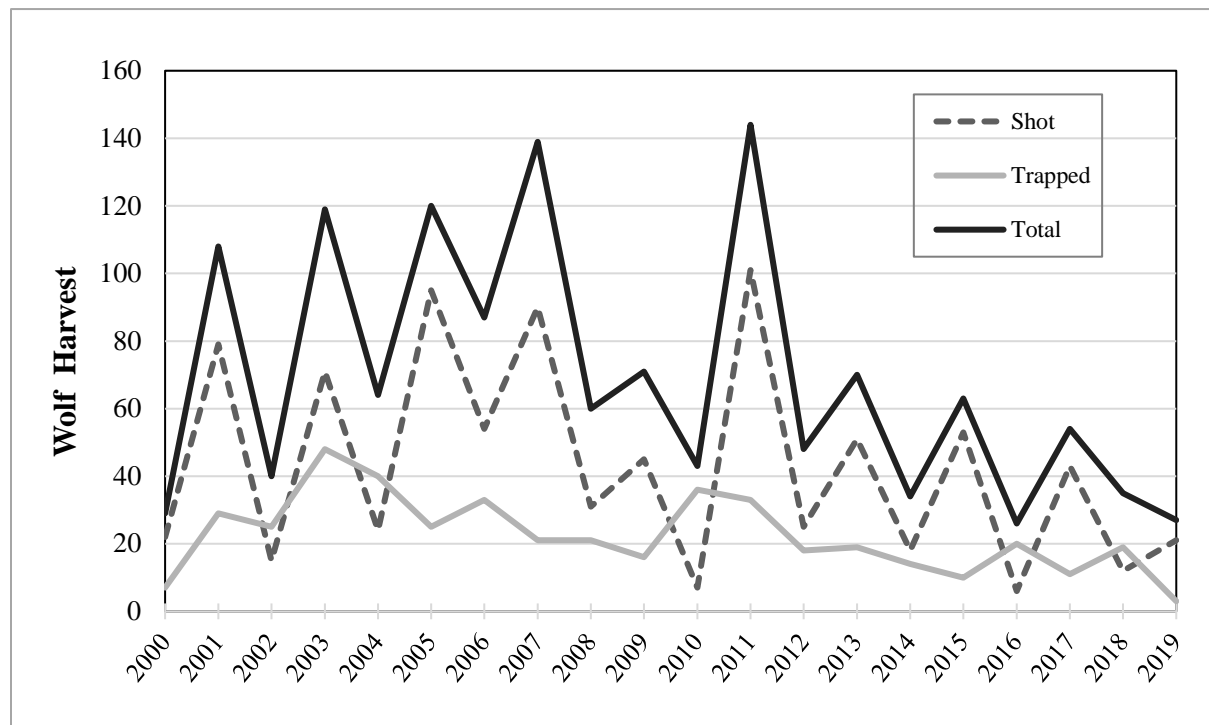
There is a positive customary and traditional use (C&T) finding in Unit 9 and an amount reasonably necessary for subsistence (ANS) of 10-28 wolves. There is also a positive C&T finding for Unimak Island in Unit 10 with an ANS of 0-1 wolf; and in the remainder of Unit 10 there is a positive C&T finding with an ANS of 90% of the harvestable portion of the population.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposed change would not have much of an effect on wolf harvest. During regulatory years

2011–2018 no wolves were trapped in June and only 3 were trapped in May in Units 9 and 10 combined.

**BACKGROUND:** Wolf seasons were made progressively longer during the late 2000s as Intensive Management (IM) programs were developed in Units 9 and 10. The June 30 closing date began in 2011 for Units 9 and 10 and has resulted in no increase in harvest. Wolf trapping has been on a declining trend since 2003 because the number of trappers is decreasing among Unit 9 villages (Fig. 30-1). With little to no wolf trapping occurring during May and June, the Unit 9 season could be shortened to close on April to align with other Central/Southwest Region GMUs. No wolves have been reported trapped in Unit 10, Unimak Island, during May and June.

Unit 9B has an active IM program for the Mulchatna caribou herd. Unit 9E has an IM program for the Northern Alaska Peninsula caribou herd (NAP) that expired on June 30, 2020. There is a proposal to reauthorize the NAP IM program at this Central/Southwest board meeting. Unit 9D had an IM program for the Southern Alaska Peninsula caribou herd which expired in 2017. Unit 10, Unimak Island, has an IM program for caribou in regulation that could not be implemented due to federal land restrictions and expired May 2020. There are 2 proposals to review IM findings and objectives for Unimak at this board meeting.



**Figure 30–4.** Trapping and hunting (shot) wolf harvest in Units 9 & 10, combined. Many wolves are shot during open biennial bear seasons, causing every-other-year spikes in wolf harvest.

**DEPARTMENT COMMENTS:** The department is **OPPOSED** to this proposal because it will reduce opportunity when there is no biological justification for the restriction. The proposed reduction in season length will align the closing season with other units in the Central/Southwest

Region, including Units 13, 14B, 16 and 17. If adopted, the board will need to determine if the shorter seasons continue to provide reasonable opportunity for subsistence uses. There are no biological concerns for wolf populations in Unit 9 or 10. Trapping is a method of taking furbearers and therefore the department is **NEUTRAL** regarding trapping seasons that extend into late spring and summer denning seasons; however the board may wish to consider allowing spring and summer harvest opportunity through hunting seasons to reduce the potential for wasted fur and bycatch.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 31 - 5 AAC 84.270 Furbearer trapping & 5 AAC 85.057 Hunting seasons and bag limits for wolverine.** Close wolverine trapping and hunting in Unit 10.

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** Close trapping and hunting for wolverine year-round in Unit 10.

**WHAT ARE THE CURRENT REGULATIONS?** The current wolverine trapping and hunting regulations can be found in 5 AAC 84.270 and 5 AAC 85.057, respectively, and published in the 2020–2021 regulations books.

The trapping season for wolverine in Unit 10 is November 10–last day of February with no bag limit. The hunting season for wolverines for residents and nonresidents is September 1–March 31 with a bag limit of 1 wolverine.

There is a positive customary and traditional use finding (C&T) for wolverines as furbearers in all units outside nonsubsistence areas with a harvestable portion, with an amount reasonably necessary for subsistence (ANS) of 90% of the harvestable portion.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Trapping and hunting activity for wolverines on Unimak Island (Unit 10) is currently low to nonexistent. The proposal would eliminate future opportunity to harvest wolverines for any uses, including subsistence uses, on the island from a very small population. Because there is currently no reported harvest, the proposal would likely have no effect except to conserve any remaining wolverines. There are no wolverine in the remainder of Unit 10.

**BACKGROUND:** Wolverines only occur in Unit 10 on Unimak Island where they are very scarce or no longer present. There is 1 sealing record for a wolverine shot in 1980, and an observation by a wildlife biologist of a lone wolverine high in alpine snow in 2011. The ADF&G Community

Subsistence Information System (CSIS; <http://www.adfg.alaska.gov/sb/CSIS/>) reports no harvest or use of wolverine in 2016, the latest year for which there are subsistence household data, nor in 1988. In 1998, an estimated four wolverine were harvested or used by residents of King Cove.

Wolf, fox, bears and their tracks are routinely seen on beaches where marine mammal carcasses have washed-up, but no wolverine sign has been observed at these important food sources in the last 6 years of regular staff trips to the island. Wolverine may have crossed Isanotski Strait regularly on pack ice in previous decades; sea ice at Unimak was much more common early in the twentieth century.

**DEPARTMENT COMMENTS:** The department submitted and **SUPPORTS** the proposal to close wolverine seasons in Unit 10 because of biological concerns for the wolverine population on Unimak Island. If adopted, the board will need to determine how the closure impacts reasonable opportunity for subsistence uses.

**COST ANALYSIS:** Adoption of the proposal would not result in significant cost to the Department.

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## **PROPOSAL 32 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Alaska Migratory Bird Co-Management Council

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to close the nonresident season for emperor geese in Units 9 and 10, until the population management index is above 28,000 birds.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
Units and Bag Limits	(General Hunt Only)	
(G) Emperor geese		
Units 8 and 10	Oct 8 – Jan 22	Oct 8 – Jan 22
Residents: 1 goose by registration permit only		
Unit 9, that portion within the Izembek State Game Refuge	Oct 16 – Oct 31	Oct 16 – Oct 31

Residents: 1 goose by  
registration permit only

Unit 9, remainder  
Residents: 1 goose by  
registration permit only

Sept. 1 – Dec. 16

Sept. 1 – Dec. 16

**NONRESIDENT HUNTERS:**

1 goose by drawing permit only;  
up to 25 permits may be issued...

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would result in loss of hunting opportunity to nonresident hunters during the general season for emperor geese, until the population management index is above 28,000 birds (i.e., the statewide quota is restored to 1,000 birds).

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season to the State of Alaska. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available to Alaska residents in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable to a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service—Alaska Region (Service—Alaska) during the breeding season to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds

– a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index was 26,585 birds (95% CL=24,161–29,008 birds), which was below the 28,000-bird threshold, triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service–Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season were: 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335 - 26,265) emperor geese. Accordingly, the Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1235, 1736, and 2129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only

<sup>b</sup>R (Resident):NR (Nonresident)

<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposal to close the nonresident hunt during restrictive regulations because this is an allocative proposal. There are no biological concerns in retaining or eliminating the nonresident emperor goose drawing permits.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department. However, if the proposal is adopted, revenue from nonresident license sales and drawing application fees will be lost.

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**PROPOSAL 33 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Chad Yamane, Clint Pollard, Rob Price, Robert Haney, Bill Sager, Gary English, Steve Timler, Mark Ihrie; Tony Roberts; Patrick Bradburn; Colby Sarvis; Patricio Gaudiano

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to allocate 50% of the allotted emperor goose permits to nonresident hunters in Units 9, 10, and 17 according to the federal allowance under prescriptive regulations – i.e., 500 draw permits to nonresidents under liberal regulations and 250 draw permits to nonresidents under restrictive regulations.

The department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 as a hunt area for Alaska residents. Also, the department interprets ‘allotted emperor goose permits’ in the proposal as reference to the federal allowance of birds. The number of Alaska resident permits available is unlimited, and therefore, a proposed 50% allocation of available emperor goose permits to nonresidents would be undefined.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
Units and Bag Limits	(General Hunt Only)	
(G) Emperor geese		
Units 8 and 10 Residents: 1 goose by registration permit only	Oct 8 – Jan 22	Oct 8 – Jan 22
Unit 9, that portion within the Izembek State Game Refuge Residents: 1 goose by registration permit only	Oct 16 – Oct 31	Oct 16 – Oct 31
Unit 9, remainder Residents: 1 goose by registration permit only	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
NONRESIDENT HUNTERS: 1 goose by drawing permit only; up to 25 permits may be issued...		



**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The

proposal would provide additional hunting opportunity for emperor geese to nonresident hunters during the general season by increasing the current number of (up to) 25 draw permits to 500 or 250 draw permits depending on the federal quota to the State of Alaska (1,000 or 500 birds) under a liberal or restrictive regulatory package, respectively.

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 33-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service—Alaska Region (Service—Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service—Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are: 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335 - 26,265) emperor geese. Accordingly, the Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 33-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 33-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235, 1,736, and 2,129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 33-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only

<sup>b</sup>R (Resident):NR (Nonresident)

<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters. There are no biological concerns with the current level of harvest.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 34 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Jeff Bringhurst, Andrew Williams, Matt Cates, Lucas Davis, Glenn Issette, Nathan Talbot, Erik Kauffman, Jeffrey Johnson, Joe Cook, Delbert Gatlin III, Benjamin Hillis,

Gary Kramer, Robert Wasley, Jeffrey Wasley, City of Cold Bay, Angela Simpson, Patrick Bradburn, Daniel Talbot, Dimitri Kritzas, Patrick Pitt, Ryan Breish, James Crews III; Hugh Clark; Alaska Waterfowl Association; Domanic Heim; Andrew Gibson; Jake Greseth; Sherwood Breish; Scott Mohr; Jordan Hamann

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to allocate 50% of the allotted emperor goose permits to nonresident hunters in Units 9, 10, and 17 according to the federal allowance under prescriptive regulations – i.e., 500 draw permits to nonresidents under liberal regulations and 250 draw permits to nonresidents under restrictive regulations.

The department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 as a hunt area for Alaska residents. Also, the department interprets ‘allotted emperor goose permits’ in the proposal as reference to the federal allowance of birds. The number of Alaska resident permits available is unlimited, and therefore, a proposed 50% allocation of available emperor goose permits to nonresidents would be undefined.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b> (General Hunt Only)	<b>Nonresident Open Season</b>
Units and Bag Limits		
(G) Emperor geese		
Units 8 and 10 Residents: 1 goose by registration permit only	Oct 8 – Jan 22	Oct 8 – Jan 22
Unit 9, that portion within the Izembek State Game Refuge Residents: 1 goose by registration permit only	Oct 16 – Oct 31	Oct 16 – Oct 31
Unit 9, remainder Residents: 1 goose by registration permit only	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
<b>NONRESIDENT HUNTERS:</b>		
1 goose by drawing permit only; up to 25 permits may be issued...		

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The

proposal would provide additional hunting opportunity for emperor geese to nonresident hunters during the general season by increasing the current number of (up to) 25 draw permits to 500 or 250 draw permits depending on the federal quota to the State of Alaska (1,000 or 500 birds) under a liberal or restrictive regulatory package, respectively.

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 34-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service—Alaska Region (Service—Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service—Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are: 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 34-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 34-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235, 1,736, and 2,129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 34-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only

<sup>b</sup>R (Resident):NR (Nonresident)

<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters. There are no biological concerns with the current level of harvest.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 35 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Brianne Rogers

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to allocate 50% of the allotted emperor goose permits to nonresident hunters in Units 9, 10, and 17 according to the federal allowance under prescriptive regulations – i.e., 500 draw permits to nonresidents under liberal regulations and 250 draw permits to nonresidents under restrictive regulations.

The department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 as a hunt area for Alaska residents. Also, the department interprets ‘allotted emperor goose permits’ in the proposal as reference to the federal allowance of birds. The number of Alaska resident permits available is unlimited, and therefore, a proposed 50% allocation of available emperor goose permits to nonresidents would be undefined.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b> (General Hunt Only)	<b>Nonresident Open Season</b>
Units and Bag Limits		
(G) Emperor geese		
Units 8 and 10	Oct 8 – Jan 22	Oct 8 – Jan 22
Residents: 1 goose by registration permit only		
Unit 9, that portion within the Izembek State Game Refuge	Oct 16 – Oct 31	Oct 16 – Oct 31
Residents: 1 goose by registration permit only		
Unit 9, remainder	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
Residents: 1 goose by registration permit only		

**NONRESIDENT HUNTERS:**

1 goose by drawing permit only;  
up to 25 permits may be issued...

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would provide additional hunting opportunity for emperor geese to nonresident hunters during the general season by increasing the current number of (up to) 25 draw permits to 500 or 250 draw permits depending on the federal quota to the State of Alaska (1,000 or 500 birds) under a liberal or restrictive regulatory package, respectively.



**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 35-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service–Alaska Region (Service–Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service–Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are: 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the

Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 35-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 35-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235, 1,736, and 2,129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 35-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup> Number of permits issued to residents only

<sup>b</sup>ra (Resident):NR (Nonresident)

<sup>c</sup>nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters. There are no biological concerns with the current level of harvest.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

\*\*\*\*\*

**PROPOSAL 36— 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Sean Tomlin and Robert Kelsey

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to allocate a 50/50 split of the emperor goose tags between Alaska resident and nonresident hunters in Units 9, 10, and 17.

The department notes that Unit 17 was included in error – Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 as a hunt area for Alaska residents. Also, the department interprets ‘emperor goose tags’ in the proposal as emperor goose permits, and thereby, a reference to the federal allowance of birds. The number of Alaska resident ‘tags’ or permits available is unlimited rendering a proposed 50/50 split of available emperor goose tags/permits between residents and nonresidents difficult to define. Thus, in effect, the proposal requests the number of available nonresident draw permits be set equivalent to 50% of the federal allowance of birds.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b> (General Hunt Only)	<b>Nonresident Open Season</b>
Units and Bag Limits		
(G) Emperor geese		
Units 8 and 10 Residents: 1 goose by registration permit only	Oct 8 – Jan 22	Oct 8 – Jan 22
Unit 9, that portion within the Izembek State Game Refuge Residents: 1 goose by registration permit only	Oct 16 – Oct 31	Oct 16 – Oct 31
Unit 9, remainder Residents: 1 goose by registration permit only	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
NONRESIDENT HUNTERS: 1 goose by drawing permit only; up to 25 permits may be issued...		

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would provide additional hunting opportunity for emperor geese to nonresident hunters during the general season by increasing the current number of up to 25 draw permits by applying a 50/50 split of the federal quota to the State of Alaska between resident and nonresident hunters. In essence this would allocate 500 or 250 draw permits to nonresident hunters, equivalent to half

of the federal allowance (1,000 or 500 birds) under a liberal or restrictive regulatory package, respectively.

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 36-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service—Alaska Region (Service—Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold, triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service—Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service—Alaska developed a state-space model that used all years (1985–2019) of

Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 36-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 36-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1235, 1736, and 2129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 36-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1,000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500		393			51			132:18	

<sup>a</sup>Number of permits issued to residents only

<sup>b</sup>R (Resident):NR (Nonresident)

<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters. There are no biological concerns with the current harvest level.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 37 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Stephen Wilber

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to increase the number of nonresident tags for emperor geese to 500 in Units 9, 10, and 17.

The department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 as a hunt area for Alaska residents. Also, the department interprets ‘tags’ as emperor goose permits, and thereby, as a reference to the federal allowance of birds. Thus, the proposal is requesting the number of available nonresident draw permits be set to 500, half of the federal allowance of birds (1000 birds) under a liberal regulatory package.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
Units and Bag Limits	(General Hunt Only)	
(G) Emperor geese		
Units 8 and 10	Oct 8 – Jan 22	Oct 8 – Jan 22
Residents: 1 goose by registration permit only		
Unit 9, that portion within the Izembek State Game Refuge	Oct 16 – Oct 31	Oct 16 – Oct 31
Residents: 1 goose by registration permit only		
Unit 9, remainder	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
Residents: 1 goose by registration permit only		

NONRESIDENT HUNTERS:  
1 goose by drawing permit only;  
up to 25 permits may be issued...

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would provide additional opportunity to nonresidents to hunt emperor geese during the general season by increasing the number of nonresident draw permits to 500; the equivalent to the total or half of the federal allowance (500 or 1,000 birds) under a restrictive or liberal regulatory package, respectively.



**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 37-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service–Alaska Region (Service–Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold, triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service–Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the

Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 37-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 37-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1235, 1736, and 2129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 37-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only

<sup>b</sup>R (Resident):NR (Nonresident)

<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters. However, the department notes that if the proposed allocation of 500 draw permits to nonresidents is allowed, the opportunity for resident hunters may be reduced or eliminated depending on the regulations package.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 38 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Britt Broadhurst and Christopher Eikelberger

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to increase the number of nonresident tags for emperor geese to 500 in Units 9, 10, and 17.

The department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 as a hunt area for Alaska residents. Also, the department interprets ‘tags’ as emperor goose permits, and thereby, as a reference to the federal allowance of birds. Thus, the proposal is requesting the number of available nonresident draw permits be set to 500, half of the federal allowance of birds (1,000 birds) under a liberal regulatory package.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
Units and Bag Limits	(General Hunt Only)	
(G) Emperor geese		
Units 8 and 10 Residents: 1 goose by registration permit only	Oct 8 – Jan 22	Oct 8 – Jan 22
Unit 9, that portion within the Izembek State Game Refuge Residents: 1 goose by registration permit only	Oct 16 – Oct 31	Oct 16 – Oct 31
Unit 9, remainder Residents: 1 goose by registration permit only	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16

NONRESIDENT HUNTERS:  
1 goose by drawing permit only;  
up to 25 permits may be issued...

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would provide additional opportunity to nonresidents to hunt emperor geese during the general season by increasing the number of nonresident draw permits to 500; the equivalent to the total or half of the federal allowance (500 or 1,000 birds) under a restrictive or liberal regulatory package, respectively.

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 38-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service–Alaska Region (Service–Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold, triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service–Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the

Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 38-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 38-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1235, 1736, and 2129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 38-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only

<sup>b</sup>R (Resident):NR (Nonresident)

<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters. However, the department notes that if the proposed allocation of 500 draw permits to nonresidents is allowed, the opportunity for resident hunters may be reduced or eliminated depending on the regulations package.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 39 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Josh Sowada and Brett McCausland

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to allocate an equal number of emperor goose tags to nonresidents and residents. The proposal is applicable to Units 9, 10, and 17.

The department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 as a hunt area for Alaska residents. Also, the department interprets use of ‘tags’ as interchangeable with permits and is a reference to the federal allowance of birds. Thus, in effect, the proposal is requesting the number of available nonresident draw permits be set to half of the federal allowance of birds (1,000 or 500 birds) under the current regulations for a liberal or restrictive package, respectively.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
Units and Bag Limits	(General Hunt Only)	
(G) Emperor geese		
Units 8 and 10	Oct 8 – Jan 22	Oct 8 – Jan 22
Residents: 1 goose by registration permit only		
Unit 9, that portion within the Izembek State Game Refuge	Oct 16 – Oct 31	Oct 16 – Oct 31
Residents: 1 goose by registration permit only		
Unit 9, remainder	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
Residents: 1 goose by registration permit only		
<b>NONRESIDENT HUNTERS:</b>		
1 goose by drawing permit only;		
up to 25 permits may be issued...		

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would provide additional opportunity to nonresidents to hunt emperor geese during the general season by increasing the number of nonresident draw permits to 500 or 250; the equivalent to half of the federal allowance (1,000 or 500 birds) under the current liberal or restrictive regulatory package, respectively.



**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 39-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service–Alaska Region (Service–Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold, triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service–Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the

Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 39-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 39-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1235, 1736, and 2129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 39-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only

<sup>b</sup>R (Resident):NR (Nonresident)

<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters, since there are no biological concerns with the current harvest level. However, there is potential of reduced opportunity for resident hunters if the proposal is adopted.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 40 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Sherwin Lott

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to double the number of draw permits for emperor geese to nonresidents.

The proposal indicates the board will consider the request for Units 9, 10, and 17. However, the department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 to form a hunt area for Alaska residents. Also, the department interprets the request to double the number of permits as relative to the federal allowance of birds. Thus, the proposal is requesting to increase the number of nonresident draw permits to 50, not restrict the number of resident permits to 950, which are available in unlimited number.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
Units and Bag Limits	(General Hunt Only)	
(G) Emperor geese		
Units 8 and 10	Oct 8 – Jan 22	Oct 8 – Jan 22
Residents: 1 goose by registration permit only		
Unit 9, that portion within the Izembek State Game Refuge	Oct 16 – Oct 31	Oct 16 – Oct 31
Residents: 1 goose by registration permit only		
Unit 9, remainder	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
Residents: 1 goose by registration permit only		
NONRESIDENT HUNTERS:		
1 goose by drawing permit only;		
up to 25 permits may be issued...		

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would provide additional opportunity to nonresidents to hunt emperor geese during the general season by doubling the number of nonresident draw permits from up to 25 to 50 draw permits.

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 40-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service–Alaska Region (Service–Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service–Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the

Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 40-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 40-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235; 1,736; and 2129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 40-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1,000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only

<sup>b</sup>R (Resident):NR (Nonresident)

<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters. There are no biological concerns with the current harvest level, and none are anticipated if this proposal is adopted.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 41 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Christopher O'Brien; Matt Switlick; Breck Dickinson; Lucien Gwin; Kevin Ryan; Mark Goldsworthy; Lee Thomas Kjos; Scott Haugen; Jason Pinter; Delbert Gatlin IV; Steven Sadowski; Matt Frackelton

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to increase the number of emperor goose draw permits for nonresidents.

The proposal indicates the board will consider the request for Units 9, 10, and 17. However, the department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 to form a hunt area for Alaska residents. Also, the department interprets the use of 'tags' throughout the proposal as interchangeable with draw permits.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b> (General Hunt Only)	<b>Nonresident Open Season</b>
Units and Bag Limits		
(G) Emperor geese		
Units 8 and 10	Oct 8 – Jan 22	Oct 8 – Jan 22
Residents: 1 goose by registration permit only		
Unit 9, that portion within the Izembek State Game Refuge	Oct 16 – Oct 31	Oct 16 – Oct 31
Residents: 1 goose by registration permit only		
Unit 9, remainder	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
Residents: 1 goose by registration permit only		
NONRESIDENT HUNTERS:		
1 goose by drawing permit only;		
up to 25 permits may be issued...		

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would provide additional opportunity to nonresidents to hunt emperor geese during the general season by increasing the number of nonresident draw permits. The proposal does not provide the number of permits to allocate to nonresident hunters. Previous emperor goose



proposals suggested an equal split between resident and nonresident hunters, and a significant increase in nonresident permits (e.g., 500 permits).

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 41-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service—Alaska Region (Service—Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service—Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service—Alaska developed a state-space model that used all years (1985–2019) of

Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 41-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 41-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235; 1,736; and 2,129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 41-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only<sup>b</sup>R (Resident):NR (Nonresident)<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters. Without a specified increase in the number of permits it is difficult to assess biological concerns. There are no concerns with the current harvest level; however, a significant increase in draw permit availability may result in reduced opportunity for resident hunters.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 42 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Moe Neale

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to allow more years of the emperor goose tags for lottery.

The proposal indicates the board will consider the request for Units 9, 10, and 17. However, the department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 to form a hunt area for Alaska residents. Also, the department interprets the use of ‘tags’ in the proposal as interchangeable with draw permits.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b> (General Hunt Only)	<b>Nonresident Open Season</b>
Units and Bag Limits		
(G) Emperor geese		
Units 8 and 10 Residents: 1 goose by registration permit only	Oct 8 – Jan 22	Oct 8 – Jan 22
Unit 9, that portion within the Izembek State Game Refuge Residents: 1 goose by registration permit only	Oct 16 – Oct 31	Oct 16 – Oct 31
Unit 9, remainder Residents: 1 goose by registration permit only	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
NONRESIDENT HUNTERS: 1 goose by drawing permit only; up to 25 permits may be issued...		

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted, the proposal would continue opportunity for nonresidents to hunt emperor geese during the general season in more years via a draw hunt. The current federal regulatory policy for emperor geese includes closure of the fall-winter hunt if the population drops below a prescribed threshold (see below) as a sustainable policy. While the true intent of the proposal is unclear, the

department interprets the proposal as requesting the board continues to allow a draw hunt for nonresidents when regulatory policy prescribes an open fall-winter hunt.

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 42-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service–Alaska Region (Service–Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold, triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service–Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of

Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 42-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 42-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235; 1,736; and 2,129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 42-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only

<sup>b</sup>R (Resident):NR (Nonresident)

<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed continuation of emperor goose hunting opportunity for nonresident hunters. Unless other regulatory action is taken, nonresident hunters will continue to have an opportunity to apply for, and hunt, emperor geese in Alaska.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 43 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Matthew Wilson

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to increase the nonresident emperor goose draw permit allocation by 10% of the current federal allowance (1,000 birds) – i.e., allow 100 draw permits per season.

Note: The proposal also asks for an increase in application fees for nonresident emperor goose drawing permits; regulating fees is not within the purview of the board.

The proposal indicates the board will consider the request for Units 9, 10, and 17. However, the department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 to form a hunt area for Alaska residents.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
Units and Bag Limits	(General Hunt Only)	
(G) Emperor geese		
Units 8 and 10	Oct 8 – Jan 22	Oct 8 – Jan 22
Residents: 1 goose by registration permit only		
Unit 9, that portion within the Izembek State Game Refuge	Oct 16 – Oct 31	Oct 16 – Oct 31
Residents: 1 goose by registration permit only		
Unit 9, remainder	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
Residents: 1 goose by registration permit only		
<b>NONRESIDENT HUNTERS:</b>		
1 goose by drawing permit only;		
up to 25 permits may be issued...		

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would provide additional opportunity to nonresidents to hunt emperor geese during the general season by increasing the number of draw permits from (up to) 25 to 10% of the federal allowance of 1,000 or 500 birds under a liberal or restrictive regulatory package, respectively; in effect, increase to 50 or 100 draw permits per season.



**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 43-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service–Alaska Region (Service–Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service–Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the

Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 43-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 43-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235; 1,736; and 2,129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 43-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1,000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only

<sup>b</sup>R (Resident):NR (Nonresident)

<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters. There is no biological concern with the current harvest level and no concerns are anticipated if this proposal is adopted.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 44 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Michael Bard

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to allow nonresident hunters to purchase unissued resident emperor goose permits.

The proposal indicates the board will consider the request for Units 9, 10, and 17. However, the department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 to form a hunt area for Alaska residents.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

Units and Bag Limits	Resident Open Season (General Hunt Only)	Nonresident Open Season
(G) Emperor geese		
Units 8 and 10 Residents: 1 goose by registration permit only	Oct 8 – Jan 22	Oct 8 – Jan 22
Unit 9, that portion within the Izembek State Game Refuge Residents: 1 goose by registration permit only	Oct 16 – Oct 31	Oct 16 – Oct 31
Unit 9, remainder Residents: 1 goose by registration permit only	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
NONRESIDENT HUNTERS: 1 goose by drawing permit only; up to 25 permits may be issued...		

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would allow nonresident hunters to purchase (at an undisclosed dollar amount) unissued resident permits.

Authority to establish sale prices (e.g., nonresident big game locking tags) lies with the Alaska Legislature. At present, no permits are available for purchase, like locking tags are.

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was

reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 44-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service—Alaska Region (Service—Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service—Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service—Alaska developed a state-space model that used all years (1985–2019) of Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service—Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through

the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 44-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 44-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235; 1,736; and 2,129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 44-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1,000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only<sup>b</sup>R (Resident):NR (Nonresident)<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocative aspects of this proposal and suggests the board does not have the authority to establish permit sale prices. This authority lies with the Legislature as established in Alaska statute. The department also notes that it is unclear how this could be accomplished if resident permits are offered in unlimited number and issued throughout the general season.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 45 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Gina Sadowski

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to increase the number of emperor goose draw permits for nonresident hunters and require nonresidents use an outfitter to hunt emperor geese.

The proposal indicates the board will consider the request for Units 9, 10, and 17. However, the department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 to form a hunt area for Alaska residents. Also, the proposal is unclear if an outfitter in this case refers to a registered migratory game bird guide.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
Units and Bag Limits	(General Hunt Only)	
(G) Emperor geese		
Units 8 and 10	Oct 8 – Jan 22	Oct 8 – Jan 22
Residents: 1 goose by registration permit only		
Unit 9, that portion within the Izembek State Game Refuge	Oct 16 – Oct 31	Oct 16 – Oct 31
Residents: 1 goose by registration permit only		
Unit 9, remainder	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
Residents: 1 goose by registration permit only		
<b>NONRESIDENT HUNTERS:</b>		
1 goose by drawing permit only;		
up to 25 permits may be issued...		

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would provide additional opportunity to nonresidents to hunt emperor geese during the general season. The proposal also would require nonresident hunters to use an outfitter to hunt emperor geese. This may limit the communities that nonresidents can hunt to only those where outfitters operate. Currently, emperor geese are not a guide-required species for nonresident



hunters. The authority to require the use of a guide by nonresident hunters lies with the Alaska Legislature as outlined in Alaska statute.

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 45-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service–Alaska Region (Service–Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service–Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of

Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 45-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 45-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235; 1,736; and 2,129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 45-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1,000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only

<sup>b</sup>R (Resident):NR (Nonresident)

<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters. Emperor geese are not a species requiring the use of a guide like mountain goat, Dall's sheep, and brown bear. The authority to require the use of a guide by nonresident hunters lies with the Alaska Legislature as outlined in Alaska statute.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 46 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Thomas Losk

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to increase the number of emperor goose draw permits for nonresident hunters and establish preference points based on number of years a nonresident has applied for the hunt.

The proposal indicates the board will consider the request for Units 9, 10, and 17. However, the department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 to form a hunt area for Alaska residents.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b> (General Hunt Only)	<b>Nonresident Open Season</b>
Units and Bag Limits		
(G) Emperor geese		
Units 8 and 10	Oct 8 – Jan 22	Oct 8 – Jan 22
Residents: 1 goose by registration permit only		
Unit 9, that portion within the Izembek State Game Refuge	Oct 16 – Oct 31	Oct 16 – Oct 31
Residents: 1 goose by registration permit only		
Unit 9, remainder	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
Residents: 1 goose by registration permit only		
<b>NONRESIDENT HUNTERS:</b>		
1 goose by drawing permit only;		
up to 25 permits may be issued...		

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would provide additional opportunity for nonresidents to hunt emperor geese during the general season. The proposal also would require the department to establish a preference point system, for emperor geese only, whereby the odds of being drawn for a nonresident permit improve with number of years applying for a permit.

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was

reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 46-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service—Alaska Region (Service—Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service—Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service—Alaska developed a state-space model that used all years (1985–2019) of Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service—Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through

the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 46-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 46-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235; 1,736; and 2,129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 46-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1,000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only<sup>b</sup>R (Resident):NR (Nonresident)<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters. However, the author of the proposal did not specify what the desired increase is. The department **OPPOSES** establishing a preference point system for emperor geese. The department notes that a point system is not used for any draw hunts. However, should the board consider such a system for the emperor goose draw hunt, we recommend considering this for other species when a preference point system is deliberated by the board at the Statewide Regulations meeting in March 2022.

**COST ANALYSIS:** Adoption of this proposal would result in additional costs to the department.

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**PROPOSAL 47 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Luke Schmidt

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to establish a quota hunt for emperor geese with a mandatory 24-hour reporting requirement. It was not explicitly stated in the proposal whether this quota hunt includes a permit requirement, pertains to both residents and nonresidents, or applies to a single or multiple hunt areas.

The proposal indicates the board will consider the request for Units 9, 10, and 17. However, the department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 to form a hunt area for Alaska residents.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
Units and Bag Limits	(General Hunt Only)	
(G) Emperor geese		
Units 8 and 10	Oct 8 – Jan 22	Oct 8 – Jan 22
Residents: 1 goose by registration permit only		
Unit 9, that portion within the Izembek State Game Refuge	Oct 16 – Oct 31	Oct 16 – Oct 31
Residents: 1 goose by registration permit only		
Unit 9, remainder	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
Residents: 1 goose by registration permit only		
NONRESIDENT HUNTERS:		
1 goose by drawing permit only;		
up to 25 permits may be issued...		

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would provide additional opportunity for nonresidents to hunt emperor geese during the general season by establishing a quota system with mandatory 24-hour reporting. The extent of



additional nonresident opportunity is unknown because it isn't clear what effect the proposal would have on resident hunters and the overall hunt strategy.

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 47-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan); [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service—Alaska Region (Service—Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service—Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service—Alaska developed a state-space model that used all years (1985–2019) of

Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 47-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 47-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235; 1,736; and 2,129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 47-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1,000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only<sup>b</sup>R (Resident):NR (Nonresident)<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters. The author of the proposal did not specify the increased number for nonresident permits. Should harvest increase significantly the use of a shorter reporting period may be appropriate and can be implemented by the department's discretionary authority. The department notes that federal regulation allows an emperor goose season by permit only. Also, it is conceivable that establishing a quota system which included a single range-wide hunt area could potentially result in reduced or no opportunity for hunters in southern regions of the state based on the migration chronology of emperor geese. Implementing a quota system that is applicable to both residents and nonresidents would require the current hunt structure for the emperor goose general season to be changed.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 48 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Terry Lassiter

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to increase the number of emperor goose draw permits for nonresident hunters or allow a second draw for unused resident permits.

The proposal indicates the board will consider the request for Units 9, 10, and 17. However, the department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 to form a hunt area for Alaska residents.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b> (General Hunt Only)	<b>Nonresident Open Season</b>
Units and Bag Limits		
(G) Emperor geese		
Units 8 and 10	Oct 8 – Jan 22	Oct 8 – Jan 22
Residents: 1 goose by registration permit only		
Unit 9, that portion within the Izembek State Game Refuge	Oct 16 – Oct 31	Oct 16 – Oct 31
Residents: 1 goose by registration permit only		
Unit 9, remainder	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
Residents: 1 goose by registration permit only		
NONRESIDENT HUNTERS:		
1 goose by drawing permit only; up to 25 permits may be issued...		

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would provide additional opportunity for nonresidents to hunt emperor geese during the general season by increasing the number of draw permits available. The proposal also would provide additional opportunity by allowing a second draw of unissued resident permits for nonresidents.

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 48-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service—Alaska Region (Service—Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold, triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service—Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 48-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 48-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235; 1,736; and 2,129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 48-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1,000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only<sup>b</sup>R (Resident):NR (Nonresident)<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocation of emperor goose hunting opportunity for nonresident hunters. The author of the proposal did not specify a number of nonresidents permits to be offered. The department **OPPOSES** establishing a second permit drawing for nonresident emperor goose permits. The department notes that resident permits are offered in unlimited number and issued throughout the general season (Sept. 1–Jan. 22); thus, it would be difficult to predict resident harvest to set the appropriate number of permits available for a second draw.

**COST ANALYSIS:** Adoption of this proposal would result in additional costs to the department by requiring a second permit drawing period.

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**PROPOSAL 49 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Shane Smith

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to establish a combined resident-nonresident draw permit hunt in select areas or regions of the state with draw quotas in place for each hunt area. Also, allow for a second draw for unissued permits from the first round of draws.

The proposal indicates the board will consider the request for Units 9, 10, and 17. However, the department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 as a hunt area for Alaska residents.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b> (General Hunt Only)	<b>Nonresident Open Season</b>
Units and Bag Limits		
(G) Emperor geese		
Units 8 and 10	Oct 8 – Jan 22	Oct 8 – Jan 22
Residents: 1 goose by registration permit only		
Unit 9, that portion within the Izembek State Game Refuge	Oct 16 – Oct 31	Oct 16 – Oct 31
Residents: 1 goose by registration permit only		
Unit 9, remainder	Sept. 1 – Dec. 16	Sept. 1 – Dec. 16
Residents: 1 goose by registration permit only		

**NONRESIDENT HUNTERS:**

1 goose by drawing permit only;  
up to 25 permits may be issued...

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would increase the nonresident hunting opportunity of emperor geese by establishing a combined resident-nonresident draw permit hunt of emperor geese in select areas or regions with draw quotas and by allowing a second draw of unissued permits, with an option for a second



permit to first round awardees; this would increase the bag limit which is mandated by the federal regulatory framework.

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 49-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service–Alaska Region (Service–Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and 28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service–Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of

Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017-2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 49-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 49-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235; 1,736; and 2,129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 49-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1,000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only<sup>b</sup>R (Resident):NR (Nonresident)<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the proposed allocative aspects of the proposal to combine resident-nonresident draw permit structure. The department notes that adoption of this proposed draw hunt would result in a reformation of the current structure for the general season hunt of emperor geese approved by the board in 2017. The department also notes that the proposed draw permit structure would require residents to pay for a permit (that is currently free and issued in unlimited number) with draw odds equal to nonresidents; this has potential to negatively impact hunting opportunity for residents. In addition, allowing the hunt to occur only in select areas or regions would reduce or eliminate opportunity for rural residents outside of designated hunt areas. If adopted, the board will need to determine if drawing permits will continue to provide a reasonable opportunity for subsistence uses, which the board has not done for any drawing hunts for any species.

Awarding a second draw permit to hunters in a general season would be out of compliance with federal regulations that allow harvest of one emperor goose per hunter per season.

**COST ANALYSIS:** Adoption of this proposal would result in additional costs to the department.

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**PROPOSAL 50 – 5 AAC 85.065(a)(4) Hunting season and bag limits for small game**

**PROPOSED BY:** Christian Scudder

**WHAT WOULD THE PROPOSAL DO?** The proposal seeks to increase the opportunity to hunt emperor geese for nonresidents by administering a complex preference program with an allocation of tags or harvests to residents and nonresidents which seemingly equates to 1325 emperor geese. However, a few complexities of the proposed program remain unclear: the basis for percentage allotted to (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> timer) residents – presumably an unspecified quota of birds; if the total ‘harvests’ allotted to nonresidents is 500 or 1325 birds; and the basis for 100% allotment to nonresidents with valid AK hunting licenses in a few areas across the Aleutians – this appears in addition to the apparent 1325 allotted to nonresident 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> timers.

The proposal indicates the board will consider the request for Units 9, 10, and 17. However, the department notes that Unit 17 is not in regulation as one of the four zones in the nonresident hunt area (see below). Rather, Unit 17 is combined with Unit 9 to form a hunt area for Alaska residents. Also, the department interprets ‘tags’ as emperor goose permits, and thereby, as a reference to the federal allowance of birds.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulation allows 25 nonresident draw permits to hunt emperor geese in Units 8, 9, 10 and the Izembek State Game Refuge as follows:

5 AAC 85.065(a)(4)(G)

	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
Units and Bag Limits	(General Hunt Only)	
(G) Emperor geese		
Units 8 and 10	Oct 8 – Jan 22	Oct 8 – Jan 22
Residents: 1 goose by registration permit only		
Unit 9, that portion within the Izembek State Game Refuge	Oct 16 – Oct 31	Oct 16 – Oct 31
Residents: 1 goose by		

registration permit only

Unit 9, remainder

Sept. 1 – Dec. 16

Sept. 1 – Dec. 16

Residents: 1 goose by

registration permit only

**NONRESIDENT HUNTERS:**

1 goose by drawing permit only;

up to 25 permits may be issued...

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposal would provide additional opportunity for nonresidents to hunt emperor geese in the 2021 general season by allotting more emperor geese to nonresidents for harvest and implementing a preference program for residents and nonresidents. It is difficult to discern how the proposed program might impact resident harvest opportunity. Limiting hunting opportunity is done in times of game scarcity and often by drawing permit; however, the proposal suggests a robust goose population and does not request a resident drawing permit hunt.

**BACKGROUND:** The general season for emperor geese was closed in 1986 to allow the population to recover from low abundance. After 30 years of closure, the general season was reopened in 2017 under a federal allowance of 1,000 emperor geese per season. The board established seven hunt areas across the annual range of emperor geese; and allocated the 1,000-bird quota across these hunt areas (Table 50-1). The hunt is administered using a registration permit system for Alaska residents that allows a permit holder to harvest one emperor goose per season in any one of the hunt areas. Registration permits are free and available in unlimited number. Hunt areas are closed by Emergency Order if the individual quota is met or after the last day of the season, whichever is first. The board also authorized a draw hunt beginning in 2018 that allowed up to 25 nonresidents to participate in the general season hunt of emperor geese. A draw permit is applicable in a single hunt area that is split into four zones with hunt conditions (zone boundaries, season dates, harvest quota, Emergency Closure, etc.) defined by the corresponding resident hunt areas (Units 8, 9, 10, and the Izembek State Game Refuge [ISGR]). A nonresident with a draw permit may hunt in any of the four hunt zones and take one emperor goose per season.

Federal frameworks regulations for the emperor goose general hunt season are guided by the harvest strategy in the Pacific Flyway Council's emperor goose management plan (Plan; [http://pacificflyway.gov/documents/eg\\_plan.pdf](http://pacificflyway.gov/documents/eg_plan.pdf)). The harvest strategy is based on using the indicated total bird index (index) from the Yukon-Kuskokwim Delta Coastal Zone (Coastal Zone) survey conducted by the U.S. Fish and Wildlife Service–Alaska Region (Service–Alaska) to assess population status relative to prescribed population thresholds. The harvest strategy specifies the general season will be open with a federal quota of 1,000 birds if the Coastal Zone index from the previous year is greater than 23,000 birds, and harvest will be closed if the index is below this threshold. If the Coastal Zone index from the previous year is between 23,000 and

28,000 birds, the federal quota will be reduced to 500 birds - a permit is required and allowable take under the reduced statewide quota remains at one bird per hunter per season.

In 2019, the Coastal Zone index (26,585; 95% CL=24,161–29,008 birds) dropped below the 28,000-bird threshold triggering a reduced federal quota of 500 emperor geese for the 2020 fall-winter hunting season. Accordingly, the individual hunt area quotas were adjusted in consultation with the Alaska Migratory Bird Co-Management Council and Service–Alaska considering past harvest data to equal the reduced quota total of 500 birds. The adjusted hunt area quotas for the 2020 hunting season are 150 in Unit 8, 100 in Unit 9/17 (combined resident hunt area), 50 in the ISGR, 125 in Unit 10, and 25 each in Units 18, 22, and 23.

In 2020, the Coastal Zone survey was canceled due to the coronavirus pandemic, resulting in the lack of a 2020 index to inform regulatory decisions for the 2021 season. To aid in regulatory decisions, the Service–Alaska developed a state-space model that used all years (1985–2019) of Coastal Zone survey data to predict a 2020 index of 27,591 birds (95% CI: 18,509–39,493), near the 2019 index. In 2021, the Service–Alaska conducted the Coastal Zone survey and estimated an indicated total bird index of 24,300 (95% CI 22,335–26,265) emperor geese. Accordingly, the Pacific Flyway Council approved continuation of the 500-bird quota for the 2022 season through the federal regulations process. The 2021 and 2022 hunt area quotas adjusted to a 500-bird quota were the same as those established in 2020.

In the last 4 hunt seasons (2017–2020), the average number of emperor goose permits issued to Alaska residents was 428; of which an average 50.0% of hunters participated in the hunt. Alaska resident hunting success was 59.4% for an average annual reported harvest of 127 emperor geese across the 4 hunt years (Table 50-1). The average reporting rate for Alaska residents was 96%. Most emperor geese were harvested in the southernmost hunt areas with only one goose harvested in the 3 northern Units (Table 50-1). In 2018, 2019 and 2020, the number of nonresident applications received for the draw hunt were 1,235; 1,736; and 2,129, respectively. Assuming each applicant submitted 6 draw entries, the number of applicants in 2018 was 205, in 2019 was 289 and in 2020 was 354. All 25 nonresidents reported hunting with 100% success in 2018 and 2019. In 2020, 21 nonresidents reported hunting with 85% success. About 72% of the nonresident emperor goose harvest was in the Cold Bay area across the 3 hunt years.

Table 50-1. Emperor goose permit hunt

2017—2019										
Hunt Areas	Harvest Quota	No. Permits Issued <sup>a</sup>			% Hunted			No. Harvested R:NR <sup>b</sup>		
		2017	2018	2019	2017	2018	2019	2017	2018 <sup>c</sup>	2019
Unit 8	175	208	172	163	41	51	41	33	48:2	25
Unit 9/17	150	126	92	112	63	76	70	68	47:17	63:19
Izembek SGR	125	42	25	30	35	44	43	12	5:3	9
Unit 10	175	72	58	73	44	75	63	16	25:1	24:6
Unit 18	125	37	26	32	10	15	15	0	0	1
Unit 22	125	13	6	3	23	50	0	0	0	0
Unit 23	125	19	7	2	0	0	50	0	0	0
Total	1,000	517	386	415	42	63	51	129	125:25	122:25
2020										
	500	393			51			132:18		

<sup>a</sup>Number of permits issued to residents only<sup>b</sup>R (Resident):NR (Nonresident)<sup>c</sup>Nonresident harvest includes 2 reports from unidentified hunt zones

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocative aspects of this proposal and **OPPOSED** to the creation of a hunt strategy that requires extensive harvest monitoring and determination of a hunter's past success. The department notes that the proposed program would require the department to track individual resident hunt success from the last three hunt years and randomly select opportunity based on registrant's hunt history, which would consume staff time and limit resident hunting opportunity. Also, the proposal suggests implementing a program that is out of compliance with federal regulation in two ways: federal regulation allows one emperor goose per hunter per year, contrary to the proposed two tags to 1<sup>st</sup> timers; and the federal quota allots 1,000 emperor geese to the State of Alaska per year, much less than the apparent opportunity proposed for both resident and nonresident hunters. In addition, the basis for the 175,000-bird density identified in the proposal is not specified – this

suggested population size is higher than U.S. Fish and Wildlife Service population models indicate, although with high uncertainty.

**COST ANALYSIS:** Adoption of this proposal would not result in additional costs to the department.

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**PROPOSAL 51 – 5 AAC 85.010(1)(a). Hunting seasons and bag limits for bison.** Expand the Copper River bison draw hunt (DI454) area.

**PROPOSED BY:** Tim Nelson

**WHAT WOULD THE PROPOSAL DO?** Expand the DI454 Copper River bison draw hunt area by approximately 530 square miles to include federal and private lands, including private Native corporation lands, within the boundary of Wrangell-St. Elias National Park (WRST; including approximately 15 miles of the McCarthy Road), and approximately 1.5 miles of the Copper River corridor.

**WHAT ARE THE CURRENT REGULATIONS?** The current bison hunting regulations can be found in 5 AAC 85.010 and in the *2020–2021 Alaska Hunting Regulations*.

<b>Units and Bag Limits</b>	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
(1)	(General hunt only)	
Unit 11, east of the Copper River, south of the Klawasi River, and west of a line from Mount Sanford to Mount Wrangell to Long Glacier, and west of the Kotsina River, and that portion of Unit 13(D) east of the Edgerton Highway		
1 bison every 10 regulatory years by drawing permit only; up to 24 permits may be issued.	Sept. 1 – Mar. 31	Sept. 1 – Mar. 31

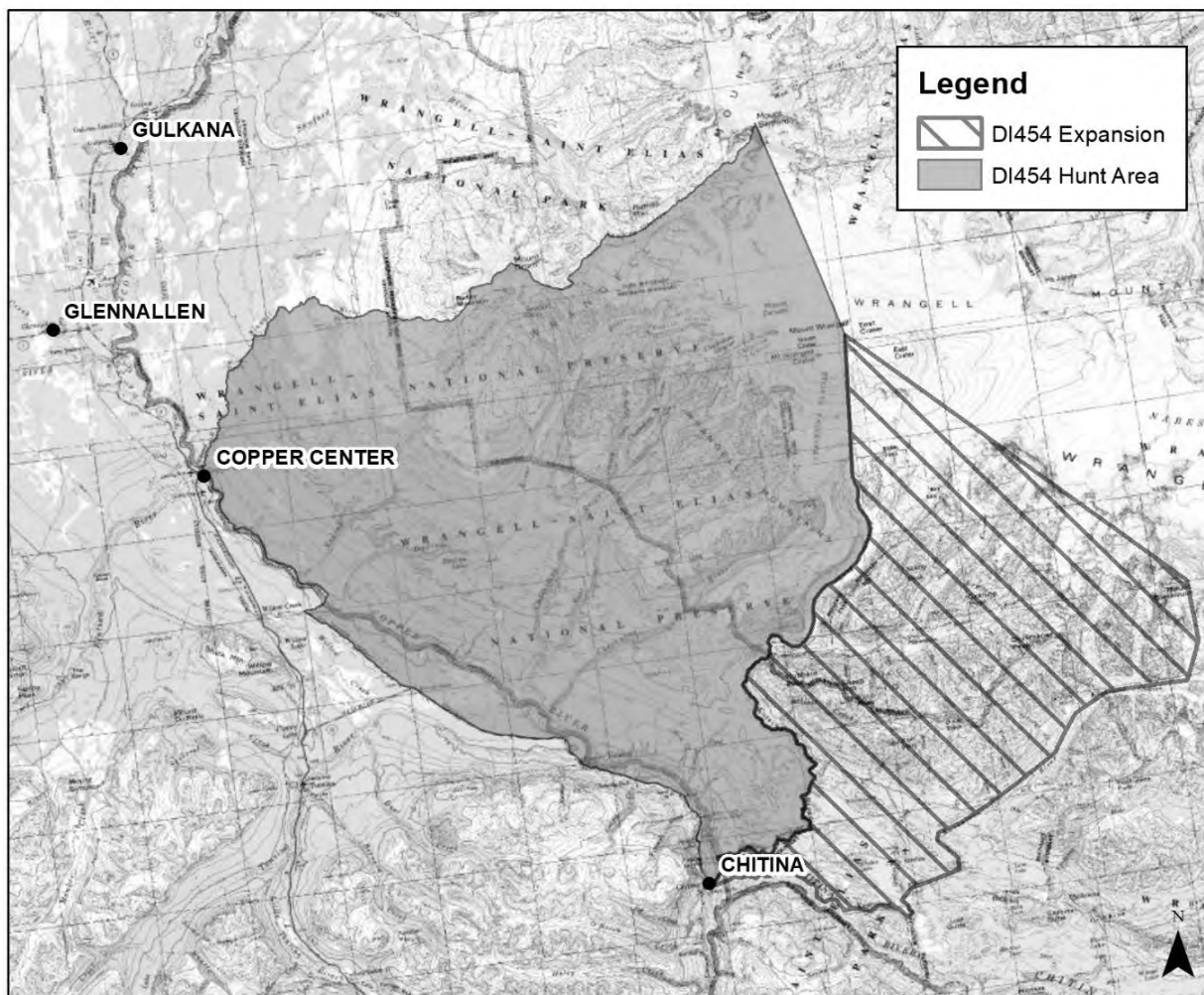
5 AAC 92.050(a)(4)(H)



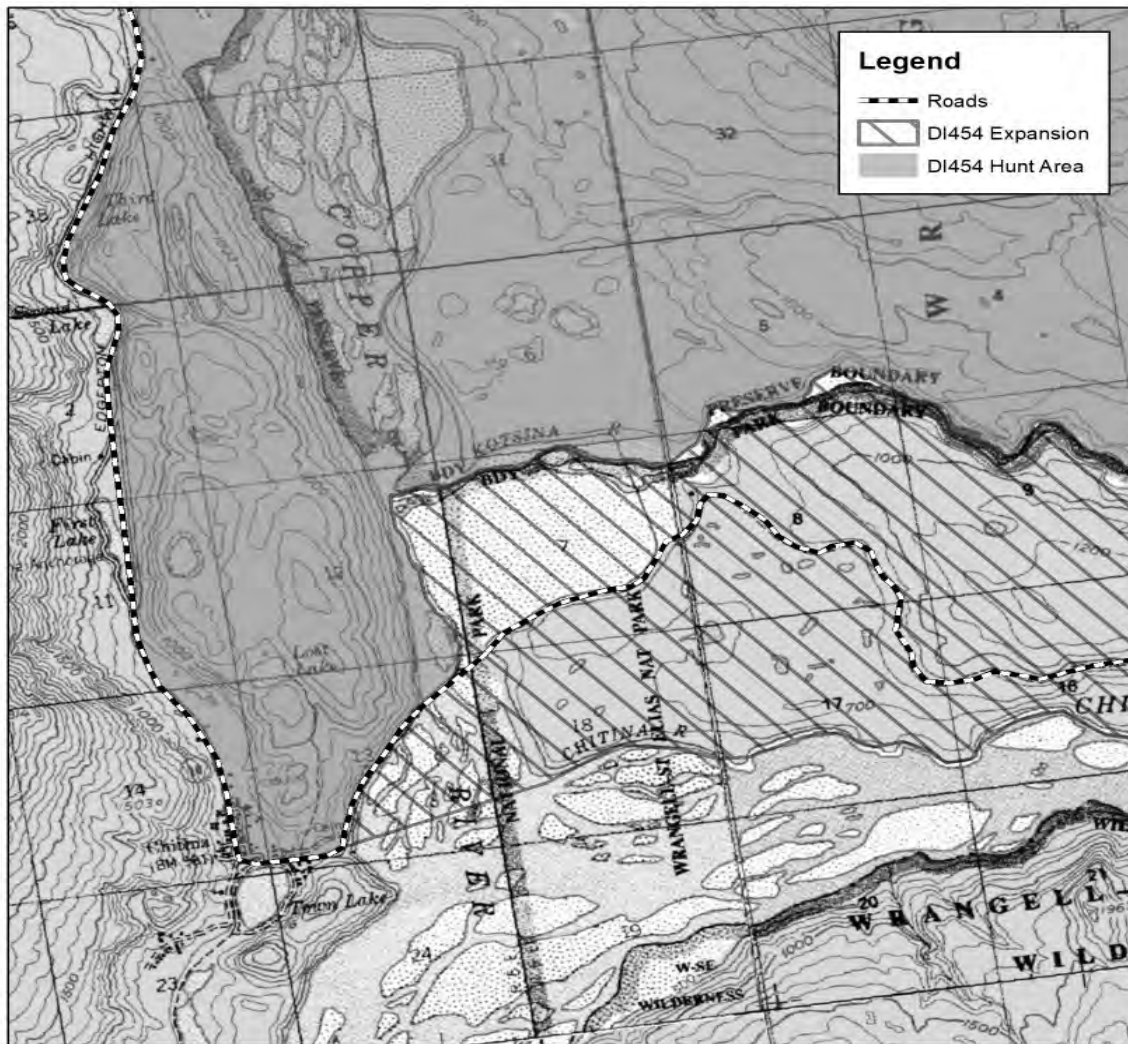
(H) a resident who is a successful applicant for a bison drawing permit hunt is ineligible to apply for another bison drawing permit for 10 years; a nonresident who is a successful applicant for a bison drawing permit is ineligible to apply for another bison drawing permit.

Bison in Units 11, 19D, and 20D have a negative C&T finding.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would allow road-hunt opportunity along the McCarthy Road for DI454 recipients who have obtained trespass permits for Native corporation lands when bison are near the road. The highway right-of-way within this section of road is within WRST, where bison hunting is currently prohibited. A small localized group of bison frequents this section of the McCarthy Road and surrounding lands year-round, providing wildlife viewing opportunities for an otherwise remote species. These animals do not typically make the seasonal movements up and down the Copper River that the majority of the herd demonstrates. Expanding the hunt area will provide highway vehicle access to harvest opportunities for hunters on those private Native corporation lands (\$1,500 trespass permit currently required) that are along the floodplain of the Kotsina River and the gravel bars of the Copper River for approximately 1.5 miles not already within the hunt area, and within a State of Alaska campground adjacent to the McCarthy Road. Once the localized animals around the McCarthy Road are removed, harvest opportunity will depend on the unpredictable seasonal movements of other animals within the herd, which largely remain within the current hunt area.



**Figure 51-1.** DI454 Copper River bison draw hunt area, current and proposed.



**Figure 51-2.** Copper River Bison Drawing hunt area (DI454), current and proposed, near Chitina.

**BACKGROUND:** The Copper River bison herd originated from animals that were relocated from the National Bison Range in Moise, Montana to Delta Junction, Alaska in 1928. In 1950, 5 bulls and 12 cows were moved from the Delta herd to Slana. These bison moved away from the release site, and by 1961 they had relocated down the Copper River to the Dadina and Chetaslina river drainages. Currently the herd makes seasonal movements from the upper Dadina and upper Chetaslina to the Copper River, south to Chitina. Small roaming groups are sometimes seen in Kenny Lake. During the hunting season hunters are successful in finding small scattered groups along the Copper River, from the Dadina to Chitina. In recent years, a small number of bison have been observed frequently on or near the McCarthy Road just east of Chitina year round. Throughout the years, minimum population counts for the herd have varied from a low of 51 bison in 1967 to a high of 225 in 2017 (Table 51-1).

The Chitina bison herd was introduced near May Creek in 1962 to expand the range of the Copper River bison herd. The hope was that the 2 herds, in their wanderings, would eventually combine and utilize the habitat available up and down the Copper River as well as the Chitina and Nizina rivers. For the most part the 2 herds have remained distinct in their separate ranges since that time.

**Table 51-1.** Copper River Bison herd minimum counts, harvest, and success, RY2015–RY2019

Year	Herd Minimum Count	DI454 Permits Issued	Total Harvest*	Hunter Success*
2015	181	30	11	48%
2016	196	24	11	65%
2017	225	30	12	80%
2018	159	46	19	58%
2019	146	25	15	79%
2020	70	24		

\*Includes SI454 Governor's Permit  
2020 survey was considered poor.

The department held the first hunt by registration permit for Copper River bison in regulatory year (RY) 1964. The hunt was closed from RY1989 to RY1998 due to a decline in herd size, but annual harvests resumed in RY1999 under a drawing permit hunt. The DI454 hunt area south and west of Mt. Wrangell in Unit 11 was created to follow the boundary between Wrangell-St. Elias National Preserve, where hunting is permitted following state regulations, and Wrangell-St. Elias National Park, where non-subsistence hunting is prohibited on federal lands. Harvest has ranged from 4 to 18 bison annually since then, which represents 3%–11% of the annual minimum count. In RY2012–16 and RY2018, 1 governor's permit was auctioned annually for this herd, and the permit winners harvested 1 bull bison during each of those years. Permit winners were Alaska residents 4 out of those 6 years. For DI454 draw permit winners, hunter success was 63% over the past five seasons. Overall harvest has been 68% males over the past five seasons.

The current DI454 hunt area encompasses the seasonal movements of most of the Copper River herd. Hunters typically raft or jetboat the Copper River in the fall, in search of bison near the river, or wait until February or March to access the hunt area via snowmachine or airplane (Table 51-2).

As the herd has increased in recent years, harvestable surplus sometimes exceeds that which can be achieved with only 24 permits. Permit winners are requested to notify the department of intent to hunt and for every hunter that declines the permit prior to the start of the season, a new draw winner is awarded a permit in their place in an attempt to maximize harvest under a limited number of permits.

**Table 51-2.** Harvest chronology and method of transportation for DI454, RY2015–2019.

<b>RY</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>March</b>	<b>Total Harvest</b>
2015	3 - boat 1 - plane	1 - boat	-	-	-	1 - plane 1 - snowmachine	3 - plane	10
2016	3 - boat	1 - boat	-	-	-	1 - snowmachine	2 - plane 3 - snowmachine	10
2017	5 - boat	1 - boat	-	-	-	2 - plane 3 - snowmachine	1 - snowmachine	12
2018	6 - boat 1 - unknown	2 - boat	-	-	-	2 - plane 1 - snowmachine	5 - plane 1 - snowmachine	18
2019	4 - boat	5 - boat	-	-	-	4 - snowmachine	2 - snowmachine	15

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the expansion of the DI454 hunt boundary. The expansion of the hunt boundary will likely result in decreased bison viewing opportunities along the McCarthy Road, which is an allocative decision between user groups. Due to the limited area, the land status involved, and the limited number of animals in the area, expanding the boundary may result in an increase in harvest of 1 or 2 animals for limited years, but overall through time it is not likely to substantially increase the harvest of bison nor the already high hunter success rate for the DI454 hunt. Harvest opportunity may occur for localized bison near the McCarthy road for hunters with trespass permits for Native corporation lands, but that opportunity may not be sustainable over time. Harvest opportunity along the Copper River will largely be dependent on unpredictable seasonal movements of other animals within the herd. Should the board decide to expand the hunt area, a more specific boundary description is recommended, such as: north of the north bank of the Kuskulana River and north of the north bank of the Chitina River.

The department recommends an **AMENDMENT** to increase the number of permits that may be issued for this herd to allow increased opportunity throughout the hunt area when herd abundance is high, and to allow for sufficient harvest to control herd growth.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 52 – 5 AAC 85.025(a)(8) Hunting seasons and bag limits for caribou.** Repeal “pre-2018” caribou hunting language in regulation.

**PROPOSED BY:** Ahtna Intertribal Resource Commission

**WHAT WOULD THE PROPOSAL DO?** Repeal pre-2018 regulations as a housekeeping matter in Unit 13 caribou hunting regulations.

**WHAT ARE THE CURRENT REGULATIONS?** The current caribou hunting regulations can be found in 5 AAC 85.025 and in the *2020–2021 Alaska Hunting Regulations*.

5 AAC 85.025(a)(8)

(A) Before July 1, 2018, the hunting seasons and bag limits for caribou in Unit 13 were as follows:

<b>Units and Bag Limits</b>	<b>Resident Open Season</b> (Subsistence and General hunts)	<b>Nonresident Open Season</b>
Unit 13		
1 caribou per harvest report per regulatory year by community harvest permit only; up to 300 caribou may be taken; or	Aug. 10 – Sept. 20 (Subsistence hunt only) Oct. 21 – March 31 (Subsistence hunt only)	No open season.
1 caribou every regulatory year by Tier I subsistence permit only; or	Aug. 10 – Sept. 20 (Subsistence hunt only) Oct. 21 – March 31 (Subsistence hunt only)	No open season.
1 caribou every regulatory year by drawing permit; up to 5,000 permits may be issued	Aug. 20 – Sept. 20 Oct. 21 – Mar. 31	No open season.

(B) On or after July 1, 2018, the hunting seasons and bag limits for caribou in Unit 13 are as follows:

<b>Units and Bag Limits</b>	<b>Resident Open Season</b> (Subsistence and General hunts)	<b>Nonresident Open Season</b>
Unit 13		
Up to 2 caribou per harvest report per regulatory year by community harvest permit only; up to 400 caribou may be taken; or	Aug. 10 – Sept. 20 (Subsistence hunt only) Oct. 21 – March 31 (Subsistence hunt only)	No open season.
up to 2 caribou every regulatory year by Tier I subsistence permit only; or	Aug. 10 – Aug. 31 (Subsistence hunt only) Oct. 21 – March 31 (Subsistence hunt only)	No open season.
up to 2 caribou every regulatory year by Tier I subsistence permit only; or	Sept. 1 – Sept. 20 (Subsistence hunt only) Oct. 21 – March 31 (Subsistence hunt only)	No open season.
1 caribou every regulatory year by youth hunt drawing permit; or	Aug. 1 – Aug. 5	No open season.
1 caribou every regulatory year by drawing permit; up to 5,000 permits may be issued;	Aug. 20 – Sept. 20 Oct. 21 – Mar. 31	No open season.
1 bull every regulatory year by drawing permit; up to 200 permits may be issued when the herd is at or above population objectives;		Aug. 20 – Sept. 20

There is a positive C&T finding for Nelchina caribou in Units 12 and 13, and an ANS of 600-1,000 caribou.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Pre-2018 language would be removed from regulation, which is a housekeeping item that occurs with the review of regulations after each board cycle and will not affect current regulations or hunt administration.

**BACKGROUND:** In February 2018, the board established 2 different Tier I seasons, a youth hunt, and a nonresident hunt for Nelchina caribou in Unit 13. The limit for community harvest caribou was increased to 400. These changes were implemented for RY18, while RY17 hunts were ongoing. For this reason, the language “before July 1, 2018” and “on or after July 1, 2018” was included in regulation to allow RY17 hunts to continue unchanged.

**DEPARTMENT COMMENTS:** The department **SUPPORTS** this proposal.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 53 – 5 AAC 85.025(a)(8). Hunting seasons and bag limits for caribou.** Increase the community subsistence harvest allocation for Nelchina caribou

**PROPOSED BY:** Ahtna Intertribal Resource Commission

**WHAT WOULD THE PROPOSAL DO?** Increase the community subsistence harvest (CSH) allocation of Nelchina caribou from 400 to 500 caribou annually.

**WHAT ARE THE CURRENT REGULATIONS?** The current caribou hunting regulations can be found in 5 AAC 85.025 and in the *2020–2021 Alaska Hunting Regulations*.

<b>Units and Bag Limits</b>	<b>Resident Open Season</b> (Subsistence and General hunts)	<b>Nonresident Open Season</b>
Unit 13		
Up to 2 caribou per harvest report per regulatory year by community harvest permit only; up to 400 caribou may be taken; or	Aug. 10 – Sept. 20  (Subsistence hunt only)  Oct. 21 – March 31  (Subsistence hunt only)	No open season.



	Aug. 10 – Aug. 31	
	(Subsistence hunt only)	
up to 2 caribou every regulatory year by Tier I subsistence permit only; or	Oct. 21 – March 31 (Subsistence hunt only)	No open season.
	Sept. 1 – Sept. 20	
	(Subsistence hunt only)	
up to 2 caribou every regulatory year by Tier I subsistence permit only; or	Oct. 21 – March 31 (Subsistence hunt only)	No open season.
1 caribou every regulatory year by youth hunt drawing permit; or	Aug. 1 – Aug. 5	No open season.
1 caribou every regulatory year by drawing permit; up to 5,000 permits may be issued;	Aug. 20 – Sept. 20 Oct. 21 – Mar. 31	No open season.
1 bull every regulatory year by drawing permit; up to 200 permits may be issued when the herd is at or above population objectives;		Aug. 20 – Sept. 20

There is a positive customary and traditional use (C&T) finding for the Nelchina caribou herd in units 12 and 13 with an amount reasonably necessary for subsistence (ANS) of 600-1,000 caribou.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Permitholders for the Community Subsistence Harvest (CSH) caribou hunt would collectively be allocated up to 500 animals each season. In most years this would have no effect because historical harvest has not reached 400 animals in any given year, and typically 400 or fewer CSH hunters report hunting

annually. In years when CSH hunters are especially successful, or if the CSH hunt becomes more popular, the change in regulation would allow for additional CSH harvest above 400 animals. In years when the harvestable surplus for the NCH is relatively low then this change could potentially impact draw and Tier I hunt quotas in order to accommodate the 500 animals allotted to the CSH hunt.

**BACKGROUND:** Prior to 2009, subsistence hunting of Nelchina caribou in Unit 13 was allocated through a registration hunt open only to local residents or a Tier II hunt (most years from 1983–2008), depending on the harvestable portion of the population. Other hunting opportunity was allocated through a drawing hunt (1983–1989).

The CSH hunt for caribou in Unit 13 was established in 2009. Due to litigation the hunt was not offered in 2010, but 3,604 permits were issued for a winter hunt (TC566) that season. The hunt has occurred every year since then and has endured several modifications through board action. The CSH limit of 400 caribou was increased from 300 caribou in 2017, and the bag limit was changed from 1 caribou per household to up to 2 caribou per household. This change was temporary for the rest of the caribou season in March of 2017, and the change took effect permanently in RY2018. Since 2009, CSH caribou harvest has exceeded 300 animals during only one season (Table 53-1). RY2016 had the most participation in the CSH caribou hunt of any year to date, and the bag limit for the CSH hunt was increased to two animals in March of 2017. For the remainder of the RY2016 season, 208 CSH households chose to receive permits for a second animal, 78 of those households reported hunting for a second animal, and 36 additional animals were harvested on these additional permits. The total CSH harvest that season was 370 caribou.

**Table 53-1. CSH Caribou permit allocation and harvest, RY2009–2020.**

RY	CSH Caribou Groups	CC001 permits	Harvest	Permits Hunted	Success Rate
2009	1	477	127	288	44%
2010 <sup>a</sup>	-	-	-	-	-
2011	6	322	150	176	85%
2012	17	402	114	238	48%
2013	28	689	144	308	47%
2014	25	569	191	266	72%
2015	26	659	191	330	58%
2016	45	1,006	370	558	66%
2017	51	1,004	262	484	54%
2018	38	838	168	382	44%
2019	44	811	256	407	63%
2020	40	811	-	-	-

<sup>a</sup> The CSH hunt was not offered in 2010.

In 2009 the Board established the current ANS of 600–1,000 caribou for the NCH. When the Nelchina harvestable surplus is above 1,000 caribou, hunting opportunity is administered under a hunt structure comprised of resident-only subsistence hunts (i.e., Copper Basin CSH hunt CC001 and Tier I registration hunts RC561 and RC562) and drawing permit hunts (DC485 and YC495; Table 53-2). In 2018 the Board established a nonresident draw opportunity to be offered when the NCH is at or above population objectives (DC475). The management objective for the NCH is to maintain a population between 35,000 and 40,000 animals in the fall, post fall hunting season. Additional NCH hunting opportunity is offered to federally qualified subsistence users through federal subsistence permits on federal lands in Unit 13 (FC1302) and on Tetlin National Wildlife Refuge (FC1202).

**Table 53-2.** Nelchina Caribou permits and corresponding harvest by hunt, RY2009–2020

RY	Tier I <sup>a</sup>		CSH <sup>b</sup>		Draw <sup>c</sup>		Federal <sup>d</sup>		Total
	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Harvest
2009	500	277	479	127	-	-	2,687	369	773
2010	1,151	615	-	-	-	-	2,973	505	2,410 <sup>e</sup>
2011	3,148	1,626	323	87	1,127	319	3,083	444	2,476
2012	5,045	2,543	403	150	3,001	1,024	3,105	608	4,325
2013	6,878	1,573	689	114	5,008	609	2,896	319	2,615
2014	5,595	2,268	569	144	1,000	299	3,069	274	2,985
2015	7,235	2,911	659	191	1,001	296	3,209	644	4,042
2016	8,470	3,518 <sup>f</sup>	1,006	370 <sup>g</sup>	4,999	1,898	3,265	497	6,283
2017	8,444	2,731	1,004	262	4,998	1,534	3,199	363	4,890
2018	8,767	1,060	838	168	5,000	260	3,170	381	1,869
2019	5,673	2,169	811	256	599	285	2,947	156	2,866
2020	6,886	-	811	-	2,250	-	-	-	-

<sup>a</sup> RC566 (RY2009–2017); RC561 & RC562 (RY2018–2020)

<sup>b</sup> CC001 was not offered in 2010.

<sup>c</sup> DC480–DC483 (RY2011–2015); DC485 (RY2016–2020); YC495 (RY2019–2020); DC475 (RY2020)

<sup>d</sup> FC1302 and FC1202

<sup>e</sup> Includes 1,290 caribou harvested under 3,604 TC566 winter hunt permits.

<sup>f</sup> Includes 299 caribou harvested under 2,441 households that chose to receive a second permit in March 2017.

<sup>g</sup> Includes 36 caribou harvested under 208 households that chose to receive a second permit in March 2017.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of caribou harvest. The department will continue to manage the Nelchina caribou herd based on sustained yield principles, and quotas for each hunt will be established annually following the guidance provided by the board in 2019-223-BOG findings.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 54 – 5 AAC 85.025(a)(8)(B). Hunting season and bag limits for caribou.** Extend the Nelchina caribou youth hunt (YC495).

**PROPOSED BY:** Tyler Eggen

**WHAT WOULD THE PROPOSAL DO?** Extend the fall Nelchina caribou youth hunt (YC495) by 4 days from August 1– 5 to August 1–9 and add a winter season with dates of October 21– March 31.

**WHAT ARE THE CURRENT REGULATIONS?** The current caribou hunting regulations can be found in 5 AAC 85.025 and in the *2020–2021 Alaska Hunting Regulations*

<b>Units and Bag Limits</b>	<b>Resident Open Season</b> (Subsistence and General hunts)	<b>Nonresident Open Season</b>
Unit 13		
Up to 2 caribou per harvest report per regulatory year by community harvest permit only; up to 400 caribou may be taken; or	Aug. 10 – Sept. 20 (Subsistence hunt only)  Oct. 21 – March 31 (Subsistence hunt only)	No open season.
up to 2 caribou every regulatory year by Tier I subsistence permit only; or	Aug. 10 – Aug. 31 (Subsistence hunt only)  Oct. 21 – March 31 (Subsistence hunt only)	No open season.
up to 2 caribou every regulatory year by Tier I subsistence permit only; or	Sept. 1 – Sept. 20 (Subsistence hunt only)  Oct. 21 – March 31 (Subsistence hunt only)	No open season.

1 caribou every regulatory  
year by youth hunt drawing  
permit; or

Aug. 1 – Aug. 5

No open season.

1 caribou every regulatory  
year by drawing permit; up to  
5,000 permits may be issued;

Aug. 20 – Sept. 20

Oct. 21 – Mar. 31

No open season.

1 bull every regulatory year  
by drawing permit; up to 200  
permits may be issued when  
the herd is at or above  
population objectives;

Aug. 20 – Sept. 20

There is a positive customary and traditional use (C&T) finding for the Nelchina caribou herd in units 12 and 13 with an amount reasonably necessary for subsistence (ANS) of 600-1,000 caribou.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Extending the fall youth hunt by four days by shifting the end date from August 5<sup>th</sup> to August 9<sup>th</sup> would provide additional hunting opportunity for YC495 permit holders but is not expected to substantially increase the already high hunter success rate for this hunt. Youth hunters have the first harvest opportunity for the Nelchina herd. Subsequent Nelchina hunts (RC561, CC001) may have decreased success early in the season if the youth hunt is extended, since hunting pressure impacts the behavior and distribution of the herd. The addition of a 162-day winter season for the youth hunt is not likely to substantially increase hunter success. The department regularly encourages Nelchina hunters to harvest in the fall, since availability of animals during the winter season is unpredictable. In some years hunters choose to wait until the winter season to hunt, and are disappointed when they are unable to find animals to harvest because the herd has left the unit. Youth hunters who choose to hunt their permit during the winter season may experience a decrease in overall hunter success, but this may vary between years. Up to 200 permits can be issued each year for the Nelchina caribou youth drawing permit hunt, and the proposed change would not increase or decrease the number of hunters able to participate, which will result in no conservation concerns.

**BACKGROUND:** The Nelchina youth hunt was offered for the first time in RY2019. There were 2,577 applications for the hunt and 200 permits were issued. Harvestable surplus was high in RY2019 and additional hunting opportunity was offered for all Nelchina state permit holders, including YC495, September 21–September 30, to maximize harvest. One hundred and forty-seven YC495 hunters reported hunting in either the normal or extended season, of which 105 were successful in August and an additional 8 hunters were successful with the additional 10 extra days of hunting in September (77% overall hunter success, 57% overall permit success). Two thousand seven hundred and forty-seven YC495 applications were received for RY2020 and 200 permits were issued. Preliminary reports indicate that, of 151 hunters, 111 were successful (74%).

Traditionally when the Nelchina caribou season opens success rates are initially high but hunting pressure quickly causes the brunt of animals to scatter and/or move to less accessible areas. Harvest then decreases until later in the fall season when caribou begin to make natural seasonal movements back toward more hunter accessible areas. Harvest rates then begin to pick up again. This predictable trend happens annually, and anecdotal hunter reports indicate that this trend did occur with YC495 opening as the first hunt in RY2019, and again in RY2020.

**Table 54-1.** Nelchina Caribou permits and harvest by hunt, RY2009–2020

RY	Tier I <sup>a</sup>		CSH <sup>b</sup>		Draw <sup>c</sup>		Federal <sup>d</sup>		Total Harvest
	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	
2009	500	277	479	127	-	-	2,687	369	773
2010	1,151	615	-	-	-	-	2,973	505	2,410 <sup>e</sup>
2011	3,148	1,626	323	87	1,127	319	3,083	444	2,476
2012	5,045	2,543	403	150	3,001	1,024	3,105	608	4,325
2013	6,878	1,573	689	114	5,008	609	2,896	319	2,615
2014	5,595	2,268	569	144	1,000	299	3,069	274	2,985
2015	7,235	2,911	659	191	1,001	296	3,209	644	4,042
2016	8,470	3,518 <sup>f</sup>	1,006	370 <sup>g</sup>	4,999	1,898	3,265	497	6,283
2017	8,444	2,731	1,004	262	4,998	1,534	3,199	363	4,890
2018	8,767	1,060	838	168	5,000	260	3,170	381	1,869
2019	5,673	2,169	811	256	599	285	2,947	156	2,866
2020	6,886	-	811	-	2,250	-			

<sup>a</sup> RC566 (RY2009–2017); RC561 & RC562 (RY2018–2020)

<sup>b</sup> CC001 was not offered in 2010.

<sup>c</sup> DC480–DC483 (RY2011–2015); DC485 (RY2016–2020); YC495 (RY2019–2020); DC475 (RY2020)

<sup>d</sup> FC1302 and FC1202

<sup>e</sup> Includes 1,290 caribou harvested under 3,604 TC566 winter hunt permits.

<sup>f</sup> Includes 299 caribou harvested under 2,441 households that chose to receive a second permit in March 2017.

<sup>g</sup> Includes 36 caribou harvested under 208 households that chose to receive a second permit in March 2017.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of caribou harvest but is concerned that providing a winter hunt opportunity for the Nelchina youth hunt may lead to disappointed youth hunters in years when few or no animals are available during the winter

season, if youth hunters wait to hunt in winter season only. An extended season for YC495 hunters could also affect early hunt success for subsistence hunts RC561 and CC001 hunters. The department will continue to manage the Nelchina caribou herd based on maximum sustained yield principles, and quotas for each hunt will be established annually following the guidance provided by the board in their findings at 2019-223-BOG (<http://www.adfg.alaska.gov/static/regulations/regprocess/gameboard/pdfs/findings/19223.pdf>).

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 55 – 5 AAC 85.040(a)(6)Hunting seasons and bag limits for goat.** Establish a goat registration hunt in Unit 13A.

**PROPOSED BY:** Herb Mansavage

**WHAT WOULD THE PROPOSAL DO?** Create a goat registration hunt in Unit 13A.

**WHAT ARE THE CURRENT REGULATIONS?** The current goat hunting regulations can be found in 5 AAC 85.040 and in the *2020–2021 Alaska Hunting Regulations*.

Units and Bag Limits (6)	Resident Open Season (General hunt only)	Nonresident Open Season
Unit 13(D), that portion south of the Tiekel River and east of a line beginning at the confluence of the Tiekel and Tsina rivers		
1 goat by registration permit only; the taking of nannies with kids is prohibited	Sept. 1 – Nov. 30 (General hunt only)	Sept. 1 – Nov. 30
Remainder of Unit 13(D)		
1 goat by drawing permit only; up to 50 permits will be	Aug. 10 – Nov. 30	Aug. 10 – Nov. 30

issued; the taking of nannies (General hunt only)  
with kids is prohibited

The board has not made a C&T determination for goats in Unit 13A.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Goats in Unit 13A would be available for harvest. Goats in Unit 13A are currently rare and do not represent populations that can sustain harvest. A registration goat hunt will remove goats currently in 13A and/or prevent the establishment of harvestable populations of goats in 13A in the future. This hunt could also affect the goat population in 13D, since goats currently reside just south of the boundary and may travel back and forth between 13D and 13A. Goats harvested after crossing the Glenn Highway into 13A may effectively represent additional harvest from the 13D population, which is currently managed under a draw hunt.

**BACKGROUND:** While the vast majority of mountain goats in Unit 13 are found in the Chugach Mountain portion of Unit 13D (where they have a negative C&T finding), goats are periodically observed in the Talkeetna Mountains portion of 13A and the Chulitna Mountains in 13E. Historically a viable population was recorded as far north as Goat Lake in Unit 13E, demonstrating that goat range has extended north of 13A. These are naturally occurring goats rather than introduced populations. Currently 13D maintains a healthy population of goats and sheep within overlapping ranges, as does the neighboring Unit 14A, south of the Matanuska River. Both areas manage goat harvest through draw permits, and Unit 14A has an optional late season registration hunt when harvestable surplus exceeds that obtained during the draw hunt. Unit 14A north of the Matanuska River has been closed to goat hunting since 1986 and 14B has been closed since 1990. The goat population in 13D has been effectively managed with a draw hunt of 10 permits annually from 1987 through 2010, 35 permits annually in 2011 and 2012, 50 permits in 2013, 35 in 2014, 50 in 2015, and 35 annually since 2016 (Table 55-1). Goats in 13D, west of the Tazlina glacier, are those likely to cross into 13A. Some pockets of goats, such as those at Long Lake, are separated from 13A by just the Glenn Highway.



**Table 55-1.** Goat harvest and minimum counts in Unit 13D, West of Tazlina Glacier

Regulatory Year	Permits DG720	Total Harvest	Harvest West of Tazlina Glacier	Goats observed during sheep surveys in 13D - West of Tazlina Glacier		
				Adults	Kids	Total
2011	35	8	4	-	-	-
2012	35	3	1	-	-	-
2013	50	10	7	-	-	-
2014	35	6	4	70	17	87
2015	50	10	3	-	-	-
2016	35	5	3	111	11	122
2017	35	9	5	-	-	-
2018	35	10	6	-	-	-
2019	35	10	5	-	-	-
2020	35	-	-	74	16	90

**DEPARTMENT COMMENTS:** The department is **OPPOSED** to the creation of a goat registration hunt in Unit 13A. Goats are rare in Unit 13A and current population levels do not provide a harvestable surplus. Furthermore, harvest of goats in Unit 13A after they cross the Glenn Highway from 13D may affect the 13D population that is currently managed with a drawing hunt.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 56 – 5 AAC 85.045(a)(9)(B) Hunting seasons and bag limits for moose.** Extend general moose season for archery only in Unit 11.

**PROPOSED BY:** Gary Weaver

**WHAT WOULD THE PROPOSAL DO?** The proposal would allow hunters in Unit 11 with general season moose harvest tickets to hunt an additional 5 days (September 21–September 25) with bow and arrow only.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

<b>Units and Bag Limits</b>	<b>Resident Open Season</b> (Subsistence and General hunts)	<b>Nonresident Open Season</b>
Unit 11		
That portion east of the east bank of the Copper River upstream from and including the Slana River drainage		
Resident Hunters:		
1 bull per harvest report by community harvest permit only; however, no more than 100 bulls that do not meet antler restrictions for other resident hunts in the same area may be taken by Tier II permit in the entire community harvest area during the Aug. 20 – Sept. 20 season, up to 350 Tier II permits may be issued; or	Aug. 20 – Sept. 20  Dec. 1 – Dec. 31  (Subsistence hunt only)	No open season.
1 bull with spike-fork antlers or 50-inch or antlers with 3 or more brow tines on one side, by registration permit only	Aug. 20 – Sept. 17	
Nonresident Hunters:		
1 bull with spike-fork antlers or 50-inch or antlers with 3 or more brow tines on one side, by registration permit only	Aug. 20 – Sept. 17	

Remainder of Unit 11		
1 bull per harvest report by community harvest permit only; however, no more than 100 bulls that do not meet antler restrictions for other resident hunts in the same area may be taken by Tier II permit in the entire community harvest area during the Aug. 20 – Sept. 20 season, up to 350 Tier II permits may be issued; or	Aug. 20 – Sept. 20  Dec. 1 – Dec. 31  (Subsistence hunt only)	No open season.
1 bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on one side	Aug. 20 – Sept. 20	Aug. 20 – Sept. 20

There is a positive C&T finding for moose in Unit 11, and an ANS of 30–40.

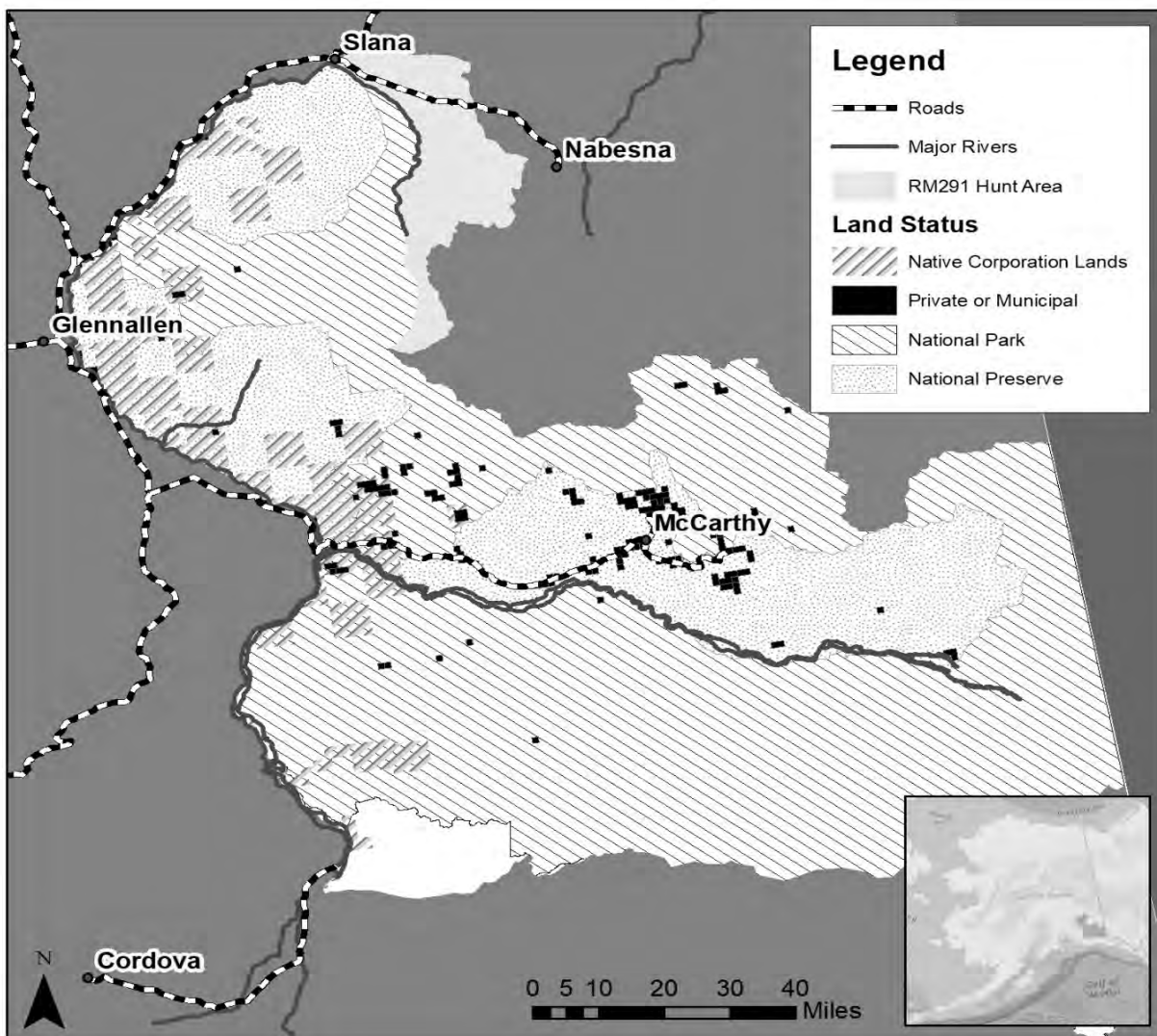
**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This change would provide additional opportunity under a general hunt that would not be available to Copper Basin Community Subsistence Harvest (CSH) hunters, who are not eligible to hunt with general season harvest tickets in Unit 11.

For those hunters who can access moose in the remainder of Unit 11, this proposal would provide additional opportunity as moose are entering the rut and becoming more vulnerable to mating calls. Harvest is likely to increase because any hunter who was unsuccessful with rifle or bow during the regular season may then choose to hunt the extra 5 days with a bow. However, due to the limited area where this season would be available, the increase in harvest is not likely to result in any conservation concerns.

**BACKGROUND:** Establishment of the Wrangell-Saint Elias National Monument in December 1978 encompassed most of Unit 11. In 1980, monument status was changed to park and preserve with passage of the Alaska National Interest Lands Conservation Act. State hunting regulations apply on state, private, and preserve lands within Unit 11. The National Park Service closely manages hunting on park lands by issuing federal subsistence hunting permits based on hunter residency.

The majority of Unit 11 lies within Wrangell St. Elias National Park and Preserve (Figure 56-1). General season moose hunting is prohibited on national park lands, but is allowed on state, private, and preserve lands outside of the RM291 permit area. Most of these lands are difficult to access and provide very little moose hunting opportunity for the general public. On average 24 moose are harvested annually with general season harvest tickets in Unit 11.

Since 2009, CSH moose hunters have had the option to hunt moose in Units 11, 13, and a small portion of Unit 12. The season for CSH hunters is August 10–September 20, CSH permit holders may shoot any antlered bull if they are in possession of a CSH any-bull locking tag, and hunters without locking tags may harvest any bull that meets the general season antler restrictions. CSH



**Figure 56-1.** Land status and registration moose hunt area RM291, Unit 11.

hunters are not eligible to receive general season moose harvest tickets. If hunters are unsuccessful after the close of the season (September 20), CSH hunters may only hunt other areas that have

open seasons and a bag limit of more than one moose, making them ineligible for the extended general season hunt in Unit 11.

In March 2012, the BOG replaced the general season hunt with a registration hunt (RM291; Figure 56-1) for residents and nonresidents for that portion of Unit 11 east of the east bank of the Copper River upstream from and including the Slana River drainage, and in Unit 12, that portion within the Nabesna River drainage west of the east bank of the Nabesna River upstream from the southern boundary of the Tetlin National Wildlife Refuge. The existing RM291 registration hunt area would not be affected by a general season extension in Unit 11.

The general season in Unit 11 applies to lands outside of the RM291 hunt area, lands outside of the boundary of Wrangell St. Elias National Park, and private and Native corporation lands within the boundary of Wrangell St. Elias National Park (Figure 56-1).

Due to the land status and difficult access in Unit 11, moose densities tend to reflect a low density dynamic equilibrium where combined predation by wolves and bears, species that are lightly harvested in the area, maintain moose populations at low densities for extended periods of time. Since 2010, surveys within an established count area in Unit 11 have documented an average of 0.9 moose/mi<sup>2</sup> and bulls per 100 cows consistently above 50, which is above the management objective of a fall ratio of 30 bulls to 100 cows. Hunting pressure does not currently pose a conservation concern in Unit 11.

On average 66 hunters report hunting annually on general season harvest tickets in Unit 11 and 24 moose are harvested annually (Table 56-1).

**Table 56-1.** Annual moose hunter participation and harvest reported on general season (GM000) harvest tickets in Unit 11, RY2015–2019.

Regulatory Year	Reported Hunting	Successful Harvest	Success Rate
2015	77	25	32%
2016	76	28	37%
2017	66	21	32%
2018	60	25	42%
2019	51	23	45%

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of moose harvest. This proposal would provide additional opportunity to some hunters but the limited hunt area where it would be applicable is not likely to appreciably affect Unit 11 moose populations.

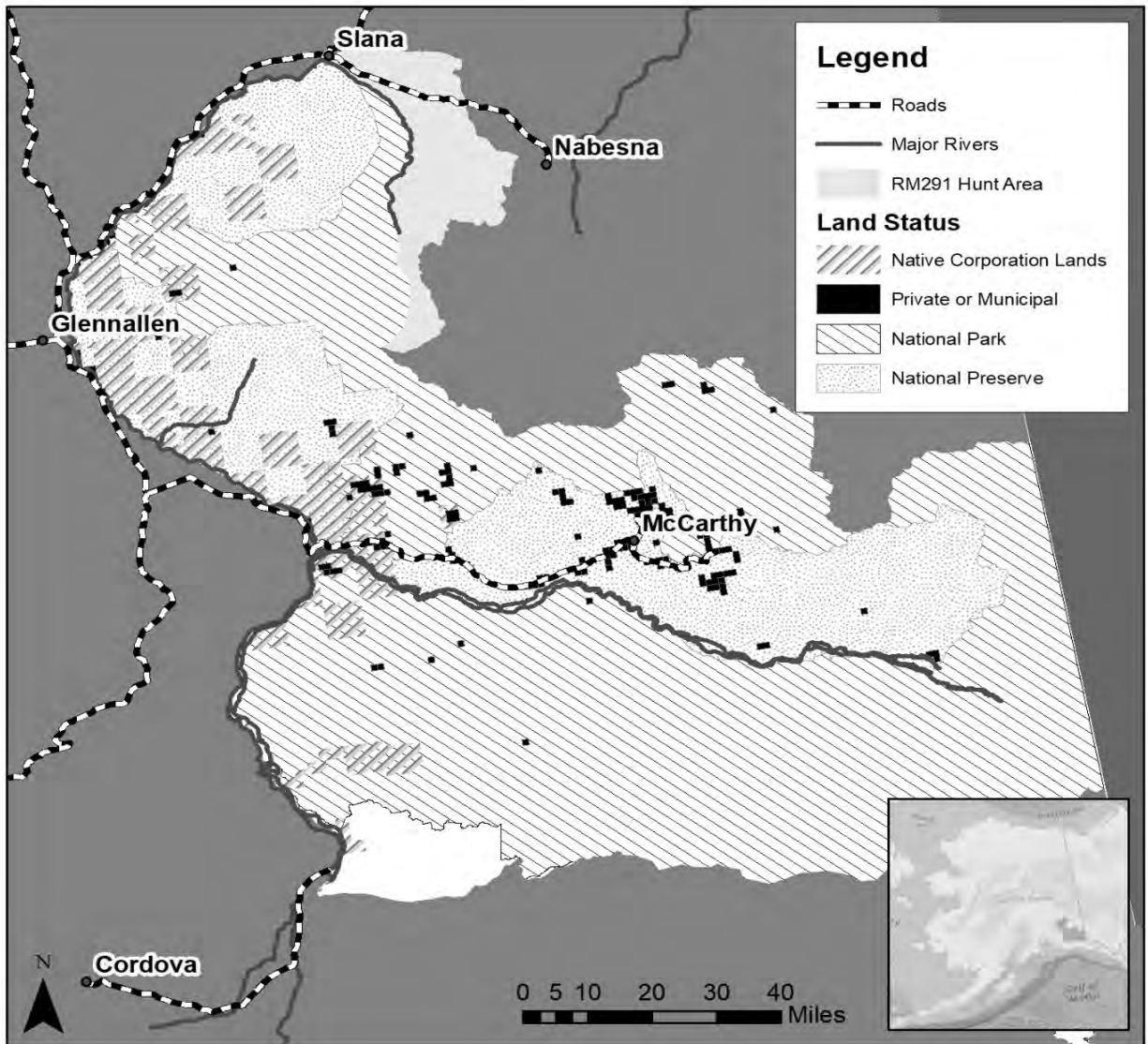
**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 57 – 5 AAC 85.045(a)(9)(B). Hunting seasons and bag limits for moose.** Establish an archery only registration hunt for bull moose in Unit 11.

**PROPOSED BY:** Alaskan Bowhunters Association

**WHAT WOULD THE PROPOSAL DO?** This proposal would create an additional moose registration hunt in Unit 11 for certified resident and nonresident bowhunters. The proposed 10-day season would be September 21–September 30 with a bag limit of 1 bull with spike-fork antlers, or 50-inch antlers, or antlers with 3 or more brow tines on at least 1 side. The hunt area would be outside of the RM291 hunt area and outside of Wrangell-St. Elias National Park in Unit 11, where general season hunting regulations currently apply (Figure 57-1). Private lands, including Native corporation lands, within Wrangell St. Elias National Park would be included within the hunt area for those with permission to hunt on said lands.



**Figure 57-1.** Land status and registration moose hunt area RM291, Unit 11.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

<b>Units and Bag Limits</b>	<b>Resident Open Season</b> (Subsistence and General hunts)	<b>Nonresident Open Season</b>
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Unit 11

That portion east of the east bank of the Copper River upstream from and including the Slana River drainage

Resident Hunters:

1 bull per harvest report by community harvest permit only; however, no more than 100 bulls that do not meet antler restrictions for other resident hunts in the same area may be taken by Tier II permit in the entire community harvest area during the Aug. 20 – Sept. 20 season, up to 350 Tier II permits may be issued; or

Aug. 20 – Sept. 20

Dec. 1 – Dec. 31

No open season.

(Subsistence hunt only)

1 bull with spike-fork antlers or 50-inch or antlers with 3 or more brow tines on one side, by registration permit only

Aug. 20 – Sept. 17

Nonresident Hunters:

1 bull with spike-fork antlers or 50-inch or antlers with 3 or more brow tines on one side, by registration permit only

Aug. 20 – Sept. 17

Remainder of Unit 11

1 bull per harvest report by community harvest permit only; however, no more than 100 bulls that do not meet antler restrictions for other resident hunts in the same area may be taken by Tier II permit in the entire community harvest area during the Aug. 20 – Sept. 20 season, up to 350 Tier II permits may be issued; or

Aug. 20 – Sept. 20

Dec. 1 – Dec. 31

No open season.

(Subsistence hunt only)

1 bull with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on one side

Aug. 20 – Sept. 20

Aug. 20 – Sept. 20



There is a positive customary and traditional (C&T) use finding in Unit 11 and an amount reasonably necessary for subsistence of 30-40 moose.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The majority of Unit 11 is comprised of Wrangell-St. Elias National Park and Preserve. General season moose hunting is prohibited on Wrangell-St. Elias National Park land, but is allowed on state, private, and preserve lands outside of the RM291 permit area (Figure 57-1) Most of these lands are difficult to access and provide very little moose hunting opportunity for the general public. On average 24 moose are harvested annually with general season harvest tickets in Unit 11. This proposal would create an additional hunt opportunity under a registration hunt that would not be available to Community Subsistence Harvest (CSH) hunters, who are not eligible to obtain moose registration permits.

For those hunters who can access moose in the remainder of Unit 11 this proposal would provide additional opportunity as moose are entering the rut and becoming more vulnerable. Harvest is likely to increase, since any hunter who was unsuccessful with rifle or bow during the regular season may then obtain a registration permit for an additional 10 day opportunity to harvest a bull with a bow. Due to the limited area where this season would be available, and the antler restrictions that would remain in place, the increase in harvest is not likely to result in any conservation concerns. To date the department has certified over 23,000 archers in the state of Alaska. A late season opportunity may encourage hunters looking for one additional hunt.

**BACKGROUND:** In December 1978, the establishment of the Wrangell-Saint Elias National Monument encompassed most of Unit 11. In 1980, monument status was changed to park and preserve with passage of the Alaska National Interest Lands Conservation Act. State hunting regulations apply on state, private, and preserve lands within Unit 11. The National Park Service closely manages hunting on park lands by issuing federal subsistence hunting permits based on hunter residency.

Since 2009, CSH moose hunters have had the option to hunt moose in Units 11, 13, and a small portion of Unit 12. The season for CSH hunters is August 10 – September 20, CSH permit holders may shoot any antlered bull if they are in possession of a CSH any-bull locking tag, and hunters without locking tags may harvest any bull that meets the general season antler restrictions. Due to observance of the community subsistence pattern of use, as outlined by board findings, CSH hunters are not eligible to receive general season moose harvest tickets. If hunters are unsuccessful after the close of the season (September 20), CSH hunters may only hunt other areas that have open seasons and a bag limit of more than 1 moose, making them ineligible for this proposed additional registration hunt in Unit 11.

In March 2012, the board replaced the general season hunt with a registration hunt (RM291) for residents and nonresidents for that portion in Unit 11 east of the east bank of the Copper River upstream from and including the Slana River drainage and Unit 12, that portion within the Nabesna

River drainage west of the east bank of the Nabesna River upstream from the southern boundary of the Tetlin National Wildlife Refuge. This registration hunt area would not be affected by the proposed registration archery hunt in Unit 11 because the additional registration opportunity would not be available in the RM291 hunt area.

Unit 11 moose are at low density. Predation by wolves and bears maintains moose populations at low densities for extended periods of time. Since 2010, surveys within an established count area in Unit 11 have documented an average of 0.9 moose/mi<sup>2</sup> within an established count area and the number of bulls per 100 cows is consistently above 50, which is above the management objective of a fall ratio of 30 bulls to 100 cows. The additional hunting pressure from this proposal does not pose a conservation concern.

On average 66 hunters report hunting annually on general season harvest tickets in Unit 11 and 24 moose are harvested annually (Table 57-1).

**Table 57-1.** Annual moose hunters and harvest reported on general season (GM000) harvest tickets in Unit 11, RY2015–2019.

Regulatory Year	Reported Hunting	Successful Harvest	Success Rate
2015	77	25	32%
2016	76	28	37%
2017	66	21	32%
2018	60	25	42%
2019	51	23	45%

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of moose harvest. This proposal would provide additional opportunity to some hunters but the antler restrictions and the limited hunt area where it would be applicable is not likely to appreciably affect Unit 11 moose populations.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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Proposal 58 to reauthorize antlerless moose seasons in Unit 13 was replaced by Proposal 215.

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Proposal 59

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**PROPOSAL 60 – 5 AAC 85.045(a)(11) Hunting seasons and bag limits for moose.** Establish a registration archery-only hunt for bull moose in Unit 13.

**PROPOSED BY:** John Linnell

**WHAT WOULD THE PROPOSAL DO?** This proposal would create an archery-only registration hunt for moose in Unit 13. This hunt would be available to residents who commit to only hunting moose under this permit during that regulatory year. Hunters would not be able to obtain any other moose permits or harvest tickets that regulatory year. Season dates would be September 25 through October 15 and permit holders may harvest 1 bull moose with spike, fork, 50-inch antlers or greater, or 3 or more brow tines on at least 1 side. Reporting requirements would be within 5 days of harvest or 15 days of end of season.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

The Board of Game (BOG) has made a positive customary and traditional use finding for moose in Unit 13 with an amount reasonably necessary for subsistence (ANS) of 300–600 moose. Hunters who wish to hunt moose in Unit 13 may do so under the following seasons and bag limits:

- ***CM300:*** Copper Basin Community Subsistence Harvest (CSH) Hunt: The board has established an allocation of 100 bull moose that do not meet general season antler restrictions (“any-bulls”) to the Copper Basin CSH. CSH participants have a bag limit of 1 bull from August 20–September 20 if they are in possession of an any-bull locking tag. CM300 permit holders not in possession of an any-bull locking tag have a bag limit of 1 moose with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines on at least 1 side, with the same season dates. Once the 100-bull allocation has been met, the bag limit is changed for all CSH participants by emergency order to one bull with spike-fork antlers or 50-inch antlers or antlers with four or more brow tines. 350 CSH participants receive any-bull locking tags based on Tier II-like scoring criteria. Each community group must have 25 qualified individuals to successfully apply for any CSH program, and Copper Basin CSH groups are locked-in for a two-year commitment upon successful application. No member of a Copper Basin CSH moose hunt household may hold state or federal moose permits outside of the Copper Basin Community Hunt area (Unit 11, 13, and that portion of Unit 13 south of the Little Tok River) or hold general season moose harvest tickets. After the CSH hunt has ended, unsuccessful individual household members may then acquire state or federal moose harvest tickets or permits for other areas if the bag limit is greater than 1 moose per person.
- ***GM000:*** Resident hunters with general season harvest tickets for Unit 13 may harvest 1 bull with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines on 1 side from September 1–20.

- **DM324:** Resident hunters who successfully draw a Unit 13 bull moose drawing permit are permitted one antlered bull from September 1–20; up to 5 permits may be issued.
- **DM325:** Resident hunters who successfully draw a Unit 13 antlerless moose drawing permit for 13A can harvest one antlerless moose from October 1–31 or March 1–31; up to 200 permits may be issued.
- **DM335–339:** Nonresident hunters who successfully draw a Unit 13 drawing permit are permitted 1 bull with 50-inch antlers or antlers with 4 or more brow tines on 1 side from September 1–20; up to 150 permits may be issued and each permit is valid for only 1 subunit of Unit 13.
- **FM1301:** Federally qualified subsistence users can obtain a federal moose permit from the Glennallen Field Office of the Bureau of Land Management. The season is August 1–September 20 with a bag limit of 1 antlered bull moose per household for residents that qualify for 13E, or 1 antlered bull moose per hunter for residents that qualify for the remainder of Unit 13. Federal permits are valid for federally managed public lands only. In July 2020, these lands in Unit 13A and 13B were closed by the Federal Subsistence Board for hunting of moose and caribou by non-federally qualified hunters.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The popularity of this proposed hunt is unknown, since any hunter who registers for this permit commits to hunting moose only in Unit 13, from September 25 to October 15, and only with bow and arrow. However, the department has certified over 23,000 archers since the inception of the program in 1970. The advantage of the hunt is to be able to harvest a bull during the rut, when bulls are much more susceptible to mating calls, and hunters may harvest a 3-brow tine bull rather than be restricted to 4 brow tines.

Bulls are considerably more vulnerable during the rut because they are highly susceptible to mating calls during the rut. Hunters are likely to have very high success rates and this hunt would likely increase the total number of bulls harvested annually in Unit 13, which may not be sustainable over time and may affect any-bull quotas in subsequent years in order to maintain bull-to-cow ratios at or above objectives.

**BACKGROUND:** Unit 13 is a highly popular area for moose hunters, largely because of the relative accessibility of the unit on the road system, as well as its proximity to Alaska’s population centers in Anchorage, the Mat-Su Valley, and Fairbanks. As such, the moose hunt structure in Unit 13 has a complex history.

The Copper Basin CSH hunt was first implemented in 2009 and has since undergone several iterations through BOG action to develop a manageable hunt strategy that allows for the take of 100 “any-bulls” to provide for subsistence needs while also allowing for one of the customary and traditional use patterns of Copper Basin moose. Nonresident draw hunts for moose were also first

implemented in 2009. Resident antlerless draw permits have been available in Unit 13A since 2012. Five resident draw permits for any antlered bull have been issued annually since 2016. Roughly 5,600 hunters report hunting moose in Unit 13 annually, but hunter numbers fluctuate annually, typically relative to the number of Nelchina Caribou permits issued annually (Table 60-1).

**Table 60-1.** Unit 13 annual moose permits and corresponding harvest by hunt, RY2015–2019.

Regulatory Year	GM000	CM300	Resident Draw Permits	Nonresident Draw Permits	Federal Permits	Total Harvest	Total Hunters*
2015	772	171	7	23	85	1,058	5,739
2016	757	201	10	21	99	1,088	6,566
2017	689	188	11	28	90	1,006	5,990
2018	552	154	9	20	61	796	5,347
2019	638	160	10	18	71	897	4,580

\*Federally qualified subsistence hunters may report hunting on both federal and state permits. Harvest data is reconciled to the best of our ability.

In 2010 the CSH hunt was not offered due to legal litigation, but it was reinstated in 2011 with a quota of 70 “any-bulls.” The hunt became increasingly popular annually (Table 60-2). From 2012 to 2013 the number of groups participating jumped from 19 to 45, and the any-bull quota was raised to 100 in 2013, but the rapid harvest early in the season resulted in any-bull closures 4–6 days after the season opened for all subunits. A five-day reporting requirement complicated hunt administration with high levels of participation in 2013 resulting in a 24-hour reporting requirement and locking tag system for 2014. One locking tag was issued for every 3 households in each group. The overall quota was lowered to 90 “any-bulls” in 2014, and returned to 100 in 2015, which has been the overall quota since.

The locking tag system slowed harvest and allowed for a manageable hunt. Participation, however, continued to increase. To limit the number of locking tags issued for the 100 “any-bulls” the BOG determined that starting in 2018, 350 locking tags would be issued to CSH participants based on Tier II-like scoring criteria. Also beginning in 2018, groups that successfully applied to participate in the CSH hunt were locked-in for a two-year commitment.

**Table 60-2.** Annual Copper Basin CSH Hunt Participation and Harvest, RY2009–2020.

Regulatory Year	Number of Groups	Number of Permits	Hunters Reported Hunting	Number of Locking Tags	Total CSH Moose Harvest
2009	1	378	293	-	100
2010 <sup>1</sup>	-	-	-	-	-
2011	9	753	312	-	86
2012	19	961	358	-	98
2013	45	2,066	842	-	156
2014	43	1,771	607	281	150
2015	43	1,984	621	344	171
2016	73	3,023	941	485	201
2017	83	3,136	879	521	188
2018	57	2,331	664	354	154
2019	61	2,143	589	350	160
2020	49	1,702	-	352	-

<sup>1</sup> No CSH hunt was administered in RY2010.

Moose abundance is within objectives in 13A and 13D, above objectives in 13C and 13E, and below objectives in 13B. Bull-to-cow ratios, however, in Units 13A, 13B, 13C, and 13E have been dropping since 2013 (Tables 60-3 through 60-7). Any-bull quotas are reevaluated annually based on bull-to-cow ratios, to prevent ratios from dropping below the objective of 25 bulls per 100 cows. Increasing overall bull harvest in any of these subunits poses a conservation concern. Increasing bull harvest may result in lower any-bull quotas in following years to mitigate that conservation concern.

**Table 60-3.** Any-bull harvests and bull-to-cow ratios in Unit 13A, RY2009–2019.

Regulatory Year	Quota <sup>a</sup>	Harvested <sup>a</sup>	Any-Bull Early Closure Date	Post-hunt Bull:Cow Ratio
2009	20	15	September 17	28
2010 <sup>b</sup>	-	-	-	-
2011	10	10	August 17	26
2012	12	15	August 15	26
2013	16	42	August 14	21
2014	6	8	August 14	28
2015	10	9	No early closure	25
2016	10	9	No early closure	19
2017	10	12	September 15	27
2018	10	10	No early closure	24
2019	5	7	August 26	-

<sup>a</sup> Starting in 2014, 13A any-bull harvests have not been allowed in that portion of 13A west of Lake Louise Road, Lake Louise, Lake Susitna, Lake Tyone, and the Tyone River.

<sup>b</sup> No CSH hunt was administered in RY2010.

**Table 60-4.** Any-bull harvests and bull-to-cow ratios in Unit 13B, RY2009–2019.

Regulatory Year	Quota	Harvested	Any-Bull Early Closure Date	Post-hunt Bull:Cow Ratio
2009	25	23	No early closure	36
2010 <sup>a</sup>	-	-	-	-
2011	20	13	August 12 <sup>b</sup>	35
2012	17	23	September 3	33
2013	26	23	August 16	38
2014	26	25	August 26	38
2015	30	35	September 14	37
2016	30	31	September 2	34
2017	30	34	September 8	33
2018	30	33	September 18	34
2019	34	34	No early closure	29

<sup>a</sup> No CSH hunt was administered in RY2010.

<sup>b</sup> In 2011 there was a 5-mile corridor on either side of the Denali Highway in 13B with a quota of 6 any-bulls that closed on August 12, but the remainder of the unit remained open through September 20.

**Table 60-5 .** Any-bull harvests and bull-to-cow ratios in Unit 13C, RY2009–2019.

Regulatory Year	Quota	Harvested	Any-Bull Early Closure Date	Post-hunt Bull:Cow Ratio
2009	15	11	No early closure	42
2010 <sup>a</sup>	-	-	-	-
2011	10	13	No early closure	30
2012	10	14	September 17	30
2013	16	1	August 16	44
2014	16	9	No early closure	37
2015	18	8	No early closure	30
2016	18	20	No early closure	34
2017	18	11	No early closure	16
2018	18	7	No early closure	21
2019	18	12	No early closure	26

<sup>a</sup> No CSH hunt was administered in RY2010.

**Table 60-6.** Any-bull harvests and bull-to-cow ratios in Unit 13D, RY2009–2019

Regulatory Year	Quota	Harvested	Any-Bull Early Closure Date	Post-hunt Bull:Cow Ratio
2009	10	7	No early closure	-
2010 <sup>a</sup>	-	-	-	-
2011	5	7	August 17	62
2012	8	8	August 28	67
2013	11	7	August 16	89
2014	11	13	August 31	69
2015	14	14	September 9	58
2016	14	15	September 2	89
2017	14	16	September 12	-
2018	14	17	No early closure	-
2019	16	13	No early closure	70

<sup>a</sup> No CSH hunt was administered in RY2010.

**Table 60-7.** Any-bull harvests and bull-to-cow ratios in Unit 13E, RY2009–2019.

Regulatory Year	Quota	Harvested	Any-Bull Early Closure Date	Post-hunt Bull:Cow Ratio
2009	15	13	September 17	33
2010 <sup>a</sup>	-	-	-	-
2011	15	20	No early closure	31
2012	13	16	September 13	32
2013	21	12	August 16	34
2014	21	21	August 15	41
2015	26	26	September 9	25
2016	26	38	August 24	40
2017	26	29	August 27	23
2018	26	25	No early closure	27
2019	25	27	September 8	24

<sup>a</sup> No CSH hunt was administered in RY2010.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of moose harvest and the methods of harvest allowed but is **OPPOSED** to an increase in any-bull harvest in Units 13A, 13B, 13C, or 13E. Current any-bull harvest levels have resulted in declining bull-to-cow ratios, or ratios that have stabilized near objectives in those subunits. Additional harvest in those subunits poses a conservation concern. Furthermore, the department is **OPPOSED** to moose hunts in Unit 13 during the rut.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 61 – 5 AAC 85.045(a)(11). Hunting seasons and bag limits for moose.** Establish a drawing permit hunt for bull moose limited to resident certified bowhunters in Unit 13E.

**PROPOSED BY:** Gary Weaver

**WHAT WOULD THE PROPOSAL DO?** This proposal would create a resident archery-only draw hunt for any bull in Unit 13E with season dates of September 1–September 20. This hunt would be in addition to the current resident draw hunt available for any bull that applies to all of Unit 13, for which five permits are issued annually.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

The Board of Game (BOG) has made a positive customary and traditional use finding for moose in Unit 13 with an amount reasonably necessary for subsistence (ANS) of 300–600 moose. Hunters who seek to hunt moose in Unit 13 may do so under the following seasons and bag limits:

- **CM300:** Copper Basin Community Subsistence Harvest (CSH) Hunt: The board has established an allocation of 100 bull moose that do not meet general season antler restrictions (any-bulls) to the Copper Basin CSH. CSH participants have a bag limit of 1 bull from August 20–September 20 if they are in possession of an any-bull locking tag. CM300 permit holders not in possession of an any-bull locking tag have a bag limit of 1 moose with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines on at least 1 side, with the same season dates. Once the 100 bull allocation has been met, the bag limit is changed for all CSH participants by emergency order to one bull with spike-fork antlers or 50-inch antlers or antlers with four or more brow tines. 350 CSH participants receive any-bull locking tags based on Tier II-like scoring criteria. Each community group must have 25 qualified individuals to successfully apply for any CSH program, and Copper Basin CSH groups are locked-in for a two-year commitment upon successful application. No member of a Copper Basin CSH moose hunt household may hold state or federal moose permits outside of the Copper Basin Community Hunt area (Unit 11, 13, and that portion of Unit 13 south of the Little Tok River) or hold general season moose harvest tickets. After the CSH hunt has ended, unsuccessful individual household members may then acquire state or federal moose harvest tickets or permits for other areas if the bag limit is greater than 1 moose per person.
- **GM000:** Resident hunters with general season harvest tickets for Unit 13 may harvest 1 bull with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines on 1 side from September 1–20.
- **DM324:** Resident hunters who successfully draw a Unit 13 bull moose drawing permit are permitted one antlered bull from September 1–20; up to 5 permits may be issued.

- **DM325:** Resident hunters who successfully draw a Unit 13 antlerless moose drawing permit for 13A can harvest one antlerless moose from October 1–31 or March 1–31; up to 200 permits may be issued.
- **DM335–339:** Nonresident hunters who successfully draw a Unit 13 drawing permit are permitted 1 bull with 50-inch antlers or antlers with 4 or more brow tines on 1 side from September 1–20; up to 150 permits may be issued and each permit is valid for only 1 subunit of Unit 13.
- **FMI301:** Federally qualified subsistence users can obtain a federal moose permit from the Glennallen Field Office of the Bureau of Land Management. The season is August 1–September 20 with a bag limit of 1 antlered bull moose per household for residents that qualify for 13E, or 1 antlered bull moose per hunter for residents that qualify for the remainder of Unit 13. Federal permits are valid for federal subsistence lands only. In July 2020 these lands in Unit 13A and 13B were closed by the Federal Subsistence Board for hunting of moose and caribou by state hunters.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal may increase the harvest of bulls, some of which will likely be any-bulls in Unit 13E. Unit 13E has no additional any-bulls available, and any-bull harvest is allocated to the Copper Basin Community Subsistence Harvest (CSH) hunt as well as the five resident draw permits that are available for all of Unit 13. Additional any-bull harvest will not be sustainable over time under the current hunt structure and may affect subsistence hunting opportunity and or other hunt structures in subsequent years in order to maintain bull-to-cow ratios at or above objectives.

**BACKGROUND:** Unit 13 is a highly popular area for moose hunters, largely because of the relative accessibility of the unit on the road system, as well as its proximity to Alaska’s populations in Anchorage, the Mat-Su Valley, and Fairbanks. As such, the moose hunt structure in Unit 13 has a complex history.

The Copper Basin CSH hunt was first implemented in 2009 and has since undergone several iterations through BOG action to develop a manageable hunt strategy that allows for the take of 100 any-bulls to provide for subsistence needs while also allowing for one of the customary and traditional use patterns of Copper Basin moose. Nonresident draw hunts for moose were also first implemented in 2009. Resident antlerless draw permits have been available in Unit 13A since 2012. Five resident draw permits for any antlered bull have been issued annually since 2016. Roughly 5,600 hunters report hunting moose in Unit 13 annually, but hunter numbers fluctuate annually, typically relative to the number of Nelchina Caribou permits that are issued annually (Table 61-1).

**Table 61-1.** Unit 13 annual moose permits and corresponding harvest by hunt, RY2015–2019.

Regulatory Year	GM000	CM300	Resident	Nonresident	Federal Permits	Total Harvest	Total Hunters*
			Draw Permits	Draw Permits			
2015	772	171	7	23	85	1,058	5,739
2016	757	201	10	21	99	1,088	6,566
2017	689	188	11	28	90	1,006	5,990
2018	552	154	9	20	61	796	5,347
2019	638	160	10	18	71	897	4,580

\*Federally qualified subsistence hunters may report hunting on both federal and state permits. Harvest data is reconciled to the best of our ability.

In 2010 the CSH hunt was not offered due to legal litigation, but it was reinstated in 2011 with a quota of 70 any-bulls. The hunt became increasingly popular annually (Table 61-2). From 2012 to 2013 the number of groups participating jumped from 19 to 45, and the any-bull quota was raised to 100 in 2013, but the rapid harvest early in the season resulted in any-bull closures 4–6 days after the season opened for all subunits. A five-day reporting requirement complicated hunt administration with high levels of participation in 2013 resulting in a 24-hour reporting requirement as well as a locking tag system for 2014. One locking tag was issued for every 3 households in each group. The overall quota was lowered to 90 any-bulls in 2014, and returned to 100 in 2015, which has been the overall quota since.

The locking tag system slowed harvest and allowed for a manageable hunt. Participation, however, continued to increase. To limit the number of locking tags issued for the 100 any-bull the BOG determined that, starting in 2018, 350 locking tags would be issued to CSH participants based on Tier II scoring criteria. Also beginning in 2018, groups that successfully applied to participate in the CSH hunt were locked-in for a two-year commitment.

**Table 61-2.** Annual Copper Basin CSH Hunt Participation and Harvest, RY2009–2020.

Regulatory Year	Number of Groups	Number of Permits	Hunters Reported Hunting	Number of Locking Tags	Total CSH Moose Harvest
2009	1	378	293	-	100
2010 <sup>1</sup>	-	-	-	-	-
2011	9	753	312	-	86
2012	19	961	358	-	98
2013	45	2,066	842	-	156
2014	43	1,771	607	281	150
2015	43	1,984	621	344	171
2016	73	3,023	941	485	201
2017	83	3,136	879	521	188
2018	57	2,331	664	354	154
2019	61	2,143	589	350	160
2020	49	1,702	-	352	-

<sup>1</sup>No CSH hunt was administered in RY2010.

Moose abundance is above objectives in 13E. Bull-to-cow ratios in 13E, however, have been dropping in recent years (Table 61-3). Any-bull quotas are reevaluated annually based on bull-to-cow ratios, to prevent ratios from dropping below the objective of 25 bulls per 100 cows. Increasing overall bull harvest in 13E without increasing cow harvest poses a conservation concern. Increasing bull harvest may result in lower CSH any-bull quotas in following years in order to mitigate that conservation concern.

**Table 61-3.** Any-bull harvests and bull-to-cow ratios in Unit 13E, RY2009–2019.

Regulatory Year	Quota	Harvested	Any-Bull Early Closure Date	Post-hunt Bull:Cow Ratio
2009	15	13	September 17	33
2010 <sup>1</sup>	-	-	-	-
2011	15	20	No early closure	31
2012	13	16	September 13	32
2013	21	12	August 16	34
2014	21	21	August 15	41
2015	26	26	September 9	25
2016	26	38	August 24	40
2017	26	29	August 27	23
2018	26	25	No early closure	27
2019	25	27	September 8	24

<sup>1</sup>No CSH hunt was administered in RY2010.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of moose harvest and the allowed methods of harvest but **OPPOSED** to an increase in any-bull harvest in Unit 13E. Current any-bull harvest levels have resulted in declining bull to cow ratios or ratios that have stabilized near objectives. Additional moose harvest in Unit 13E poses a conservation

concern if cow harvest is not available to stabilize ratio objectives and prevent herd growth for a population that is already above abundance objectives.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 62 – 5 AAC 85.045(a)(11) Hunting seasons and bag limits for moose.** Establish an antlerless moose season in Unit 13E.

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** This proposal would create a resident draw hunt for antlerless moose in Unit 13E with season dates of October 1–October 31.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

The Board of Game has made a positive customary and traditional use finding for moose in Unit 13 with an amount reasonably necessary for subsistence (ANS) of 300–600 moose. Hunters who seek to hunt moose in Unit 13 may do so under the following seasons and bag limits:

- **CM300:** Copper Basin Community Subsistence Harvest (CSH) Hunt: The board has established an allocation of 100 bull moose that do not meet general season antler restrictions (any-bulls) to the Copper Basin CSH. CSH participants have a bag limit of one bull from August 20–September 20 if they are in possession of an any-bull locking tag. CM300 permitholders not in possession of an any-bull locking tag have a bag limit of one moose with spike-fork antlers or 50-inch antlers or antlers with four or more brow tines on at least one side, with the same season dates. Once the 100 bull allocation has been met, the bag limit is changed for all CSH participants by emergency order to one bull with spike-fork antlers or 50-inch antlers or antlers with four or more brow tines. 350 CSH participants receive any-bull locking tags based on Tier II-like scoring criteria. Each community group must have 25 qualified individuals to successfully apply for any CSH program, and Copper Basin CSH groups are locked-in for a two-year commitment upon successful application. No member of a Copper Basin CSH moose hunt household may hold state or federal moose permits outside of the Copper Basin Community Hunt area (Unit 11, 13, and that portion of Unit 13 south of the Little Tok River) or hold general season moose harvest tickets. After the CSH hunt has ended, unsuccessful individual household members may then acquire state or federal moose harvest tickets or permits for other areas if the bag limit is greater than 1 moose per person.

- **GM000:** Resident hunters with general season harvest tickets for Unit 13 may harvest 1 bull with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines on one side from September 1–20.
- **DM324:** Resident hunters who successfully draw a Unit 13 bull moose drawing permit are permitted 1 antlered bull from September 1–September 20; up to 5 permits may be issued.
- **DM325:** Resident hunters who successfully draw a Unit 13 antlerless moose drawing permit for 13A can harvest 1 antlerless moose from October 1–31 or March 1–31; up to 200 permits may be issued. The board has directed the department to issue antlerless moose permits when the moose population is at or above the midpoint of the population objective with the goal of harvesting up to 1% of the cow moose population.
- **DM335–339:** Nonresident hunters who successfully draw a Unit 13 drawing permit are permitted 1 bull with 50-inch antlers or antlers with 4 or more brow tines on one side from September 1–20; up to 150 permits may be issued and each permit is valid for only one subunit of Unit 13.
- **FM1301:** Federally qualified subsistence users can obtain a federal moose permit from the Glennallen Field Office of the Bureau of Land Management. The season is August 1–September 20 with a bag limit of 1 antlered bull moose per household for residents that qualify for Unit 13E, or 1 antlered bull moose per hunter for residents that qualify for the remainder of Unit 13. Federal permits are valid for federal subsistence lands only. In July 2020 these lands in Units 13A and 13B were closed by the Federal Subsistence Board for state hunting of moose and caribou.

An intensive management (IM) plan, including a wolf predation control area, has been established for moose in Unit 13 under 5 AAC 92.121. This plan defines the moose population abundance objective for 13E as 5,000–6,000 moose with harvest objectives of 300–600 moose annually with a bull-to-cow ratio objective of 25:100. The plan allows for public aerial permits or public land and shoot permits to increase wolf harvest with the goal of reducing predation and allowing for growth in the moose population.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would allow for cow moose harvest to reduce moose abundance to within objectives in Unit 13E. Ultimately, additional bull moose may be available for harvest as bull-to-cow ratios are adjusted with the reduction in cow moose.

**BACKGROUND:** Unit 13 is a highly popular area for moose hunters, largely due to the relative accessibility of the unit on the road system, as well as its proximity to Alaska’s populations in Anchorage, the Mat-Su Valley, and Fairbanks. As such, the moose hunt structure in Unit 13 has a complex history. There is an active Intensive Management (IM) program for moose in Unit 13, which includes a wolf control program.

The moose abundance index indicated fewer than 4,000 moose in Unit 13E in 2000 but the population has been increasing since then and the current abundance is well above the abundance objectives of 5,000 to 6,000 moose (Table 62-1). Harvest levels increased with the increase in abundance, but harvest levels remain below the harvest objectives of 300 to 600 moose. Bull-to-cow ratios are at the objective of 25 bulls to 100 cows. Additional harvest has been requested by the public for Unit 13E but cannot be obtained without harvesting some cows. Cow moose harvest opportunity will provide for the reduction of moose abundance to within objectives before the population becomes nutritionally stressed and experiences a decline due to nutritional constraints. Furthermore, harvest of cows will allow for additional bull harvest without compromising bull-to-cow ratios, and populations under sustained-yield management are more productive with both bull and cow harvest.

**Table 62-1.** Moose population and harvest data for Unit 13E, RY2015–2020.

Regulatory Year	Abundance Index	Bulls per 100 Cows	Harvest <sup>a</sup>
2015	6,281	25	200
2016	6,036	40	232
2017	6,324	23	199
2018	6,413	27	184
2019	6,394	24	204

<sup>a</sup> Includes federal harvest.

**DEPARTMENT COMMENTS:** The department **SUPPORTS** this proposal. Antlerless moose hunts are required to regulate the moose population within the established Intensive Management objectives for population size, population structure, and harvest. Cow moose harvest in Unit 13E will provide additional harvest opportunity, allow for the reduction of moose abundance to within objectives without nutritional constraints, and provide for additional bull harvest while maintaining bull-to-cow ratios.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 63 – 5 AAC 92.050(a)(4)(I). Required permit hunt conditions and procedures and 5 AAC 92.072. Community subsistence harvest hunt and permit conditions.** Change the household harvest report and household bag limit in the community subsistence caribou hunt for Unit 13.

**PROPOSED BY:** Ahtna Intertribal Resource Commission

**WHAT WOULD THE PROPOSAL DO?** This proposal would allow each eligible member of a household participating in the Copper Basin Community Subsistence Harvest (CSH) to hunt a bag limit of up to 2 caribou in Unit 13.

**WHAT ARE THE CURRENT REGULATIONS?** The current caribou hunting regulations can be found in 5 AAC 85.025 and in the *2020–2021 Alaska Hunting Regulations*.

CSH regulations defined in 5 AAC 92.050 and 5 AAC 92.072 limit Tier I (RC561/RC562) subsistence and CSH caribou permits for Unit 13 to 1 permit per household. Bag limits are determined annually based on harvestable surplus, but may be changed by Emergency Order, and may be increased to up to 2 caribou. Each entity that elects to subscribe to a community harvest permit may only retain up to two caribou per household.

<b>Units and Bag Limits</b>	<b>Resident Open Season</b> (Subsistence and General hunts)	<b>Nonresident Open Season</b>
Unit 13		
Up to 2 caribou per harvest report per regulatory year by community harvest permit only; up to 400 caribou may be taken; or	Aug. 10 – Sept. 20 (Subsistence hunt only)  Oct. 21 – March 31 (Subsistence hunt only)	No open season.
up to 2 caribou every regulatory year by Tier I subsistence permit only; or	Aug. 10 – Aug. 31 (Subsistence hunt only)  Oct. 21 – March 31 (Subsistence hunt only)	No open season.
up to 2 caribou every regulatory year by Tier I subsistence permit only; or	Sept. 1 – Sept. 20 (Subsistence hunt only)  Oct. 21 – March 31	No open season.



(Subsistence hunt only)

1 caribou every regulatory year by youth hunt drawing permit; or

Aug. 1 – Aug. 5

No open season.

1 caribou every regulatory year by drawing permit; up to 5,000 permits may be issued;

Aug. 20 – Sept. 20

No open season.

Oct. 21 – Mar. 31

1 bull every regulatory year by drawing permit; up to 200 permits may be issued when the herd is at or above population objectives;

Aug. 20 – Sept. 20

There is a positive customary and traditional use determination for Nelchina caribou in Units 12 and 13, with an amount reasonably necessary of 600-1,000 caribou.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Each eligible household member in a CSH caribou group would receive a Unit 13 caribou permit with a bag limit of up to 2 caribou per regulatory year. The change would provide CSH caribou hunters with a greater number of permits per household than Tier I subsistence caribou permit holders for Unit 13. The overall cap of 400 caribou for the CSH hunt would remain in place, as would the designated hunter option for the CSH caribou hunt. As long as the bag limit remains in place, overall harvest is not expected to significantly increase because CSH caribou hunters can already hunt under permits issued to other households in their group. To date no CSH caribou group has filled all caribou permits issued to households within that group, indicating that each group has unrealized opportunity to harvest additional caribou. If multiple hunters in the same household hunt they may inadvertently exceed the bag limit. This occurrence would be greater when the bag limit is 1 caribou but still possible under a 2 caribou bag limit.

**BACKGROUND:** Prior to 2009, subsistence hunting of Nelchina caribou in Unit 13 was allocated through a registration hunt open only to local residents or a Tier II hunt (most years from 1983–2008). Other hunting opportunity was allocated through a drawing hunt (1983–1989).

The CSH hunt for caribou in Unit 13 was established in 2009. Due to litigation the hunt was not offered in 2010, but 3,604 permits were issued for a winter hunt (TC566) that season. The hunt has occurred every year since then and has endured several modifications through Board of Game (BOG) action. The CSH limit of 400 caribou was increased from 300 caribou in 2017, and the bag limit was changed from 1 caribou per household to up to 2 caribou per household. This change was temporary for the rest of the caribou season in March of 2017, and the change took effect permanently in regulatory year (RY)2018. Since 2009, CSH caribou harvest has exceeded 300 animals during only one season (Table 63-1). Regulatory year 2016 had the most participation in the CSH caribou hunt of any year to date, and the bag limit for the CSH hunt was increased to two animals in March of 2017. For the remainder of the RY2016 season, 208 CSH households chose to receive permits for a second animal, 78 of those households reported hunting for a second animal, and 36 additional animals were harvested on these additional permits. The total CSH harvest that season was 370 caribou. CSH caribou groups can harvest additional caribou without an increased bag limit by having group members hunt on permits for households that would not otherwise hunt.

**Table 63-1.** CSH Caribou permit allocation and harvest, RY2009–2020 (dashes indicate data not available).

RY	CSH Caribou Groups	CC001 permits	Harvest	Permits Hunted	Success Rate
2009	1	477	127	288	44%
2010 <sup>a</sup>	-	-	-	-	-
2011	6	322	150	176	85%
2012	17	402	114	238	48%
2013	28	689	144	308	47%
2014	25	569	191	266	72%
2015	26	659	191	330	58%
2016	45	1,006	370	558	66%
2017	51	1,004	262	484	54%
2018	38	838	168	382	44%
2019	44	811	256	407	63%
2020	40	811	-	-	-

<sup>a</sup> The CSH hunt was not offered in 2010 due to litigation

In 2009 the Board established the current ANS of 600–1,000 caribou available for harvest for the NCH. The ANS has been met in all years since 2009. When the Nelchina harvest quota is above 1,000 caribou, hunting opportunity is administered under a Tier I hunt structure. The Tier I hunt is comprised of resident-only subsistence hunts (i.e., Copper Basin CSH hunt CC001 and Tier I registration hunts RC561 and RC562) and drawing permit hunts (DC485 and YC495; Table 63-2). In 2018 the Board established a nonresident draw opportunity to be offered when the NCH is at or above population objectives (DC475). The management objective for the NCH is to maintain

a population between 35,000 and 40,000 animals in the fall, post-fall hunting season. Additional NCH hunting opportunity is offered to federally qualified subsistence users through federal subsistence permits on federal lands in Unit 13 (FC1302) and on the Tetlin National Wildlife Refuge (FC1202). Tier I registration permits are limited to 1 permit per household to provide for subsistence opportunity. To provide a hunting opportunity that complies with the specific customary and traditional patterns of use in this area, where subsistence harvest is not generally sought outside the range of the NCH (see 2006-170-BOG and 2011-184-BOG), and to further limit permit numbers, participants in both Tier I opportunities (CSH and registration hunts) must agree to hunt moose and caribou only in Unit 13 in order to obtain a permit.

**Table 63-2.** Nelchina caribou permits and harvest by hunt, RY2009–2020.

RY	Tier I <sup>a</sup>		CSH <sup>b</sup>		Draw <sup>c</sup>		Federal <sup>d</sup>		Total Harvest
	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	
2009	500	277	479	127	-	-	2,687	369	773
2010	1,151	615	-	-	-	-	2,973	505	2,410 <sup>e</sup>
2011	3,148	1,626	323	87	1,127	319	3,083	444	2,476
2012	5,045	2,543	403	150	3,001	1,024	3,105	608	4,325
2013	6,878	1,573	689	114	5,008	609	2,896	319	2,615
2014	5,595	2,268	569	144	1,000	299	3,069	274	2,985
2015	7,235	2,911	659	191	1,001	296	3,209	644	4,042
2016	8,470	3,518 <sup>f</sup>	1,006	370 <sup>g</sup>	4,999	1,898	3,265	497	6,283
2017	8,444	2,731	1,004	262	4,998	1,534	3,199	363	4,890
2018	8,767	1,060	838	168	5,000	260	3,170	381	1,869
2019	5,673	2,169	811	256	599	285	2,947	156	2,866
2020	6,886	-	811	-	2,250	-			

<sup>a</sup> RC566 (RY2009–2017); RC561 & RC562 (RY2018–2020)

<sup>b</sup> CC001 was not offered in 2010.

<sup>c</sup> DC480–DC483 (RY2011–2015); DC485 (RY2016–2020); YC495 (RY2019–2020); DC475 (RY2020)

<sup>d</sup> FC1302 and FC1202

<sup>e</sup> Includes 1,290 caribou harvested under 3,604 TC566 winter hunt permits.

<sup>f</sup> Includes 299 caribou harvested under 2,441 households that chose to receive a second permit in March 2017.

<sup>g</sup> Includes 36 caribou harvested under 208 households that chose to receive a second permit in March 2017.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of caribou harvest. The department will continue to manage the Nelchina caribou herd based on sustained yield principles and in alignment with the statutory subsistence priority. Quotas for each hunt will be established annually based on allocative guidance from the Board, not to exceed harvestable surplus.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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## Proposal 65

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## Proposal 66

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**PROPOSAL 67 – 5 AAC 92.220 (d). Salvage of game meat, furs, and hides.** Require meat to remain naturally attached to the bone during salvage for Dall Sheep in Unit 11.

**PROPOSED BY:** Seth Wilson

**WHAT WOULD THE PROPOSAL DO?** Require that for Dall sheep taken in Unit 11, the edible meat of the front quarters, hindquarters, and ribs remain naturally attached to the bone until the meat is transported from the field or is processed for human consumption.

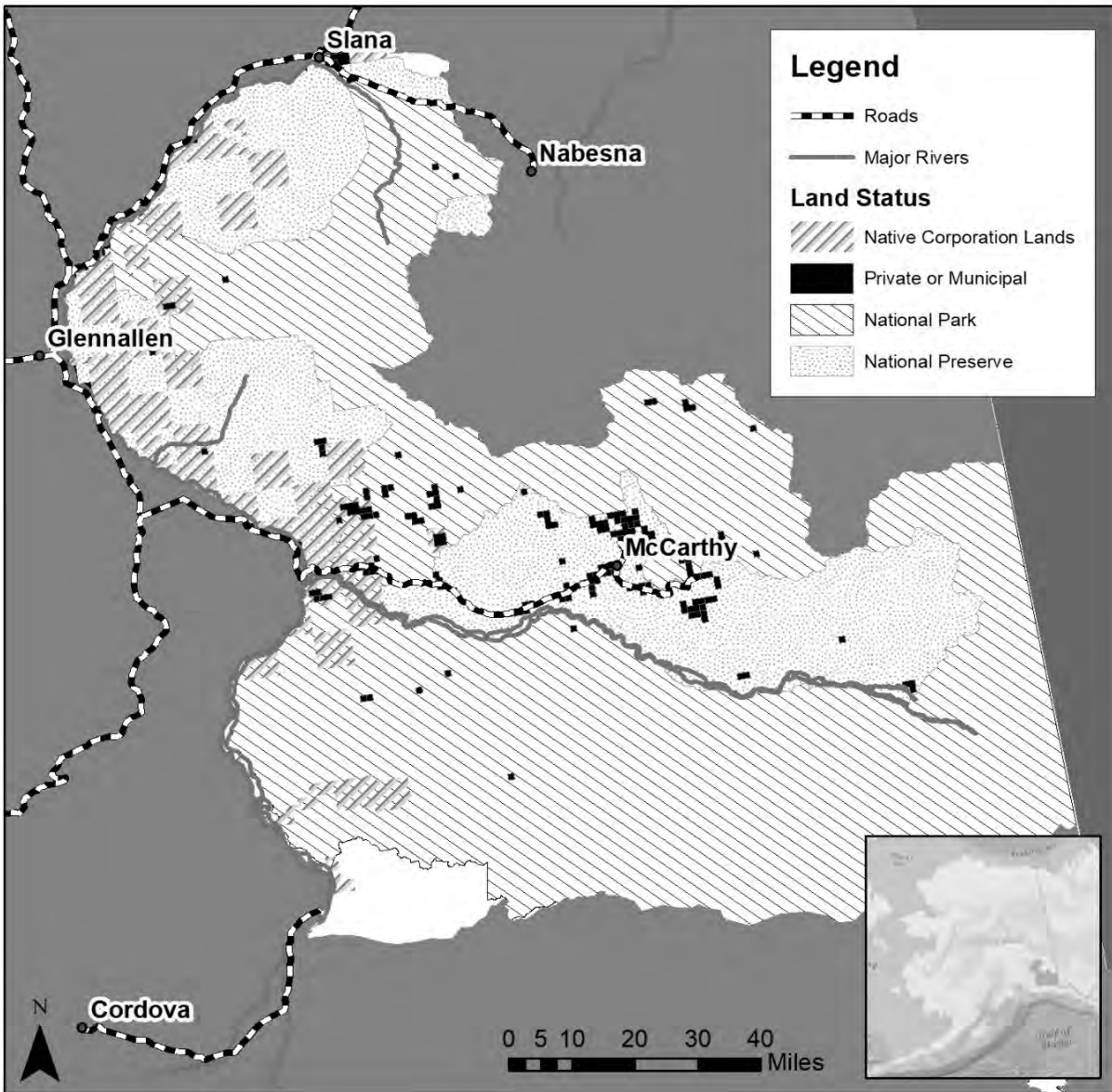
**WHAT ARE THE CURRENT REGULATIONS?** The current Dall sheep hunting regulations can be found in 5 AAC 85.055 and in the *2020–2021 Alaska Hunting Regulations*.

Under 5 AAC 92.990, a person taking Dall sheep anywhere in the state must salvage for human consumption all edible meat. Meat of Dall sheep is not required to remain on the bone prior to removal from the field.

The board made a positive customary and traditional use finding for Dall sheep in Unit 11 with an amount reasonably necessary of 60 - 75 animals.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Meat of the front quarters, hindquarters, and ribs for Dall sheep taken in Unit 11 would have to remain naturally attached to the bone until the meat is transported from the field, thereby eliminating confusion by the public and enforcement regarding fulfillment of salvage requirements. Meat is less likely to spoil if it remains on the bone. Furthermore, this proposal could result in slowing or possibly decreasing harvest rates of Dall sheep in Unit 11 without decreasing opportunity, since hunting parties are less likely to harvest 1 sheep per hunter with this change in salvage requirements.

**BACKGROUND:** Unit 11 includes a large portion of the Wrangell Mountains, which is a popular area for Dall sheep hunting. Much of the area within Unit 11 includes Wrangell St. Elias National Preserve, where sheep hunting is allowed under state regulations (general season harvest ticket for residents and nonresidents with full-curl ram bag limit), as well as Wrangell St. Elias National Park, where only federally qualified subsistence users may harvest Dall sheep (Figure 67-1). Federally qualified subsistence users may harvest Dall sheep on either park or preserve lands.



**Figure 67-1.** Land status in Unit 11.

In 2019 the Alaska Wildlife Troopers (AWT) made a concerted effort of contacting sheep hunters in the field in the Wrangell Mountains, which resulted in concerns regarding salvage of sheep meat. To help address the issue, AWT and ADF&G coordinated to produce a sheep salvage reference card in 2020 for distribution to hunters and transporters in the field as well as in-person visitors in the Regional and Glennallen offices.

Sheep population surveys in Unit 11 are conducted for some count areas every other year when weather allows, but survey data can be sporadic. The available data indicate that populations have largely been stable to increasing over the past decade. In the last ten years Unit 11 has experienced an increase in sheep hunters, sheep harvest, and hunter success (Table 67-1).

**Table 67-1.** Dall sheep harvest by sex and hunter success in Unit 11, RY2010–RY2019.

Regulatory Year	Rams	Ewes	Total Harvest	Hunters	Hunter Success
2010	48	1	49	143	34%
2011	48	0	48	141	34%
2012	34	1	35	131	27%
2013	45	0	45	125	36%
2014	49	1	50	135	37%
2015	46	4	50	149	34%
2016	54	0	54	137	39%
2017	52	0	52	156	33%
2018	69	0	69	159	43%
2019	73	1	74	164	45%

Over the past decade, 505 rams have been sealed from Unit 11. On average, 48% of rams are taken by federally qualified subsistence users annually (Table 67-2). Most rams taken, regardless of location or federal subsistence status, meet the full-curl/age/broken horn restrictions outlined in state regulations (especially in recent years). The average age of rams taken by federal subsistence hunters, however, is lower than the average age of rams taken by non-federal hunters.

**Table 67-2.** Age of rams sealed, by federal hunt status, from Unit 11, RY2010–RY2019.

Regulatory Year	Rams sealed	Average Age	Percentage of rams taken by federally qualified subsistence hunters	Percentage of rams that meet state horn/age restrictions	Average age of federal sheep	Average age of non-federal sheep
2010	48	7.4	44%	60%	7.5	7.3
2011	48	7.3	58%	67%	6.8	8.1
2012	33	7.3	52%	67%	6.9	7.7
2013	45	7.4	47%	78%	6.7	8.1
2014	48	7.3	67%	65%	7.1	7.7
2015	44	6.7	55%	59%	6.1	7.4
2016	51	7.2	53%	82%	6.6	7.8
2017	48	8.0	29%	88%	7.5	8.1
2018	68	8.0	40%	88%	7.7	8.1
2019	72	7.4	40%	75%	6.1	8.2

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal and encourages hunters to take measures to ensure optimal salvage of meat. Requiring meat to remain naturally attached removes any question for the hunter or for enforcement officers if the salvage requirement has been met. Leaving meat naturally attached to the bone is widely recognized as the best way to transport meat in the field to prevent spoilage. If the board considers supporting this proposal then

the department recommends that it be DEFERRED to a statewide meeting where it can be considered as a statewide change.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 68 – 5 AAC 85.020 (a)(12). Hunting seasons and bag limits for brown bears.** Extend the general season hunt for brown bears in Unit 11 for archery only hunters.

**PROPOSED BY:** Alaskan Bowhunters Association

**WHAT WOULD THE PROPOSAL DO?** This proposal would extend the general season brown bear hunt, for archery only, to July 1 through August 9, adding 40 days of opportunity for archery hunters and resulting in no closed season.

**WHAT ARE THE CURRENT REGULATIONS?** The current brown bear hunting regulations for Unit 11 can be found in 5 AAC 85.020 and in the *2020–2021 Alaska Hunting Regulations*.

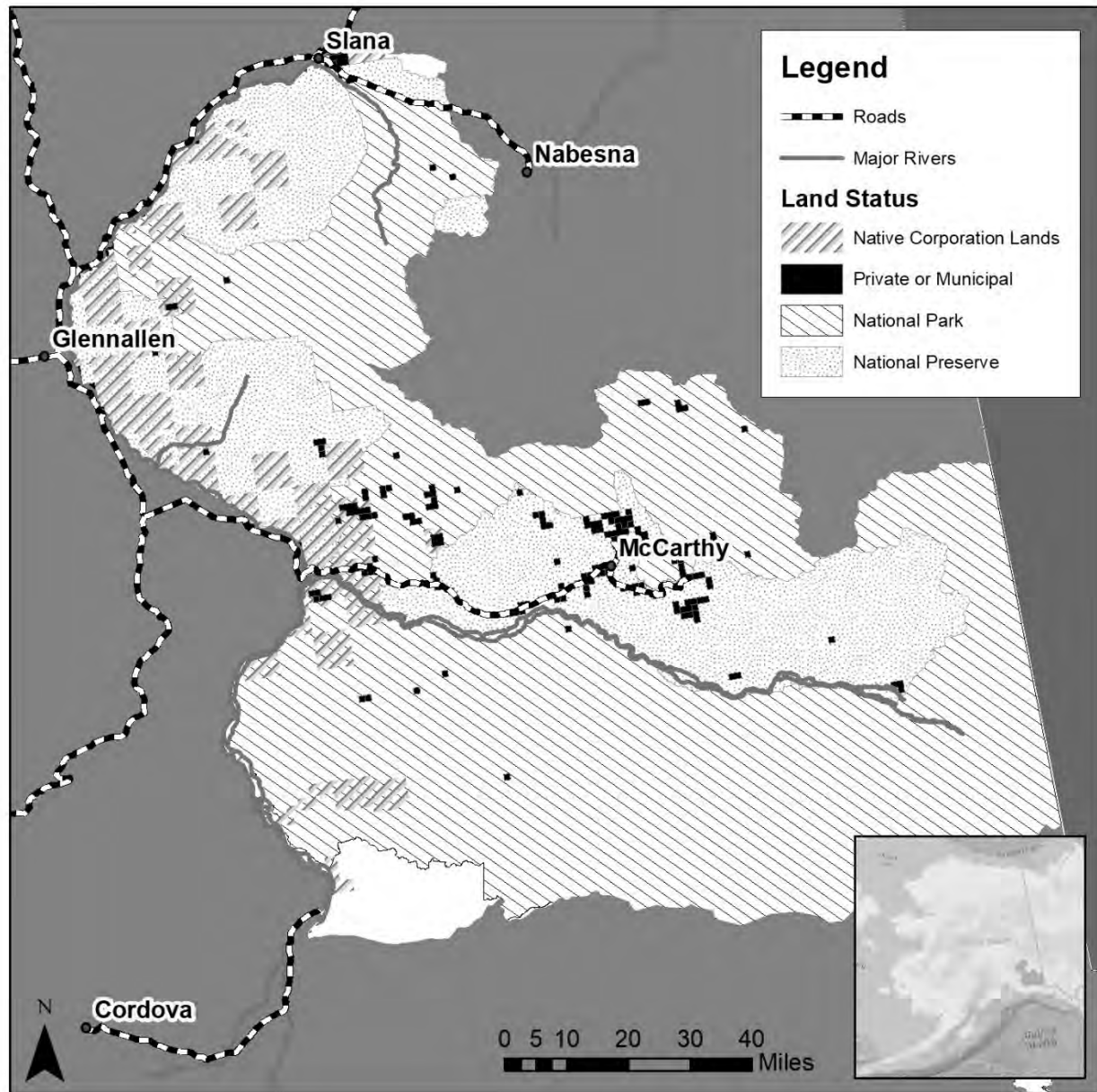
- One brown bear every regulatory year for residents and non-residents from August 10 through June 30.
- Brown bear sows with cubs or cubs within the first two years of life may not be harvested.
- Resident locking tags are not required.
- There are no weapons restrictions for this hunt.

There is a negative customary and traditional use finding for brown bears in Unit 11.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would add 40 days of archery only hunting opportunity for brown bears in Unit 11, creating no closed season. The majority of Unit 11 lies within Wrangell St. Elias National Park and Preserve (Figure 68-1). General season bear hunting is prohibited in Wrangell St. Elias National Park, but is allowed on state, private, and preserve lands. Most of these lands are difficult to access and provide very little bear hunting opportunity for non-locals. Furthermore, fur and meat quality during the proposed season extension is not optimal, hunter success in brown bear archery hunts is limited, and the land status and accessibility in Unit 11 is limited. This combination of factors suggests that this proposal will not have a significant effect on brown bear harvest rates in Unit 11.

**BACKGROUND:** Brown bear harvest in Unit 11 varies annually but remains relatively low, averaging 11 bears over the past five regulatory years (Table 68-1). Ground shooting is the main method of harvest, since archery hunters make up a very small percentage of total harvest (Table 68-1). Harvest chronology varies, since hunters take brown bears while hunting for moose or sheep

in August and September, and other hunters take brown bears in the spring after they emerge from dens (Table 68-2).



**Figure 68-1.** Land status in Unit 11.



**Table 68-1.** Brown bear harvest in Unit 11 by method of take, RY2015–2019.

R <sub>Y</sub>	Archery (%)	Ground Shooting (%)	Other	Total
2015	1 (6)	12 (75)	3	16
2016	1 (14)	6 (86)	0	7
2017	1 (9)	10 (91)	0	11
2018	1 (11)	7 (78)	1	9
2019	2 (17)	10 (83)	0	12

**Table 68-2.** Chronology of brown bear harvest in Unit 11, RY2015–2019.

R <sub>Y</sub>	April	May	June	August	September	October	November	Total
2015	0	2	0	5	7	2	0	16
2016	0	0	1	0	5	1	0	7
2017	1	2	2	2	3	0	1	11
2018	0	3	2	2	2	0	0	9
2019	0	4	2	3	3	0	0	12
<i>Average</i>	<i>1</i>	<i>3</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>2</i>	<i>1</i>	<i>11</i>

In July and August brown bear hides are rubbed, making hides less desirable. In areas with salmon runs the meat during these months is also typically undesirable. Poor hide and meat quality can decrease hunter desire to harvest a brown bear during this time.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocative intent of the proposal and it does not pose a conservation concern for brown bears in Unit 11. Given the limited desirability of brown bear hides or meat in July and August, combined with the low success rates and limited popularity of brown bear archery hunting, extending the season in July and August for archery only is not expected to substantially increase brown bear harvest in Unit 11. The protected land status of much of Unit 11, combined with the protection of cubs and sows with cubs, ensures that a slight increase in brown bear harvest in Unit 11 would not pose a concern for brown bear populations in that area.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 69 – 5 AAC 85.020 (a)(12). Hunting seasons and bag limits for brown bears.** Increase bag limit for brown bears in Unit 13.

**PROPOSED BY:** Claude Bondy

**WHAT WOULD THE PROPOSAL DO?** This proposal would increase the brown bear bag limit for resident and non-resident hunters from 1 bear to 2 bears every regulatory year.

**WHAT ARE THE CURRENT REGULATIONS?** The current brown bear hunting regulations can be found in 5 AAC 85.020 and in the *2020–2021 Alaska Hunting Regulations*.

- Unit 13E, that portion within Denali State Park: resident and non-resident hunters can take 1 brown bear every regulatory year from August 10–June 15.
- Remainder of Unit 13: resident and non-resident hunters can take 1 brown bear every regulatory year with no closed season.
- Harvest of sows with cubs or cubs within their first or second year of life is prohibited.
- Bear hunters may harvest brown or black bears over bait in Unit 13 from April 15–June 30.
- Resident locking tags are not required to hunt brown bears in Unit 13.

There is a negative customary and traditional use finding for brown bears in Unit 13.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted, this proposal may result in an increase in brown bear harvest in Unit 13, which will contribute to further decline of an already declining brown bear population in an area where ungulate populations are relatively high and are not substantially limited by predation.

**BACKGROUND:** Brown bear population data are available for limited portions of Unit 13. The most recent five-year average (2015–2019) of 145 is an increase over the previous five-year average of 130 bears annually (2010–2014).

In 2013, the spring harvest of brown bears over bait was allowed in Unit 13D, resulting in a 116% increase in the overall Unit 13D brown bear harvest. Twenty-six of 32 spring brown bears were harvested over bait. Harvest in 13D dropped to more typical levels in 2014 but remained slightly higher in following years (Table 69-1). During the spring of 2015 the harvest of brown bears over bait was allowed in all of Unit 13, and the overall harvest of brown bears increased by 49% compared to the previous year, with 41 of the 90 spring harvested brown bears taken over bait (Table 69-2). The percent of females in the harvest has increased in recent years, both in overall harvest and in harvest of bears over bait (Table 69-2). Bear baiting activity in Unit 13 has increased substantially over the past 10 years, from 114 registered bait stations in 2010 to 268 in 2019 (Table 69-3).

**Table 69-1.** Number of brown bears harvested in Unit 13 by subunit, regulatory years 2010 through 2019.

Regulatory Year	13A	13B	13C	13D	13E	Unit 13 Total
2010	34	19	2	27	56	138
2011	19	18	5	21	57	120
2012	24	20	12	25	48	129
2013 <sup>1</sup>	28	22	8	54	47	159
2014	10	15	9	24	45	103
2015 <sup>2</sup>	20	25	16	37	55	153
2016	32	28	10	32	45	147
2017	27	29	9	29	54	148
2018	24	32	8	25	59	148
2019	27	28	11	25	36	127
<i>Average</i>	<i>25</i>	<i>24</i>	<i>9</i>	<i>30</i>	<i>50</i>	<i>137</i>

<sup>1</sup> First year of spring brown bear take over bait in 13D, 26 brown bears taken over bait.

<sup>2</sup> First year of spring brown bear take over bait in all of Unit 13, 41 brown bears taken over bait.

**Table 69-2.** Chronology of brown bear harvest and percent females in harvest in Unit 13, regulatory years 2010 through 2019.

Regulatory Year	Fall	Fall Females (%)	Spring	Spring Females (%)	Bait	Baited Females (%)	Total	Total Females (%)
2010	104	38 (37)	34	13 (38)	n/a	-	138	51 (37)
2011	79	35 (44)	41	12 (29)	n/a	-	120	47 (39)
2012	89	37 (42)	40	13 (33)	n/a	-	129	50 (39)
2013 <sup>1</sup>	102	44 (43)	57	16 (28)	26	8 (31)	159	60 (38)
2014	65	27 (42)	38	13 (34)	13	3 (23)	103	40 (39)
2015 <sup>2</sup>	63	28 (44)	90	33 (37)	41	13 (32)	153	61 (40)
2016	75	39 (46)	72	28 (39)	36	10 (28)	147	67 (46)
2017	85	39 (46)	63	26 (41)	30	13 (43)	148	65 (45)
2018	80	37 (46)	68	28 (41)	41	19 (46)	148	65 (44)
2019	65	31 (48)	62	28 (45)	33	15 (45)	127	59 (46)

<sup>1</sup> First year of spring brown bear take over bait in 13D, 26 brown bears taken over bait.

<sup>2</sup> First year of spring brown bear take over bait in all of Unit 13, 41 brown bears taken over bait.

**Table 69-3.** Number of registered bear bait stations in Units 13 by subunit, regulatory years 2010 through 2019

Regulatory Year	13A	13B	13C	13D	13E	Unit 13 Total
2010	14	1	6	62	31	114
2011	22	3	4	95	29	153
2012	11	1	4	107	30	153
2013 <sup>1</sup>	17	1	8	139	25	190
2014	13	2	12	155	33	215
2015 <sup>2</sup>	34	14	23	139	47	257
2016	24	25	17	142	44	252
2017	22	23	18	114	52	229
2018	20	26	12	138	62	258
2019	25	31	18	145	49	268
<i>Average</i>	<i>20</i>	<i>13</i>	<i>12</i>	<i>124</i>	<i>40</i>	<i>209</i>

<sup>1</sup> First year of spring brown bear take over bait in 13D, 26 brown bears taken over bait.

<sup>2</sup> First year of spring brown bear take over bait in all of Unit 13, 41 brown bears taken over bait.

In 1995, the Board of Game established an objective to reduce the population of brown bears in Unit 13 by 50% by liberalizing harvest to improve survival for moose calves. A baseline study was conducted in 2008 that determined a brown bear density estimate of 21.3 independent bears per 1,000 km<sup>2</sup> (95% CI=18.3—25.9). As such, the 50% reduction objective would result in 645 independent brown bears (95% CI range results in 554-784 independent brown bears) in Unit 13. Based on a capture-mark-resight density survey done on collared bears from 2006 to 2011 in Unit 13A, there was a 25-40% reduction in brown bear densities compared to the baseline study. Brown bear population densities in Unit 13 declined by 4% annually for independent bears and 2% annually for total number of bears (dependent cubs included) and harvest rates were estimated to be greater than 8% annually. Despite the decline, the population had not reached the 1995 objective as of 2011. Utilizing the lambda ( $\lambda = 0.96$ ), the rate of decline, from the 2006–2011 study, we expect the 50% reduction goal has since been reached and the Unit 13 brown bear population is between 478–620 bears as of 2020. The protection of females and dependent offspring within the study population appears to be a sufficient safeguard to avoid a sharp decline in population numbers given current harvest rates. Research is currently underway to confirm brown bear densities and population trends in Unit 13 since 2011. Given the declining brown bear population between 1998 and 2011, combined with the stable to increasing brown bear harvest numbers in Unit 13, it is expected that the brown bear population continues to be in decline and harvest rates may be approaching as much as 20% at this time.

**DEPARTMENT COMMENTS:** The department is **OPPOSED** to increasing the brown bear bag limit in Unit 13 at this time. The brown bear population has declined and is likely at or below the population directive established in 1995. Given population data and harvest trends, the brown bear population remains in decline. Research is ongoing to verify this and preliminary results of radiocollaring efforts indicate a relatively sparse brown bear population within the study area.

Moose and caribou populations are largely within or above objectives and there is no evidence that brown bear predation is currently a significant limiting factor on those populations. Further increase of brown bear harvest may not be sustainable over time and could result in negative effects on overall habitat and ecosystem functions relative to Unit 13 ungulates. With ongoing brown bear research in the unit, the department will gain a better understanding of population status and trends under increasing harvest pressure to determine if higher harvest rates can be sustained by the population.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 70 – 5 AAC 92.044. Permit for hunting bear with the use of bait or scent lures.**  
Create a fall bear baiting season in Unit 13 for black and brown bears.

**PROPOSED BY:** Matanuska Valley Fish & Game Advisory Committee

**WHAT WOULD THE PROPOSAL DO?** This proposal would create a fall black and brown bear baiting season and a fall brown bear hunt by registration permit in Unit 13, except that portion of Unit 13E within Denali State Park, with a 57-day season from August 20–October 15.

**WHAT ARE THE CURRENT REGULATIONS?** The current black and brown bear hunting regulations can be found in 5 AAC 85.015 and 85.020, respectively. in the *2020–2021 Alaska Hunting Regulations*.

Bear baiting in Unit 13 is guided by the following regulations (5AAC 92.044):

- Unit 13E, that portion within Denali State Park: resident and non-resident hunters can take one brown bear every regulatory year from August 10–June 15.
- Remainder of Unit 13: resident and non-resident hunters can take one brown bear every regulatory year with no closed season.
- All of Unit 13: residents and non-resident hunters can take 3 black bear every regulatory year with no closed season.
- Harvest of sows with cubs and harvest of cubs is prohibited.
- Bear hunters may harvest brown or black bears over bait in Unit 13 from April 15–June 30.
- Resident locking tags are not required to hunt brown bears in Unit 13.

There is a positive customary and traditional (C&T) use finding for black bears in Units 11 and 13 combined and an amount reasonably necessary for subsistence (ANS) of 20–50 black bears. There is a negative C&T finding for brown bears in Unit 13.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted, this proposal would increase the black and brown bear baiting seasons by 57 days, likely leading to an increase in harvest of both species in Unit 13. User conflicts and human-bear interactions may also increase, since Unit 13 is a rural area that is inundated with moose and caribou hunters during the proposed fall bear baiting season.

**BACKGROUND:** Brown bear population data are available for limited portions of Unit 13. The most recent five-year average (RY2015–RY2019) of 145 is an increase over the previous five-year average of 130 bears annually (RY2010–RY2014).

In 2013, the spring harvest of brown bears over bait was allowed in Unit 13D, resulting in a 116% increase in the overall Unit 13D brown bear harvest. Twenty-six of 32 spring brown bears were harvested over bait. Harvest in 13D dropped to more typical levels in 2014 but remained slightly higher in following years (Table 70-1). During the spring of 2015 the harvest of brown bears over bait was allowed in all of Unit 13, and the overall harvest of brown bears increased by 49% compared to the previous year, with 41 of the 90 spring harvested brown bears taken over bait (Table 70-2). The percent of females in the harvest has increased in recent years, both in overall harvest and in harvest of bears over bait (Table 70-2). Bear baiting activity in Unit 13 has increased substantially over the past 10 years, from 114 registered bait stations in 2010 to 268 in 2019 (Table 70-3).

**Table 70-1.** Number of brown bears harvested in Unit 13 by subunit, regulatory years 2010 through 2019.

R/Y	Unit 13A	Unit 13B	Unit 13C	Unit 13D	Unit 13E	Unit 13 Total
2010	34	19	2	27	56	138
2011	19	18	5	21	57	120
2012	24	20	12	25	48	129
2013 <sup>1</sup>	28	22	8	54	47	159
2014	10	15	9	24	45	103
2015 <sup>2</sup>	20	25	16	37	55	153
2016	32	28	10	32	45	147
2017	27	29	9	29	54	148
2018	24	32	8	25	59	148
2019	27	28	11	25	36	127
<i>Average</i>	<i>25</i>	<i>24</i>	<i>9</i>	<i>30</i>	<i>50</i>	<i>137</i>

<sup>1</sup> First year of spring brown bear take over bait in 13D, 26 brown bears taken over bait.

<sup>2</sup> First year of spring brown bear take over bait in all of Unit 13, 41 brown bears taken over bait.

**Table 70-2.** Chronology of brown bear harvest and percent females in harvest in Unit 13, regulatory years 2010 through 2019.

R/Y	Fall	Fall Females (%)	Spring	Spring Females (%)	Bait	Baited Females (%)	Total	Total Females (%)
2010	104	38 (37)	34	13 (38)	n/a	-	138	51 (37)
2011	79	35 (44)	41	12 (29)	n/a	-	120	47 (39)
2012	89	37 (42)	40	13 (33)	n/a	-	129	50 (39)
2013 <sup>1</sup>	102	44 (43)	57	16 (28)	26	8 (31)	159	60 (38)
2014	65	27 (42)	38	13 (34)	13	3 (23)	103	40 (39)
2015 <sup>2</sup>	63	28 (44)	90	33 (37)	41	13 (32)	153	61 (40)
2016	75	39 (46)	72	28 (39)	36	10 (28)	147	67 (46)
2017	85	39 (46)	63	26 (41)	30	13 (43)	148	65 (45)
2018	80	37 (46)	68	28 (41)	41	19 (46)	148	65 (44)
2019	65	31 (48)	62	28 (45)	33	15 (45)	127	59 (46)

<sup>1</sup> First year of spring brown bear take over bait in 13D, 26 brown bears taken over bait.

<sup>2</sup> First year of spring brown bear take over bait in all of Unit 13, 41 brown bears taken over bait.

**Table 70-3.** Number of registered bear bait stations in Unit 13 by subunit, regulatory years 2010 through 2019.

R <sub>Y</sub>	Unit 13A	Unit 13B	Unit 13C	Unit 13D	Unit 13E	Unit 13 Total
2010	14	1	6	62	31	114
2011	22	3	4	95	29	153
2012	11	1	4	107	30	153
2013 <sup>1</sup>	17	1	8	139	25	190
2014	13	2	12	155	33	215
2015 <sup>2</sup>	34	14	23	139	47	257
2016	24	25	17	142	44	252
2017	22	23	18	114	52	229
2018	20	26	12	138	62	258
2019	25	31	18	145	49	268
<i>Average</i>	<i>20</i>	<i>13</i>	<i>12</i>	<i>124</i>	<i>40</i>	<i>209</i>

<sup>1</sup> First year of spring brown bear take over bait in 13D, 26 brown bears taken over bait.

<sup>2</sup> First year of spring brown bear take over bait in all of Unit 13, 41 brown bears taken over bait.

In 1995, the Board of Game established an objective to reduce the population of brown bears in Unit 13 by 50% by liberalizing harvest to improve survival for moose calves. A baseline study was conducted in 2008 that determined a brown bear density estimate of 21.3 independent bears per 1,000 km<sup>2</sup> (95% CI=18.3—25.9). As such, the 50% reduction objective would result in 645 independent brown bears (95% CI range results in 554-784 independent brown bears) in Unit 13. Based on a capture-mark-resight density survey done on collared bears from 2006 to 2011 in Unit 13A, there was a 25-40% reduction in brown bear densities compared to the baseline study. Brown bear population densities in Unit 13 declined by 4% annually for independent bears and 2% annually for total number of bears (dependent cubs included) and harvest rates were estimated to be greater than 8% annually. Despite the decline, the population had not reached the 1995 objective as of 2011. Utilizing the lambda ( $\lambda = 0.96$ ), the rate of decline from the 2006–2011 study, we expect the 50% reduction goal has since been reached and the Unit 13 brown bear population is between 478–620 bears as of 2020. The protection of females and dependent offspring within the study population appears to be a sufficient safeguard to avoid a sharp decline in population



numbers given current harvest rates. Research is currently underway to confirm brown bear densities and population trends in Unit 13 since 2011. Given the declining brown bear population between 1998 and 2011, combined with the stable to increasing brown bear harvest numbers in Unit 13, it is expected that the brown bear population continues to be in decline and harvest rates may be approaching as much as 20% at this time.

Black bears are numerous in portions of Unit 13 with suitable forest habitat. Harvest data have been available since 1973, when the sealing of black bears became mandatory. Black bear harvests averaged 67 per year during the 1970s, 81 in the 1980s, and 93 in the 1990s. During the 2000s the average yearly black bear harvest in Unit 13 increased to 132, and in the last decade (RY10-19) yearly harvest averages 143 animals per year (Table 70-4).

**Table 70-4.** Number of black bears harvested by subunit in Unit 13, regulatory years 2010 through 2019<sup>1</sup>.

RY	Unit 13A	Unit 13B	Unit 13C	Unit 13D	Unit 13E	Unit 13 Total
2010	12	3	6	68	56	145
2011	11	7	10	51	45	124
2012	8	4	9	44	38	103
2013	11	6	10	61	62	150
2014	12	8	3	84	58	165
2015	14	6	15	77	47	159
2016	15	4	13	73	60	165
2017	6	7	5	59	62	139
2018	18	1	3	49	62	133
2019	16	6	6	66	56	150
<i>Average</i>	<i>12.3</i>	<i>5.2</i>	<i>8</i>	<i>63.2</i>	<i>54.6</i>	<i>143.3</i>

<sup>1</sup> There is no sealing requirement for black bears for Alaska residents who hunt in Unit 13. Harvest data are collected from harvest ticket reports.

A black bear density estimate was conducted in 1985 along a portion of the upper Susitna River in conjunction with the Susitna Hydroelectric Project. Results indicated a density estimate of 90 black bears/1,000 km<sup>2</sup>. Females had an observed mean litter size of 2.1 cubs of the year (range = 1–4), or 1.9 yearlings (range = 1–3). However, the study area was considered marginal black bear habitat and not indicative of bear densities in more favorable forested habitat within the unit. Field observations and harvest data indicate black bears are present in large portions of Units 13D and

13E, and to a lesser extent in Unit 13C. A population estimate for Unit 13 has not been attempted because density estimates for bears in more optimal, forested habitat within the unit are not available. Trends in bear density or abundance have not been documented, but the percentage of females in the harvest suggests there is not a biological concern for black bears in Unit 13 at this time (Table 70-5). Anecdotally, however, some hunters have expressed difficulty finding black bears in Unit 13 outside of the bear baiting season.

Unit 13 is very accessible for bear baiting with extensive road systems, trails, rivers, and lakes. Unit 13 is also a highly popular unit for moose and caribou hunters in August and September. Concerns regarding overcrowding in the field are regularly expressed by the public. Active bear bait stations across the landscape during moose and caribou hunting season, although required to be posted, pose a potential public safety concern, since hunter densities are likely to increase around trails and accessible areas that are being baited.

**Table 70-5.** Chronology of sealed black bears harvested from Unit 13, regulatory years 2010 through 2019<sup>1</sup>.

R Y	Fall	Fall Females (%)	Spring	Spring Females (%)	Bait	Baited Females (%)	Total	Total Females (%)
2010	62	29 (47)	122	37 (30)	72	22 (31)	184	66 (36)
2011	22	6 (27)	60	14 (23)	34	8 (24)	82	20 (24)
2012	33	9 (27)	32	7 (22)	21	6 (29)	65	16 (25)
2013	23	7 (30)	64	20 (31)	54	16 (30)	87	27 (31)
2014	21	6 (29)	76	27 (36)	62	20 (32)	97	33 (34)
2015	8	2 (25)	66	22 (33)	55	20 (36)	74	24 (32)
2016	11	5 (45)	50	13 (26)	42	12 (29)	61	18 (30)
2017	22	9 (41)	41	11 (27)	24	8 (33)	63	20 (32)
2018	15	9 (60)	34	9 (26)	29	8 (28)	49	18 (37)
2019	7	3 (43)	31	8 (26)	22	3 (14)	38	11 (29)

<sup>1</sup> There is no sealing requirement for Alaska residents who hunt black bears in Unit 13. Chronological data show only the data for bears that were sealed. Numbers in this table are lower than total harvest.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** regarding the method of bear harvest but is **OPPOSED** to further increasing the brown bear harvest in Unit 13 at this time. The brown bear population has declined and is likely at or below the population directive established in 1995. Given population data and harvest trends, the brown bear population remains in decline and research is ongoing to verify this. Moose and caribou populations are largely within or above objectives, and there is no evidence that brown bear predation is currently a significantly limiting factor on those populations. Further increase of brown bear harvest may not be sustainable over time and could result in negative effects on overall habitat and ecosystem function relative to Unit 13 ungulates as well as small game and mesopredators (i.e., coyote, wolverine, fox, marten).

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 71 – 5 AAC 85.057(a). Hunting seasons and bag limits for wolverine.** Extend wolverine hunting season in Unit 13.

**PROPOSED BY:** Copper Basin Fish and Game Advisory Committee

**WHAT WOULD THE PROPOSAL DO?** This proposal would lengthen the hunting season for wolverine by 28 days (29 days during leap year). The new season dates would be September 1 – last day of February.

**WHAT ARE THE CURRENT REGULATIONS?** The current wolverine hunting regulations can be found in 5 AAC 85.057 and in the *2020–2021 Alaska Hunting Regulations*.

Residents and nonresidents can harvest one wolverine with a hunting license in Unit 13 from September 1 to January 31. There is no bag limit under trapping regulations (firearms may be used under a trapping license) for wolverine in Unit 13 and there is a 97-day season from November 10 to February 15

- Federally qualified subsistence users can hunt wolverine on federal lands in Unit 13 with a bag limit of one wolverine from September 1 to February 28.
- Federally qualified subsistence users can trap wolverine on federal lands in Unit 13 with no limit from November 10 to February 28.

There is a positive customary and traditional use finding for wolverines as furbearers in Unit 13 with an amount reasonably necessary of 90% of the harvestable portion.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted this proposal would extend the wolverine hunting season in Unit 13 by one month. Hunting seasons for wolverine are currently aligned between Unit 11 and Unit 13. This proposal would misalign the seasons between those two units but align more closely with federal hunting and trapping regulations.

**BACKGROUND** Wolverines are considered common in the more remote, mountainous regions of Unit 13 and remain relatively scarce at lower elevations. Between 1987 and 1995, density estimates within favorable wolverine habitat in moderate to high elevation areas of 13A and 13D ranged from 4.7–5.2 wolverine/1,000 km<sup>2</sup>. A Sample Unit Population Estimator (SUPE) survey was completed in portions of Units 13A and 13E in 2015, finding a higher density of 9.48 wolverines/1,000 km<sup>2</sup> (95 percent confidence interval 8.12–10.83 wolverines/1,000 km<sup>2</sup>). Unit 13E has historically been considered a population refugia for wolverines – likely feeding other areas of Unit 13.

The Federal Subsistence Board recently extended the federal subsistence wolverine trapping season for RY2018, changing the season end date from January 31 to February 28. In 2018 the BOG extended the wolverine trapping season in Unit 13, changing the season end date from January 31 to February 15, effective in RY2019.

The Unit 13 wolverine take has averaged 54 per year over the last five years (Table 71-1), an increase from the previous 5-year average of 49 wolverine.

**Table 71-1.** Unit 13 wolverine harvest and method of take, regulatory years 2015–2019.

Reg Year	Hunted and Trapped				Taken by Ground Shooting		Taken under Hunting License	
	Males	Females	Unk.	Total	Harvested	% of total	Harvested	% of total
2015	43	28	8	79	2	3%	1	1%
2016	29	18	1	48	0	0%	-	-
2017	20	16	3	39	5	13%	1	3%
2018	35	23	2	60	3	5%	3	5%
2019	26	15	1	42	3	7%	2	5%

Males have consistently accounted for most of the harvest in Unit 13 (Table 71-2). Timing of wolverine harvest generally reflects snow conditions and accessibility for hunters to be able to travel in mountainous terrain (Table 71-3).

**Table 71-2.** Unit 13 wolverine harvest, regulatory years 2015–2019.

Reg. Year	Males	Females	Unk.	Total	% Female
2015	43	28	8	79	39%
2016	29	18	1	48	38%
2017	20	16	3	39	44%
2018	35	23	2	60	40%
2019	26	15	1	42	37%

**Table 71-3.** Unit 13 wolverine harvest chronology by month, regulatory years 2015–2019.

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Total
2015	1	0	4	25	49	0	0	79
2016	0	0	2	9	36	0	1	48
2017	3	0	2	8	26	0	0	39
2018	2	0	4	18	25	11	0	60
2019	1	0	5	8	23	5	0	42

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal. Wolverine harvest under hunting regulations, with a bag limit of 1 wolverine, does not pose a conservation

concern; however, consideration should be given regarding the vulnerability of wolverines during denning. With limited biological data specific to wolverines in Unit 13, conservation issues are still largely unknown. If adopted the department recommends closing the season on the last day of February.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the public or to the department.

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**PROPOSAL 72 – 5 AAC 84.270 (14). Furbearer trapping.** Extend the trapping season for wolverine in Unit 13.

**PROPOSED BY:** Herb Mansavage

**WHAT WOULD THE PROPOSAL DO?** This proposal would lengthen the trapping season for wolverine in Unit 13 by 13 days (14 days during leap year) with season dates from November 10 through the end of February.

**WHAT ARE THE CURRENT REGULATIONS?** The current wolverine trapping regulations can be found in 5 AAC 84.270 and in the *2020–2021 Alaska Trapping Regulations*.

There is no bag limit under trapping regulations for wolverine in Unit 13 and there is a 97-day season from November 10 to February 15 (firearms may be used under a trapping license). Residents and nonresidents can also harvest one wolverine with a hunting license in Unit 13 from September 1 to January 31.

- Federally qualified subsistence users can hunt wolverine on federal lands in Unit 13 with a bag limit of one wolverine from September 1 to February 28.
- Federally qualified subsistence users can trap wolverine on federal lands in Unit 13 with no limit from November 10 to February 28.

There is a positive customary and traditional use finding for wolverines as furbearers in Unit 13 with an amount reasonably necessary of 90% of the harvestable portion.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would provide additional opportunity for trapping wolverines in Unit 13. Wolverine harvest is likely to increase. Federal and state wolverine trapping seasons would be aligned in Unit 13, which would also be aligned with the state wolverine trapping season in Unit 11. The wolverine trapping season would align with other furbearer trapping seasons in Unit 13, such as red fox, lynx, marten, and mink.

**BACKGROUND:** Wolverines are considered common in the more remote mountainous regions of Unit 13 and remain relatively scarce at lower elevations. Between 1987 and 1995, density

estimates within favorable wolverine habitat in moderate to high elevation areas of 13A and 13D ranged from 4.7–5.2 wolverine/1,000 km<sup>2</sup>. A Sample-Unit Population Estimator (SUPE) survey was conducted in portions of Units 13A and 13E in 2015, finding a higher density of 9.48 wolverines/1,000 km<sup>2</sup> (95 percent confidence interval 8.12–10.83 wolverines/1,000 km<sup>2</sup>). Unit 13E has historically been considered a population refugia for wolverines – likely feeding other areas of Unit 13.

The Federal Subsistence Board recently extended the federal subsistence wolverine trapping season for RY2018, changing the season end date from January 31 to February 28. In 2018 the BOG extended the wolverine trapping season in Unit 13, changing the season end date from January 31 to February 15, effective in RY2019.

The Unit 13 wolverine take has averaged 54 per year over the last five years (Table 72-1), an increase from the previous 5-year average of 49 wolverine.

**Table 72-1.** Unit 13 wolverine harvest by sex, regulatory years 2015–2019.

Year	Males	Females	Unk.	Total	% Female
2015	43	28	8	79	39%
2016	29	18	1	48	38%
2017	20	16	3	39	44%
2018	35	23	2	60	40%
2019	26	15	1	42	37%

Males have consistently accounted for most of the harvest in Unit 13. Timing of wolverine harvest generally reflects snow conditions and accessibility for trappers to be able to travel in mountainous terrain (Table 72-2). Considering that the fox, lynx, coyote, and wolf trapping seasons extend past the wolverine trapping season, a small number of incidentally-trapped wolverines are reported on occasion. It is possible an even greater number of wolverines are incidentally trapped and never reported, or reported as taken the following trapping season.

In 2018, following the federal trapping extension, 11 wolverine harvests were reported in February (six males and five females), representing 18% of the harvest for that regulatory year. In 2019, following the state season extension, five wolverine harvests were reported in February (2 females, 2 males, & 1 unknown), representing 12% of the harvest for that regulatory year.

**Table 72-2.** Unit 13 wolverine harvest chronology by month, regulatory years 2015–2019.

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Total
2015	1	0	4	25	49	0	0	79
2016	0	0	2	9	36	0	1	48
2017	3	0	2	8	26	0	0	39
2018	2	0	4	18	25	11	0	60
2019	1	0	5	8	23	5	0	42

Harvest locations indicate that most wolverines are harvested from the periphery and foothills of the Chugach, Talkeetna, and Alaska mountain ranges. There is good road and trail access into wolverine habitat in limited portions of Unit 13, and wolverine trapping by aircraft can be very effective when snow conditions are good. However, there appears to be large areas of refugia between popular trapping locations.

The denning period for wolverines begins with the birth of kits in February and early March and extends until late May. Extending wolverine trapping through the end of February is likely to increase overall harvest and may affect recruitment over time. Reproductive females are vulnerable to harvest during the denning period because they travel extensively to obtain food while attempting to meet the energetic demands of lactation. Harvesting reproductive females during denning may lead to increased mortality of kits and can negatively affect recruitment.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal but is concerned that lengthening the wolverine trapping season to the end of February will likely increase the harvest and consideration should be given regarding the vulnerability of wolverines during denning. With limited biological data specific to wolverines in Unit 13, conservation issues are still largely unknown. Harvest effects of the latest season extensions are yet to be determined.

While the department advocates aligning trapping and hunting seasons where appropriate, some species' life histories like wolverine require additional management and as a result are not aligned with other species. While an extended hunting season with a bag limit of one wolverine poses no conservation concern, an extended trapping season would have significantly more impact on harvest pressure due to the more effective nature of trapping and the vulnerability of females during denning. If adopted the department recommends closing the season on the last day of February.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the public or to the department.

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**PROPOSAL 73 – 5 AAC 84.270 (14). Furbearer trapping.** Extend the trapping season for wolverine in Unit 13.

**PROPOSED BY:** Copper Basin Fish and Game Advisory Committee

**WHAT WOULD THE PROPOSAL DO?** This proposal would lengthen the trapping season for wolverine in Unit 13 by 13 days (14 days during leap year) with season dates from November 10 through the end of February.

**WHAT ARE THE CURRENT REGULATIONS?** The current wolverine trapping regulations can be found in 5 AAC 84.270 and in the *2020–2021 Alaska Trapping Regulations*.

There is no bag limit under trapping regulations for wolverine in Unit 13 and there is a 97-day season from November 10 to February 15 (firearms may be used under a trapping license). Residents and nonresidents can also harvest one wolverine with a hunting license in Unit 13 from September 1 to January 31.

- Federally qualified subsistence users can hunt wolverine on federal lands in Unit 13 with a bag limit of one wolverine from September 1 to February 28.
- Federally qualified subsistence users can trap wolverine on federal lands in Unit 13 with no limit from November 10 to February 28.

There is a positive customary and traditional use finding for wolverines as furbearers in Unit 13 with an amount reasonably necessary of 90% of the harvestable portion.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would provide additional opportunity for trapping wolverines in Unit 13. Wolverine harvest is likely to increase. Federal and state wolverine trapping seasons would be aligned in Unit 13, which would also be aligned with the state wolverine trapping season in Unit 11. The wolverine trapping season would align with other furbearer trapping seasons in Unit 13, such as red fox, lynx, marten, and mink.

**BACKGROUND:** Wolverines are considered common in the more remote, mountainous regions of Unit 13 and remain relatively scarce at lower elevations. Between 1987 and 1995, density estimates within favorable wolverine habitat in moderate to high elevation areas of 13A and 13D ranged from 4.7–5.2 wolverine/1,000 km<sup>2</sup>. A Sample Unit Population Estimator (SUPE) survey was completed in portions of Units 13A and 13E in 2015, finding a higher density of 9.48 wolverines/1,000 km<sup>2</sup> (95 percent confidence interval 8.12–10.83 wolverines/1,000 km<sup>2</sup>). Unit 13E has historically been considered a population refugia for wolverines – likely feeding other areas of Unit 13.

The Federal Subsistence Board recently extended the federal subsistence wolverine trapping season for RY2018, changing the season end date from January 31 to February 28. In 2018 the BOG extended the wolverine trapping season in Unit 13, changing the season end date from January 31 to February 15, effective in RY2019.

The Unit 13 wolverine take has averaged 54 per year over the last five years (Table 73-1), an increase from the previous 5-year average of 49 wolverines.



**Table 73-1.** Unit 13 wolverine harvest by sex, regulatory years 2015–2019.

Reg. Year	Males	Females	Unk.	Total	% Female
2015	43	28	8	79	39%
2016	29	18	1	48	38%
2017	20	16	3	39	44%
2018	35	23	2	60	40%
2019	26	15	1	42	37%

Males have consistently accounted for most of the harvest in Unit 13. Timing of wolverine harvest generally reflects snow conditions and accessibility for trappers to be able to travel in mountainous terrain (Table 73-2). Considering that the fox, lynx, coyote, and wolf trapping seasons extend past the wolverine trapping season, a small number of incidentally-trapped wolverines are reported on occasion. It is possible an even greater number of wolverines are incidentally trapped and never reported, or reported as taken the following trapping season.

In 2018, following the federal trapping extension, 11 wolverine harvests were reported in February (6 males and 5 females), representing 18% of the harvest for that regulatory year. In 2019, following the state season extension, 5 wolverine harvests were reported in February (2 females, 2 males, & 1 unknown), representing 12% of the harvest for that regulatory year.

**Table 73-2.** Unit 13 wolverine harvest chronology by month, regulatory years 2015–2019.

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Total
2015	1	0	4	25	49	0	0	79
2016	0	0	2	9	36	0	1	48
2017	3	0	2	8	26	0	0	39
2018	2	0	4	18	25	11	0	60
2019	1	0	5	8	23	5	0	42

Harvest locations indicate that most wolverines are harvested from the periphery and foothills of the Chugach, Talkeetna, and Alaska mountain ranges. There is good road and trail access into wolverine habitat in limited portions of Unit 13, and wolverine trapping by aircraft can be very effective when snow conditions are good. However, there appears to be large areas of refugia between popular trapping locations.

The denning period for wolverines begins with the birth of kits in February and early March and extends until late May. Extending wolverine trapping through the end of February is likely to increase overall harvest and may affect survival and recruitment over time. Reproductive females are vulnerable to harvest during the denning period because they travel extensively to obtain food while attempting to meet the energetic demands of lactation. Harvesting reproductive females during denning may lead to increased mortality of kits and can negatively affect recruitment.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal but is concerned that lengthening the wolverine trapping season to the end of February will likely increase the harvest and consideration should be given regarding the vulnerability of wolverines during denning. With limited biological data specific to wolverines in Unit 13, conservation issues are still largely unknown. Harvest effects of the latest season extensions are yet to be determined.

While the department advocates aligning trapping and hunting seasons where appropriate, some species' life histories like wolverine require additional management and as a result are not aligned with other species. While an extended hunting season with a bag limit of one wolverine poses no conservation concern, an extended trapping season would have significantly more impact on harvest pressure due to the more effective nature of trapping and the vulnerability of females during denning.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the public or to the department.

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#### Proposal 74

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**PROPOSAL 75 – 5 AAC 92.540. Controlled Use Areas.** Limit airboats for hunting in Tokositna State Recreation Area in Unit 13E.

**PROPOSED BY:** Vincent Pokryfki

**WHAT WOULD THE PROPOSAL DO?** The proposal would require the establishment of a Controlled Use Area to prohibit the use of airboats for hunting in the Tokositna State Recreation Area, except on the Tokositna River, from April 20 through September 30 (Figure 75-1).

**WHAT ARE THE CURRENT REGULATIONS?** 11 AAC 20.415 (c) states that the Tokositna River upstream from Pirate Lake is closed to the use of airboats between April 20 and July 10 annually unless authorized by the director of state parks under 11 AAC 18.010.39. 11AAC 20.985 (a) (12) also states that the Tokositna State Recreation Area, except the Tokositna River, is closed to the use of airboats between April 20 and July 10 annually, unless authorized by the director under 11 AAC 18.010. The Tokositna Recreation Area is approximately 600 acres total.

No current restrictions are in place specific to this area under fish and game regulations at 5 AAC; however, airboats are defined as both boats and motorized land vehicles in 5 AAC 92.990.

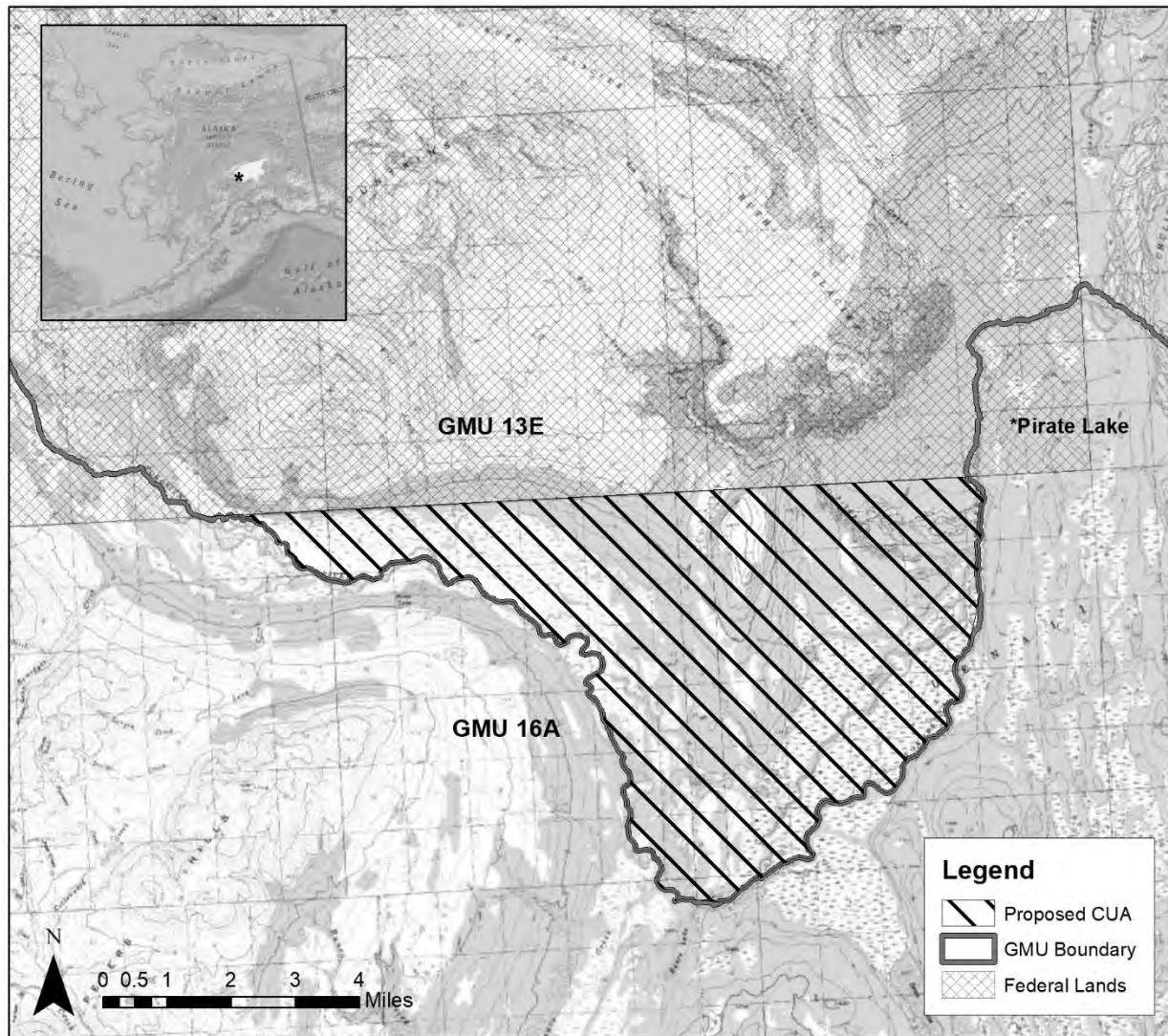
**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Use of airboats for hunting would be prohibited outside of federal lands in 13E, north of the Tokositna River upstream from Pirate Lake (Figure 75-1). This may result in a decrease in harvest of big game, small game, or waterfowl within this small portion of land, but is not likely to have

significant effect on harvest or populations for Unit 13E. The proposed dates will conflict with the State Park regulations, and are misaligned with both moose and brown bear hunting season dates.

**BACKGROUND:** The Tokositna State Recreation Area, which is approximately 600 acres, was established by management agreement to be managed as an addition to Denali State Park.

State of Alaska Department of Natural Resources (DNR) closed the area upriver of Pirate Lake along the Tokositna River to airboats in the spring to protect habitat and nesting areas for trumpeter swans.

The area north of the Tokositna River and south of Denali National Park encompasses 37 square miles associated with the Tokositna River and the Ruth River (Figure 75-1). In the past five years, 14 hunters have reported hunting moose in the area of the Tokositna River and the Ruth River, and 8 of those hunters were successful (Table 75-1). One successful hunter accessed the area with an airplane in 2016, one unsuccessful hunter specifically reported using an airboat to access the area in 2019, and all other hunters reported accessing the area by boat.



**Figure 75-1.** Tokositna State Recreation Area: that area north of the Tokositna River and south of Denali National Park, upstream of Pirate Lake, GMU 13E.

**Table 75-1.** Moose hunters and harvest in the area of the Tokositna River and Ruth River in Unit 13E, RY2015–2019.

RY	Moose Hunters	Moose Harvested
2015	1	1
2016	2	1
2017	3	2
2018	1	0
2019	7	4

Moose abundance is above objectives and a change in harvest in this area is not likely to dramatically impact overall moose abundance, harvest rates, or population composition for Unit 13E.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal to limit the use of airboats to the Tokositna River upstream of Pirate Lake for hunting. Airboats and other boats would still be allowed on the Tokositna River. Airboats would not be allowed to travel up the Ruth River for hunting. The proposal would require the creation of a Controlled Use Area, and a more specific area/boundary description would be necessary, because Pirate Lake does not directly contact the Tokositna River. Also, the board will need to define an airboat and separate it from boat in the boat definition at 5 AAC 92.990(a)(10). If created, the department recommends aligning restrictions with those currently in place from DNR: airboats are currently prohibited in the spring under 11 AAC, but the proposal would allow an exception for airboats on the Tokositna River in 5 AAC. DNR regulations would still prohibit airboats in the spring but allowing them on the river in regulation under a Controlled Use Area would create confusion for the public. The proposal presents no conservation concerns, since it would not appreciably affect moose harvest or moose populations in Unit 13E, but may protect habitat for moose, waterfowl, small game, and furbearers in a small portion of Unit 13E surrounding the Tokositna and Ruth rivers.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 76 – 5 AAC 85.065. Hunting seasons and bag limits for small game.** Modify the season and bag limit for ptarmigan in Unit 13.

**PROPOSED BY:** Claude Bondy

**WHAT WOULD THE PROPOSAL DO?** Extend the ptarmigan season closure date from 15 February to 31 March in Units 13B and 13E. This proposal also seeks to reduce the daily bag limit from 10 ptarmigan per day to 5 per day in Units 13B and 13E.

**WHAT ARE THE CURRENT REGULATIONS?** The current ptarmigan hunting regulations can be found in 5 AAC 85.065 and in the *2020–2021 Alaska Hunting Regulations*.

In Units 13B and 13E the ptarmigan hunting season is open from 10 August to 15 February with a limit of 10 per day, 20 in possession.

In the rest of Unit 13 the hunting season is August 10–March 31 with a limit of 10 per day, 20 in possession.

There is a positive C&T finding for ptarmigan in Unit 13; the BOG has not made a finding of amount reasonably necessary for subsistence.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The hunting public would gain an additional 6 weeks of hunting opportunity in Units 13B and 13E with a 31 March season closure date. However, hunters would face reduced daily bag limits from 10 ptarmigan per day to 5 per day. Harvest is likely to increase with the later closure date, despite the change in bag limit. Increased harvest in late February and March has the potential to negatively affect overall population levels, since harvest during this time is removing birds that have survived into the next breeding season.

**BACKGROUND:** In February 2018, the Board of Game (BOG) adopted new regulations aligning Units 13B and 13E ptarmigan hunting season closure dates to 15 February. Prior to this regulation change, Unit 13B closed on 30 November and Unit 13E closed on 31 March. This change created an additional 2.5 months of hunting opportunity in Unit 13B and removed 6 weeks of hunting opportunity from Unit 13E. During that meeting the BOG did not change the season start date (10 August) or the bag limit (10 per day, 20 in possession).

Based on harvest composition between the 2011 and 2017–18 seasons, Unit 13 (except Unit 13B) ptarmigan harvest was largely bimodal with the largest harvest (60%) occurring between mid-February and 31 March. The inflection point of mid-February is generally due to good snow conditions and accessibility for snowmachines, increasing day length, and daytime temperatures. Also, based on 2 separate small game hunter surveys, the average daily ptarmigan harvest per hunter in Unit 13 was fewer than 2 ptarmigan per day. Therefore, reducing the daily bag limit from 10 per day to 5 per day may not have the desired conservation action outlined in the proposal.

Through two separate studies on rock and willow ptarmigan in Unit 13 between 2013 and 2017 the department identified that natural mortality rates in the fall are high but those in the winter are very low (for populations that have limited or no human harvest mortality in the winter). Therefore, individuals that survive through the period of high mortality in the fall will very likely survive into the breeding season. Late winter (later than 15 February) harvest mortality is additive (i.e., adds additional mortality beyond what is expected naturally) and directly reduces spring breeding densities. Coupled with harvest composition data from Unit 13E (when winter hunting seasons closed on 31 March), this likely contributed to the low spring breeding densities observed in Unit 13E prior to 2018. These data contributed to the board's decision in February 2018 to close the ptarmigan hunting season on 15 February for both units 13B and 13E.

Since the alignment of season closure dates, willow ptarmigan spring breeding abundance increased in Unit 13E and declined in 13B in 2019; which might be expected from the shifts in season closures. However, in spring 2020, spring breeding densities remained near the long-term average in Unit 13B but declined in Unit 13E. The department continues to closely monitor the rebound of several populations that have recently had late winter harvest curtailed or eliminated. The department would lose the ability to evaluate this new management strategy if this proposal were adopted.

In addition, in fall 2019 the Federal Subsistence Board passed a Temporary Wildlife Special Action Request proposed by the Denali Subsistence Resource Council aligning federal subsistence seasons with the revised state season dates. The Denali SRC expressed concern about low abundance specifically in Unit 13E.

**DEPARTMENT COMMENTS:** The department is **OPPOSED** to extending the ptarmigan season in 13B and 13E, regardless of bag limit. Season dates were recently established to end on February 15 to protect the portion of the ptarmigan population that survives annually into the new breeding season. Extending the season to March 31 would eliminate the opportunity for the department and the Board to evaluate this new management strategy and would negatively affect the reproductive potential of the populations in 13B and 13E. The BOG should evaluate whether adoption of this proposal continues to provide reasonable opportunity for success in harvesting ptarmigan for subsistence uses.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 77 – 5 AAC 85.065. Hunting seasons and bag limits for small game.** Modify the season and bag limit for ptarmigan in Unit 13.

**PROPOSED BY:** Paxson Fish and Game Advisory Committee

**WHAT WOULD THE PROPOSAL DO?** Create a 14-day hunt for hunters 16 years old or younger in Unit 13B for ptarmigan between 10 and 24 August. Beginning 25 August, all hunters would be allowed to hunt ptarmigan in Unit 13B through the entire season (15 February closure date). This proposal does not seek to adjust daily bag or possession limits.

**WHAT ARE THE CURRENT REGULATIONS?** The current ptarmigan hunting regulations can be found in 5 AAC 85.065 and in the *2020–2021 Alaska Hunting Regulations*.

Currently, all hunters in Unit 13B can hunt ptarmigan from 10 August to 15 February. There is a positive customary and traditional use finding for ptarmigan in Units 9, 10, 11, 12, 13, 15, 16, 17, 19, and 20 (outside nonsubsistence areas); the board has not yet made a finding of amounts reasonably necessary for subsistence.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Ptarmigan hunting opportunity would be limited to youth only (16 years old or younger) for the first 15 days of the season (10–24 August) in Unit 13B. Beginning 25 August, all hunters would be eligible to hunt ptarmigan in Unit 13B. This may result in a decrease in harvest early in the season, since only youth hunters would be eligible to shoot ptarmigan in 13B during the start of the Nelchina caribou hunt, but overall harvest of ptarmigan is not expected to be significantly impacted. Caribou hunters are typically concentrated further west and south in Units 13E and 13A early in the season, and

hunting pressure increases in Unit 13B later in the season. Birds left by youth hunters will be larger later in the season and are still likely to be harvested by adult hunters targeting ptarmigan or hunting opportunistically during the caribou and moose seasons in Unit 13B.

**BACKGROUND:** Ptarmigan hunting in Unit 13 is very popular during the fall and winter. Historically, this unit has been open to ptarmigan hunting beginning 10 August for all hunters (State and Federal Subsistence regulations) since 1962.

Based on DWC research completed on Unit 13B rock ptarmigan, June 20 is the average hatch date, which is only slightly later than other closely monitored populations elsewhere in the state (e.g., Eagle Summit [Unit 25C] average hatch is June 16). However, average weights of juveniles are 50–75% of adult birds captured just prior to the start of the hunting season (August 10). Near Eagle Summit, estimated juvenile rock ptarmigan weights averaged 75% of adults immediately prior to the hunting season. Some of the juvenile ptarmigan were less than half of the adult weights at the start of the season. A separate 3-year (2013–2015) study of willow ptarmigan in Unit 13E found similarly smaller juvenile weights, averaging 50–75% of adults immediately prior to the hunting season. Although data on hatch dates are inconclusive, DWC’s ptarmigan research data does support the proponent’s concern about small juvenile birds during the first several weeks of the season.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal. If this proposal were adopted it would provide an opportunity to introduce youth to small game hunting when there are fewer hunters in the field, in an area that is less likely to be crowded with caribou hunters during that portion of the season. It would also allow less experienced shooters to harvest birds that were less agile fliers while likely having lower harvest rates than has historically been observed. Overall harvest of ptarmigan in Unit 13B will probably not be affected, since hunters later in the season will be able to target larger birds and/or harvest ptarmigan opportunistically when hunting Unit 13B for other species. If adopted, the board may wish to discuss hunter education requirements or the possibility of creating regulations similar to the existing two youth hunts for small game which are located in Unit 14A and Units 15A and 15B.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 78 – 5 AAC 85.025 Hunting seasons and bag limits for caribou.** Extend the caribou season in Unit 16B.

**PROPOSED BY:** Steven Perrins



**WHAT WOULD THE PROPOSAL DO?** This proposal would extend the caribou season in Units 16B from August 10–September 30 to August 10–October 15. An alternate date of August 10–October 10 was also suggested.

**WHAT ARE THE CURRENT REGULATIONS?** The current caribou hunting regulations for Unit 16 can be found in 5 AAC 85.025 and in the 2020–2021 Alaska Hunting Regulations.

- Unit 16B - One bull caribou by harvest ticket August 10–September 30.
- Unit 16A - One bull caribou by harvest ticket August 10–September 20.

There is a positive customary and traditional use finding for the Rainy Pass Herd (RPCCH) and Big River Herd (BRCH) combined in Units 16B, 19B, 19C, and 19D with an amount reasonably necessary of 50-70 caribou. Neither RPCCH nor BRCH have been identified as intensive management caribou herds as defined in 5 AAC 92.108. Unit 16A is in the Anchorage-Matsu-Kenai Nonsubsistence Area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal if adopted would add 15 days to the caribou season in Unit 16B. The extended season would be October 1–October 15 which would overlap the rut period for caribou. This proposal, if adopted may increase harvest of bull caribou in the unit.

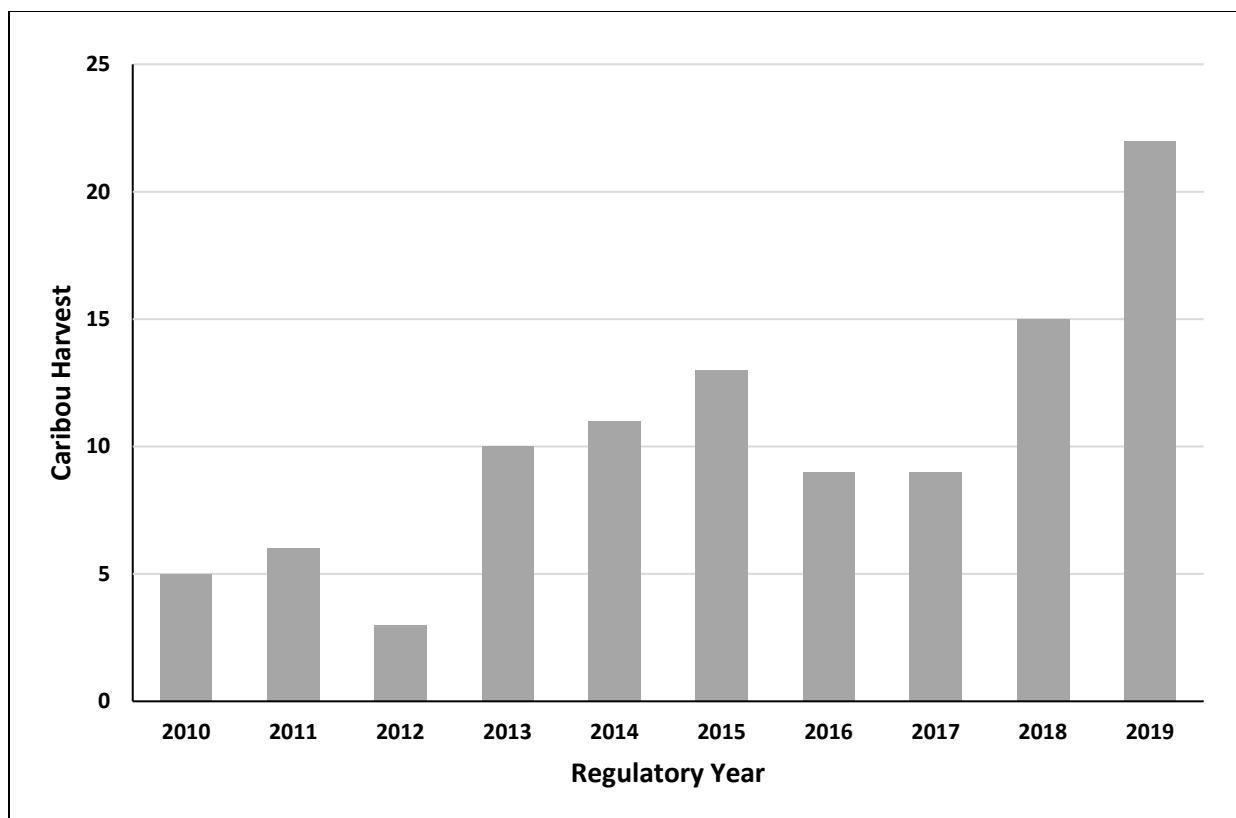
**BACKGROUND:** Caribou in the Unit 16B portion of the Alaska Range are considered to be the Rainy Pass Herd (RPCCH) and believed to number around 1,500. Most hunters who harvest caribou in Unit 16B have done so while pursuing other species since the Unit 16B population is small and does not typically aggregate in large groups. From 2010 through 2019, a total of 660 hunters harvested 107 bulls, an average of 11 per year in all of Unit 16. Approximately 48% (51) of these were harvested in August. (Table 78-1). Nearly all caribou were taken by non-residents.

**Table 78-1.** Chronology of caribou harvest in Unit 16B, regulatory years 2008–2019.

Regulatory Year	Aug 10–20	Aug 21–31	Sep 1–10	Sep 11–20	Sep 21–30	Total Harvest
2008	29%	0%	14%	14%	43%	7
2009	43%	0%	14%	0%	43%	7
2010	60%	0%	20%	0%	20%	5
2011	50%	0%	0%	33%	17%	6
2012	33%	67%	0%	0%	0%	3
2013	70%	10%	10%	10%	0%	10
2014	18%	0%	18%	0%	64%	11
2015	54%	8%	23%	8%	8%	13
2016	33%	0%	22%	0%	44%	9
2017	22%	11%	33%	11%	22%	9
2018	0%	27%	27%	20%	27%	15
2019	27%	32%	23%	9%	9%	22

The RPCH continues to be stable at a low density. The additional harvest of a few animals that could occur with this proposal would likely have a limited effect on the population.

There are very few general caribou hunting seasons that are open in early to mid-October. October seasons are generally discouraged because the quality of the meat from bulls taken during this period (caribou rut) is often tainted by rut activity and is less palatable to the general public. While steps can be taken during the cleaning process, such as wearing rubber gloves and ensuring that the hide does not touch the meat, many members of the general public are not aware of these requirements and often complain of meat tasting ‘off’ when bulls are taken at this time of year.



**Figure 78-1.** Caribou harvest in Unit 16B, regulatory years 2010–2019.

Over the past 10 years, 105 caribou have been taken in Unit 16B. Fifty-three percent of those caribou have been taken in the Rainy Pass and Ptarmigan Creek areas.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal because it has not identified a biological concern for caribou in Unit 16B. Adoption of this proposal is expected to increase harvest of caribou. Should harvest levels become a concern, the department will increase the frequency and intensity of monitoring the herds. Meat quality is a concern for any caribou taken during the rut.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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Proposal 79 to reauthorize the antlerless moose seasons in Units 14A and 14B was replaced by Proposal 224.

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**PROPOSAL 80** – **5 AAC 85.045 Hunting seasons and bag limits for moose.** Create a resident youth hunting season for any-bull moose in Unit 14A.

**PROPOSED BY:** Tyler Eggen

**WHAT WOULD THE PROPOSAL DO?** This proposal would create a 115-day resident youth draw hunt for any bull in Unit 14A. Season dates would be August 20–September 25 and November 15–January 31. Up to 50 permits may be issued.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

**Units and Bag Limits**

**Resident**

**Nonresident**

**Open Season**

**Open Season**

**(Subsistence and**

**General Hunts)**

**(12)**

Unit 14(A)

1 moose per regulatory year,

only as follows:

1 bull with spike-fork  
antlers or 50-inch antlers or  
antlers with 3 or more brow  
tines on one side,

by bow and arrow only; or

Aug. 10 – Aug. 17  
  
(General hunt only)

Aug. 10 – Aug. 17

1 bull with spike-fork  
  
antlers or 50-inch  
  
antlers or antlers with 3 or

Aug. 25 – Sept. 25  
  
(General hunt only)

Aug. 25 – Sept. 25

more brow tines on one side;  
or

1 antlerless moose by drawing permit only; up to 2,000 antlerless moose permits may be issued; or	Aug. 20 – Sept. 25 (General hunt only) Nov. 1 – Dec. 25 (General hunt only)	No open season.
1 moose by targeted permit only; by crossbow, shotgun, or bow and arrow only; up to 200 permits may be issued	Winter season to be announced by emergency order (General hunt only)	No open season.

Unit 14A is located entirely within the Anchorage-Matsu-Kenai Nonsubsistence Area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted this moose drawing permit hunt would allow an additional 115-day opportunity for youth hunters, ages 10–17, to take any-bull moose in Unit 14A. Each youth hunter would need to be accompanied in the field by a licensed resident adult at least 21 years old. The bag limit would count against both the permittee and the accompanying adult. Permittees and accompanying adults would be required to wear hunter orange vests, and basic hunter education would be required for both the permittee and the accompanying adult. The proposer requested a start date of 20 August. Currently the general hunt and antlerless permit hunts begins on August 25. If approved, the department will request that the season for this hunt begins on August 25 as well for consistency.

**BACKGROUND:** Unit 14A went to spike-fork, 50 inches, or 3 brow tines in 1993 at the same time other units in the region were converting to this management strategy. Units have been managed at 3 or 4 brow tines based on rates of brow-tine growth commensurate with antler width at 50 inches. Between RY95–RY98 the unit had two any bull draw hunts that allowed a total of 70 to 130 permits annually. In the fall of 1998, the bull-to-100 cow ratio was determined to be 17 which is below the management objective of 20–25:100 cows. Any bull draw hunt opportunity was eliminated at that time. Since 1998 the bull-to-cow ratio has fluctuated between 17–34. Survey results going back to 1998 have shown that the unit is typically within or below acceptable bull to cow ratios. A sex and age composition survey conducted in December of 2019 found a bull-to-100 cow ratio of 34 bulls:100 cows. That is the highest bull to cow ratio in Unit 14A. Since RY07 youth hunters have had the opportunity to take antlerless moose in the Pt. Mackenzie area through DM412 or YM412. Draw hunts that were created for youth hunters

were changed from the ‘DM’ designation to ‘YM’ in RY14. The average permit level since the start of DM412 in RY07 was 19 permits. There was an average participation rate of 86% and an average success rate of 46%. A Geo Spatial Population Estimator (GSPE) survey of Unit 14A conducted in February of 2018 estimated a population of 7,900 moose. The population objective for the unit is 6,000–6,500 moose. This area does face a lot of hunting pressure and historically has had difficulty maintaining acceptable bull-to-cow ratios.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal because it is allocative in nature. If the board approves this proposal the department would recommend that only a fall season of August 25 – September 25 be approved at this time, in order to give the department time to assess the impacts of the additional bull harvest on the bull to cow ratio.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 81 – 5 AAC 85.045 (12) Hunting seasons and bag limits for moose.** Allow the use of muzzleloading and blackpowder cartridge long guns in the targeted hunt AM415.

**PROPOSED BY:** Howard Delo

**WHAT WOULD THE PROPOSAL DO?** This proposal would add muzzleloader and blackpowder cartridge rifles to the weapons allowed for the targeted hunts (AM415) in Unit 14A & 14B.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

Under current regulations in Units 14A and 14B for targeted hunt AM415, residents are allowed 1 moose by shotgun, crossbow, or bow and arrow only. A winter season may be announced and opened by emergency order. Up to 200 permits may be issued in Unit 14A and up to 100 permits may be issued in Unit 14B. Residents must have taken basic hunter education to use a shotgun; weapon-specific hunter education is required for bow and arrow or crossbow use.

Units 14A and 14B are within the Anchorage-Matsu-Kenai nonsubsistence area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would allow muzzleloader and blackpowder cartridge rifles to be used by hunters to participate in targeted hunts in Units 14A & B. Currently the targeted hunts allow shotgun, crossbow, and bow and arrow only.

**BACKGROUND:** Targeted hunts are a management tool where the department uses preregistered, qualified hunters to assist with addressing nuisance or injured moose, or moose along roadways that may create public safety issues. They are not intended to provide additional

hunting opportunity or address population level concerns. The targeted moose hunts in Units 14A and 14B provide an additional tool to reduce moose-vehicle collisions (MVCs) and nuisance management issues. The AM415 targeted hunt has been in place since 2012. Under this permit, hunters are either designated a specific nuisance moose to take or are assigned one of four areas where a high number of MVCs are known to occur. Currently permits are issued as snow increases and moose become more prevalent along roadways. They have also been issued to take moose that were destroying hay bales in heavy snow years. The winter of 2014 was very mild with almost no snow. As a result, only 20 permits were issued that year. No permits were issued in the winters of 2017–2019. For the years that permits were issued, on average 143 permits were issued and 110 moose were taken, providing an average success rate of 77%.

Blackpowder cartridge rifles are different from muzzleloaders because the blackpowder cartridge rifle loads from the breech and fires a preloaded cartridge that contains black powder. Blackpowder cartridge rifles cannot be legally used in muzzleloader-only seasons and are closer to modern centerfire rifles than muzzleloaders.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal because it is a methods & means request.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 82 - 5 AAC 85.045 (12) & (14) Hunting seasons and bag limits for moose.** Extend the current bow and arrow only general season in Units 14A, 14B, and 16A.

**PROPOSED BY:** Alaska Bowhunters Association

**WHAT WOULD THE PROPOSAL DO?** This proposal extends the archery-only general season in Units 14A, 14B, and 16A by 2 days from the August 10–17 to August 10–19.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

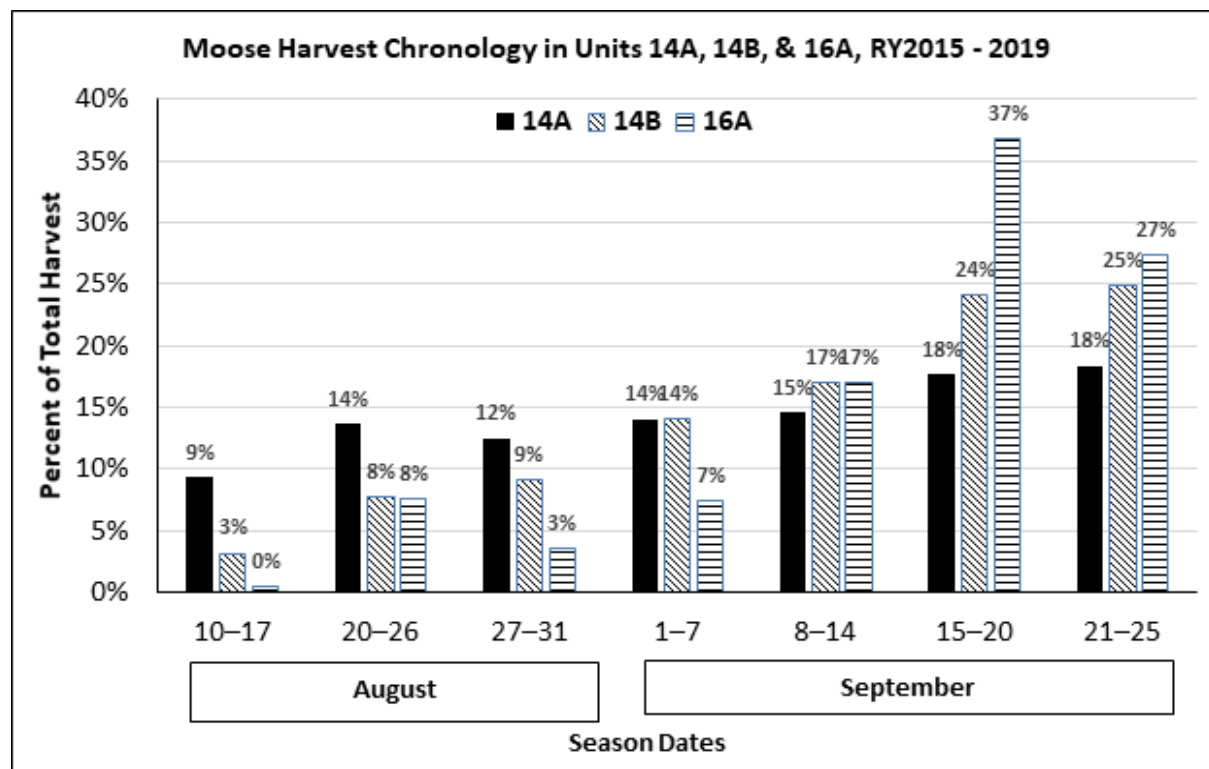
Resident and nonresident hunters may take 1 bull moose with spike-fork antlers, or 50-inch antlers, or antlers with 3 or more brow tines on at least one side with a bow and arrow only from August 10 to August 17 in Units 14A, 14B, and 16A; or under general season hunt regulations in Unit 16A from August 20 to September 25 and in Units 14A & 14B from August 25 to September 25.

There are additional drawing hunt opportunities for any-bull in Units 14B and 16A as well as for antlerless moose in Unit 14A.

Units 14A, 14B, and 16A are entirely within the Anchorage-Matsu-Kenai Nonsubsistence Area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted this proposal would add 2 days to archery-only seasons in Units 14A, 14B, and 16A. Additional days added to any general harvest season may result in additional harvest of moose in these units but are not expected to have an impact on populations. Legal moose taken during the archery season would not be available during the general season.

**BACKGROUND:** Archery-only seasons were adopted in Units 14B and 16A in regulatory year (RY) 1995 and in Unit 14A in 1998. The season dates have been August 10–August 17 since the start of archery-only hunts in these areas. During the early archery only season an average of 9% of the harvest in Unit 14A is taken by bow and arrow, and 3% of moose harvested in Unit 14B, and 0% of moose harvested in Unit 16A are taken by this method. A few additional moose are taken by archers during the general season. The chronology of the harvest varies by unit (Figure 82-1).



**Figure 82-1.** Moose harvest chronology in Units 14A, 14B, & 16A, RY2015-19.

Populations in these units have been at or above objective and antlerless hunts in Unit 14A has been warranted for 34 of the last 37 years. Currently the populations and bull-to-cow ratios in all 3 units are at or above their management objectives. However there remains some uncertainties regarding the effects of winter 2019–20 on the populations. Heavy snows in the northern portion of Unit 14A as well as 14B and 16A may have had a negative impact on the moose population in



these areas. The department received numerous reports of winter killed moose. Additional population surveys are needed to determine the current populations.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of moose hunting opportunity to archery hunters. Adding days to the general harvest season for archery-only hunters may result in additional harvest of moose in these units but is not expected to have an impact on the population.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 83 – 5 AAC 85.045 Hunting seasons and bag limits for moose.** Remove the 50-inch bag limit requirement for resident and nonresident moose hunts in Unit 16A.

**PROPOSED BY:** Neil DeWitt

**WHAT WOULD THE PROPOSAL DO?** The proposal would allow the taking of moose with spike-fork antlers, or at least 3 brow tines on at least 1 side in Unit 16A. It would remove the 50-inch component of the regulation.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.020 and in the *2020–2021 Alaska Hunting Regulations*.

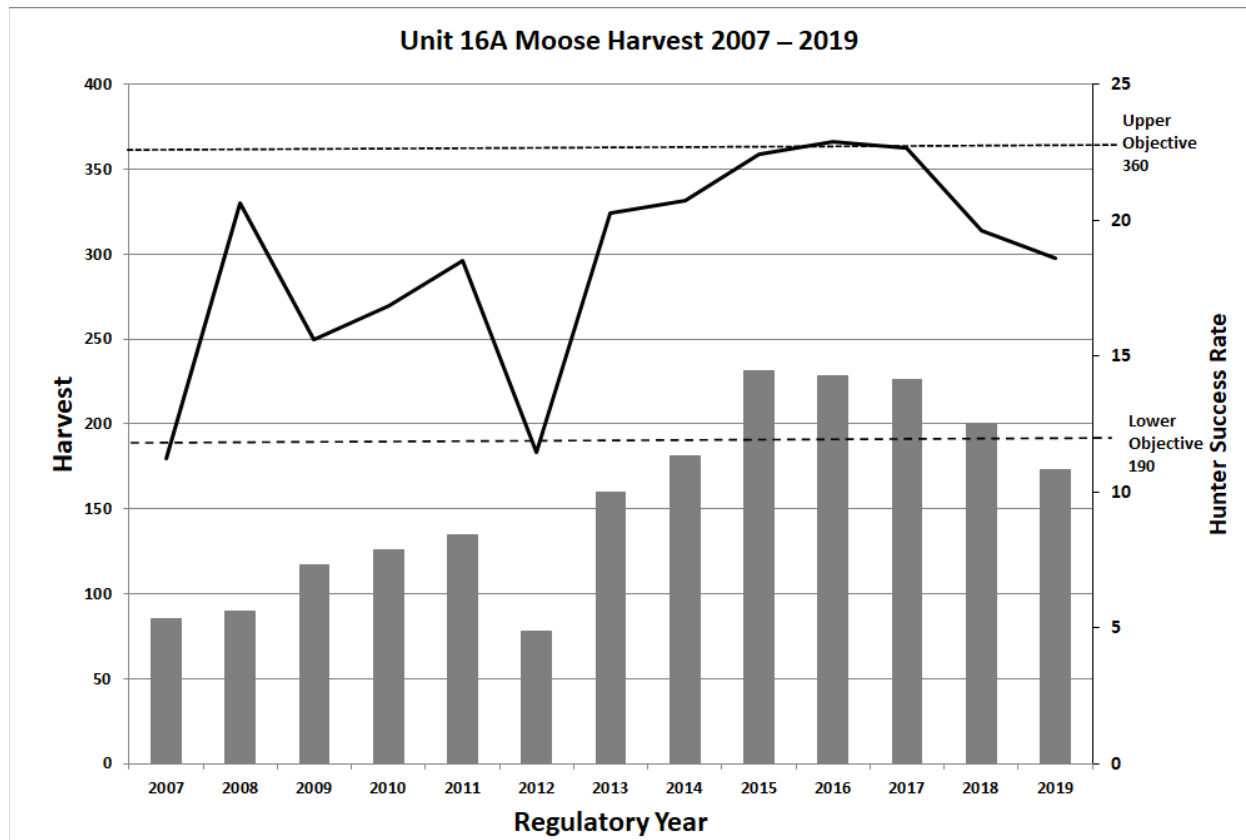
Currently resident and nonresident hunters may take 1 bull moose with spike-fork antlers, or 50-inch antlers, or antlers with 3 or more brow tines with a bow and arrow only from August 10–August 17; or under general hunt regulations from August 20–September 25.

Unit 16A is entirely within the Anchorage-Matsu-Kenai Nonsubsistence Area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would remove the 50-inch component of the regulation such that the only legal moose for harvest under the general season regulations in Unit 16A would be those moose with a spike, a fork, or at least 3 brow tines on one side regardless of the antler spread. Under this proposal illegal harvest of sublegal moose may be reduced because hunters will ensure that larger bulls will have at least three brow tines on one side of their antlers; however, harvest opportunity could be reduced under this proposal given that moose with fewer than 3 brow tines on either side will not be legal no matter how wide the antlers are. This new regulation would be unique for Unit 16A and not consistent with any other unit in the state.

**BACKGROUND:** Unit 16A went to spike-fork, 50 inches, or 3 brow tines in 1993 at the same time other units in the region were converting to this management strategy. Units have been managed at 3 or 4 brow tines based on rates of brow-tine growth commensurate with antler width at 50 inches. Over the past 5 years hunters in Unit 16A have reported that 30% of the moose that

they have taken have been  $\geq 50$  inches and yet did not have three or more brow tines on one side. The average harvest for the past 5 years has been 212 (Figure 83-1). The harvest objective is for 190–360. A decrease in harvest because of fewer hunters taking what were previously legal moose would increase the bull-to-cow ratio and may prevent harvests reaching objective.



**Figure 83-1.** Moose harvest and hunter success rates in Unit 16A, RY2007–2019.

The Geospatial Population Estimator (GSPE) survey in 2017 documented a bull:100 cow ratio of 33. The management objective for this unit is 20–25 bulls-to-cows. A GSPE survey conducted in March of 2019 estimated the population at  $4,190 \pm 587$ . The population objective is 3,500–4,000. The heavy snow winter of 2019 – 2020 may have resulted in significant winter mortality in the unit; however, additional surveys are need to assess the current status of the population.

Department of Public Safety reported that there have been an average of seven citations issued annually for sub-legal moose in Units 14A, 14B, 16A, and 16B during the period of 2015–2017. The amount of illegal harvest that goes unreported or undiscovered is unknown.

**DEPARTMENT COMMENTS:** The department is **OPPOSED** to this proposal because although it may result in fewer sub-legal moose being taken, it is difficult to predict to what degree.

This proposal would decrease the harvest of moose in Unit 16A because as many as 30% of previously legal moose would not be taken under this regulation change.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 84 – 5 AAC 85.045 Hunting seasons and bag limits for moose.** Establish an antlerless moose season in Unit 16B.

**PROPOSED BY:** Alaska Department of Fish & Game

**WHAT WOULD THE PROPOSAL DO?** This proposal would create a 113-day resident drawing hunt for antlerless moose in Unit 16B. The season dates would be August 20–September 25 and November 15–January 31. Up to 300 permits may be issued.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations for Unit 16B can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

Resident Open Season (Subsistence &		
Units and Bag Limits	General Hunts)	Nonresident Open Season
If the harvestable portion is 199 moose or less; up to 400 total Tier II permits may be issued;		
1 bull with spike-fork antlers or 50-inch antlers with 3 or more brow tines on one side by Tier II subsistence hunting permit only; or	Aug. 20–Sept. 30  (Subsistence hunt only)	
1 bull by Tier II subsistence hunting permit only; or if the harvestable portion is greater than 199 moose, but less than	Dec. 15–Mar. 31  (Subsistence hunt only)	

241 moose;

1 bull with spike-fork antlers  
or 50-inch antlers with 3 or  
more brow tines on one side;  
or

Sept. 1–Sept. 20

1 bull by Tier II subsistence  
hunting permit only; up to  
260 permits may be issued; or

Dec. 15–Mar. 31  
(Subsistence hunt only)

If the harvestable portion is  
greater than 240 moose:

1 bull with spike-fork antlers  
or 50-inch antlers with 3 or  
more brow tines on one side;  
or

Aug. 20–Sept.25

1 bull by drawing permit  
only; up to 75 percent of the  
combined drawing permits in  
the area may be issued to non-  
youth hunters; up to 600  
permits may be issued;  
provided that the harvestable  
portion is greater than 310  
moose; or

Aug. 20–Sept.25  
(General hunt only)

1 bull by youth hunt drawing  
permit only; up to 25 percent  
of the combined drawing  
permits in the area may be

Aug. 20–Sept.25  
Nov. 15—Jan. 31

issued to youth hunters;  
provided that the harvestable  
portion is greater than 310  
moose; or

(General hunt only)

1 bull by registration permit  
only; or

Dec. 15–Last Day of Feb.

1 bull by drawing permit  
only; up to 500 permits may  
be issued; or

Dec. 15–Last Day of Feb.

1 moose by Tier II  
subsistence hunting permit  
only; up to 260 permits may  
be issued; or

Dec. 15–Mar. 31

(Subsistence hunt only)

## NONRESIDENT HUNTERS

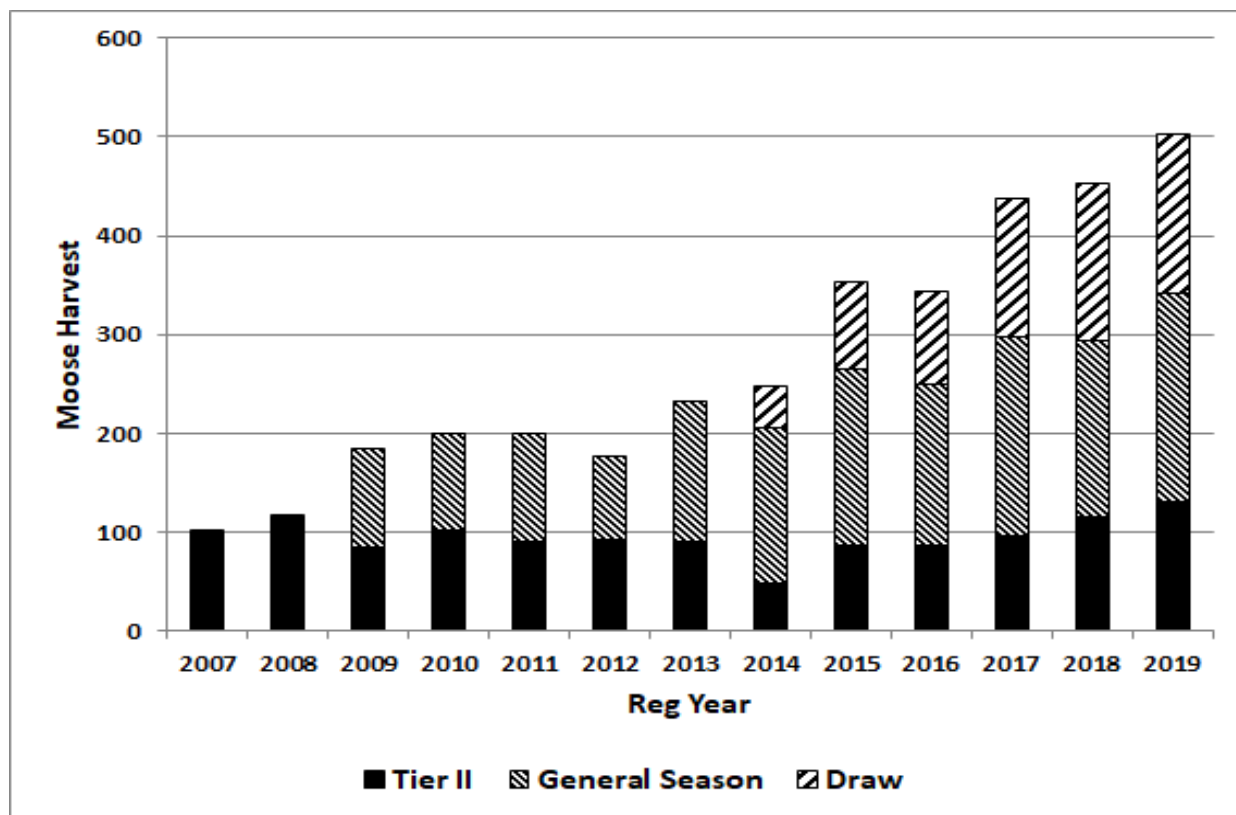
1 bull with spike-fork antlers  
or 50-inch antlers with 3 or  
more brow tines on one side;  
if the harvestable portion is  
greater than 240 moose

Aug. 20–Sept. 25

There is a positive customary and traditional (C&T) use finding for moose in Unit 16B in the Redoubt Bay drainages with an amount reasonably necessary for subsistence (ANS) of 10 moose. There is a positive C&T use finding for moose in Unit 16B in that portion south of the Beluga River and north of Redoubt Bay with an ANS of 29-37 moose. There is a positive C&T use finding for moose in Unit 16B in that portion north of the Beluga River with an ANS of 160-180 moose.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal if adopted would allow the taking of antlerless moose during the regular fall hunting season as well as an early winter season of November 15 – January 31. This action is expected to assist in arresting herd growth and returning the population to within management objectives. Some bulls may be taken under this proposal in December and January as they begin to lose their antlers in early December. Current bull to cow ratios are above objective and this proposal should not have a large impact on those ratios.

**BACKGROUND:** Moose harvest in Unit 16 has been steadily increasing since regulatory year 2012 and has been within the harvest objective (310–600) since 2015 (Figure 84-1).

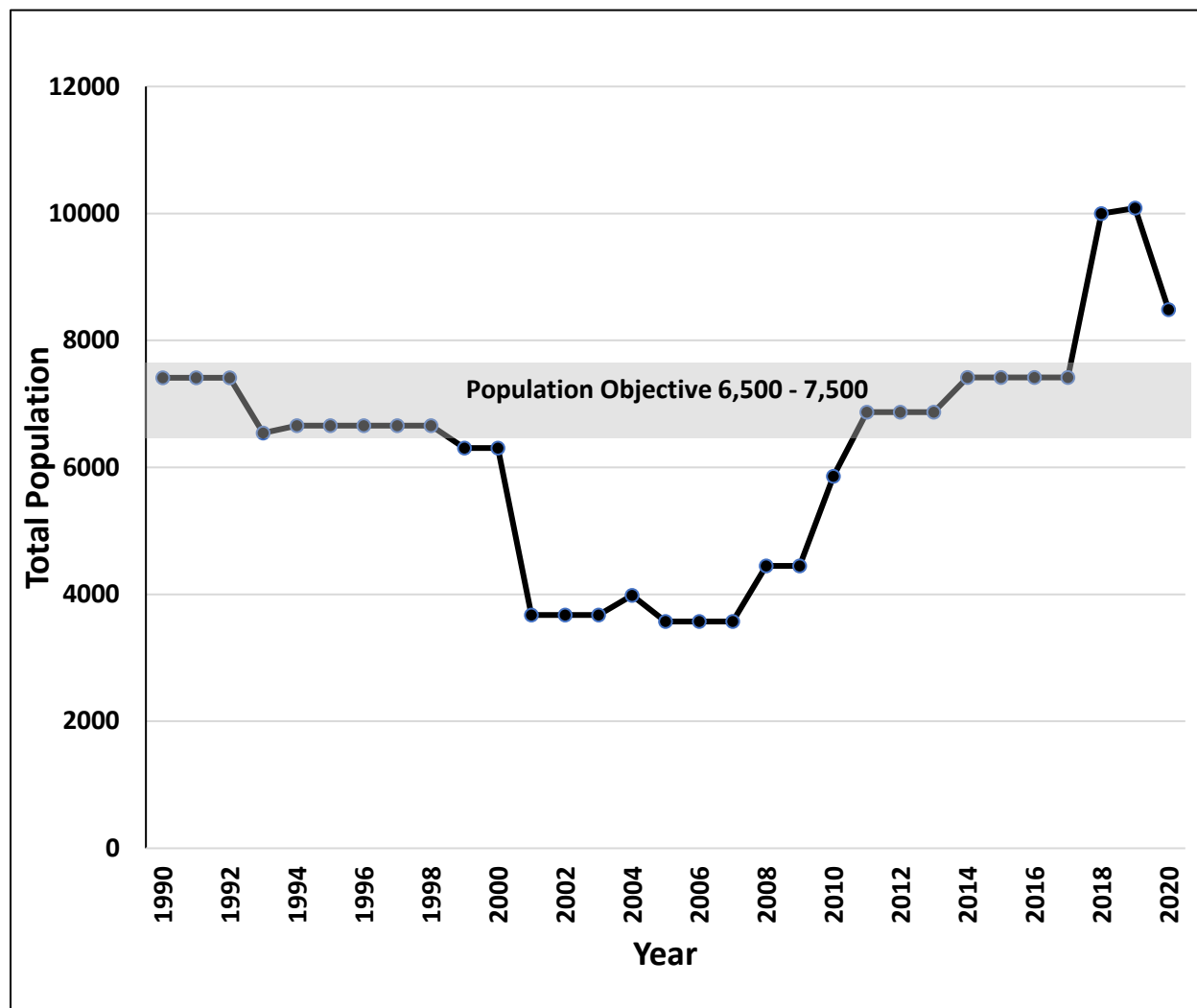


**Figure 84-1.** Moose harvest in Unit 16B by hunt type, regulatory years 2007–2019.

The department sought to address the high bull-to-cow ratios by increasing the number of draw permits available for the fall hunt. Bull-to-cow ratios have been reduced in portions of the unit. In the middle portion of Unit 16B the bull-to-100 cow ratio was 42 in 2011, 38 in the fall of 2019, and 28 in the fall of 2020. In the southern portion of the unit the bull:100 cow ratio was 52 in 2010 and 32 in the fall of 2019. The Board of Game approved a winter registration and a winter draw hunt with an ‘any bull’ bag limit in the spring of 2016. However, concerns raised by the local communities that mid-winter bull hunts may stress cows as hunters searched for a legal animal have led to the department taking a conservative approach to the implementation of the mid-winter

hunt. One hundred permits for DM560 with season dates of December 15–February 28 were issued for the first time in RY20.

The moose population itself was not deemed to be over the objective until surveys were completed in the spring of 2018. At that time, the population was estimated to be 10,000 moose (Figure 84-2).

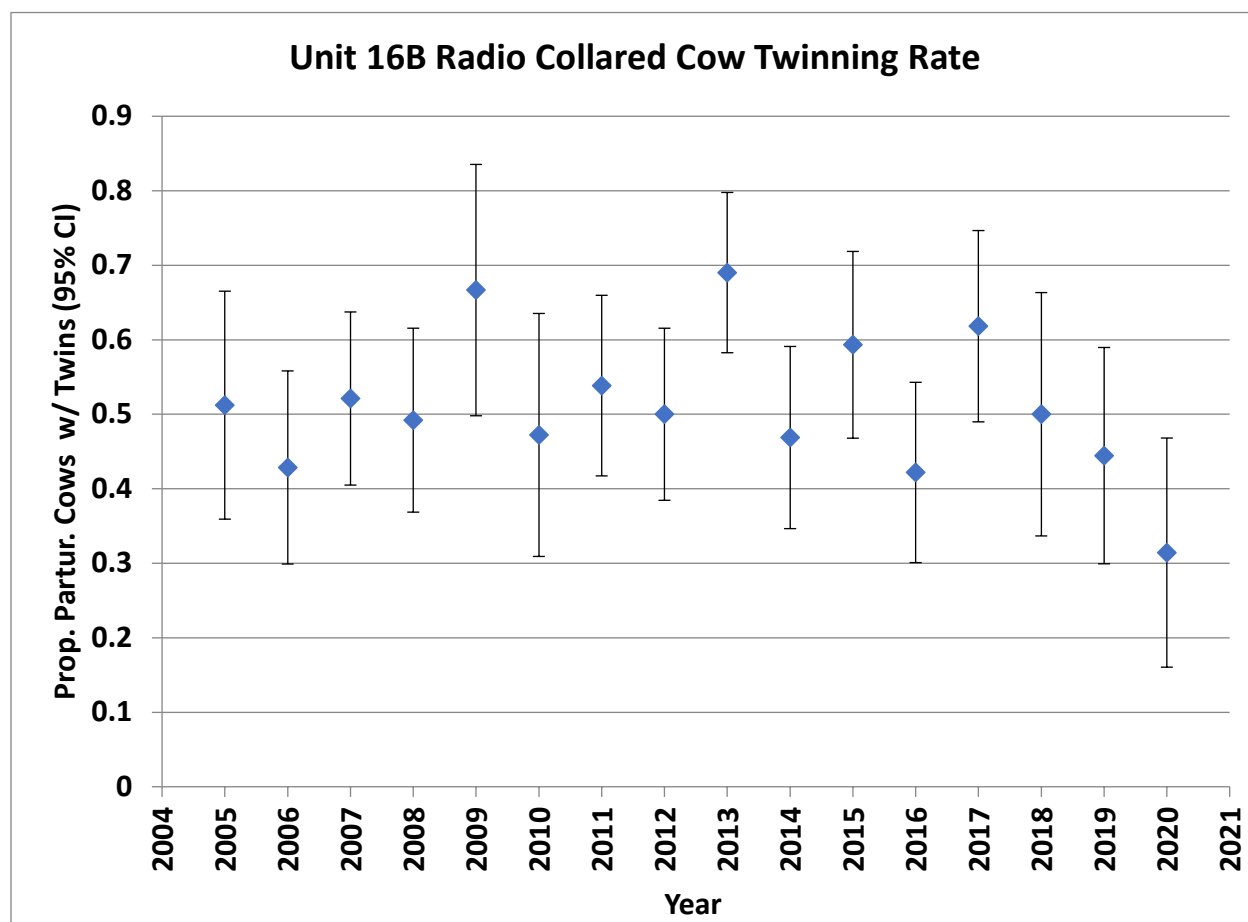


**Figure 84-2.** Unit 16B total moose population, RY1990–2020.

The population objective for Unit 16B is 6,500–7,500. Additional bull permits will not affect the reproductive segment of the population and would likely not be sufficient to bring the population back to the objective. Current winter opportunities include a Tier II any-bull hunt and a youth draw hunt. Antlerless hunts serve as a means of reducing the population to bring it back to within population objectives. Unit 16B is prone to experiencing heavy snow winters that result in a lack of available forage for moose and subsequent winter caused mortality. By maintaining the population within objectives, fewer moose may be lost in heavy snow years. The unit experienced

a heavy snow event in the winter of RY19. Moose may have been lost to harvest opportunity because of that winter. Surveys completed in the middle portion of the Unit in the fall of 2020 showed a decrease in the moose population in the area. Based on this new information we believe the population is 8,485, which is still above the population objective.

The department has been conducting moose calf twinning and recruitment studies since the spring of 2005. The twinning rate has been consistently high but has been decreasing in the past few years (Figure 84-3). Decreasing twinning rates can indicate that a moose population density is increasing beyond what the habitat can support.



**Figure 84.3** Twinning rates of radio collared cow moose in Unit 16B, 2004–2021

Browse surveys of Unit 16B were completed in the spring of 2020. The results of the surveys showed a browse removal rate of 36%. Only Unit 20A has shown a higher rate of browse removal. Work by Seaton et al. in 2011 demonstrated an inverse relationship between the rate of browse removal and twinning rates. The recent decrease in the twinning rate may be related to the high amount of browse offtake.



**DEPARTMENT COMMENTS:** The department submitted and **SUPPORTS** this proposal as a necessary management tool to arrest herd growth and return the population to within the population objectives. If adopted, the board should consider whether reasonable opportunity for success in harvesting moose for subsistence uses would continue.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 85 - 5 AAC 85. 045 (14) Hunting seasons and bag limits for moose.** Establish a registration hunt for bull moose limited to resident, certified bowhunters only within Unit 16B.

**PROPOSED BY:** Gary Weaver

**WHAT WOULD THE PROPOSAL DO?** This proposal would create an any-bull registration hunt for moose in Unit 16B August 20–September 25 for certified bowhunters only.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations for Unit 16B can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

Units and Bag Limits	Resident Open Season (subsistence and General Hunts)	Nonresident Open Season
If the harvestable portion is 199 moose or less; up to 400 total Tier II permits may be issued;		
1 bull with spike-fork antlers or 50-inch antlers with 3 or more brow tines on one side by Tier II subsistence hunting permit only; or	Aug. 20–Sept. 30  (Subsistence hunt only)	
1 bull by Tier II subsistence hunting permit only; or if the harvestable portion is greater than 199 moose, but less than 241 moose;	Dec. 15–Mar. 31  (Subsistence hunt only)	

1 bull with spike-fork antlers or  
50-inch antlers with 3 or more  
brow tines on one side; or

Sept. 1—Sept. 20

1 bull by Tier II subsistence  
hunting permit only; up to 260  
permits may be issued; or

Dec. 15–Mar. 31

(Subsistence hunt only)

If the harvestable portion is  
greater than 240 moose:

1 bull with spike-fork antlers or  
50-inch antlers with 3 or more  
brow tines on one side; or

Aug. 20–Sept.25

1 bull by drawing permit only;  
up to 75 percent of the  
combined drawing permits in  
the area may be issued to non-  
youth hunters; up to 600 permits  
may be issued; provided that the  
harvestable portion is greater  
than 310 moose; or

Aug. 20–Sept.25

(General hunt only)

1 bull by youth hunt drawing  
permit only; up to 25 percent of  
the combined drawing permits  
in the area may be issued to  
youth hunters; provided that the  
harvestable portion is greater  
than 310 moose; or

Aug. 20–Sept.25

Nov. 15—Jan. 31

(General hunt only)

1 bull by registration permit

Dec. 15–Last Day of Feb.

only; or

1 bull by drawing permit only;  
up to 500 permits may be  
issued; or

Dec. 15–Last Day of Feb.

1 moose by Tier II subsistence  
hunting permit only; up to 260  
permits may be issued; or

Dec. 15–Mar. 31

(Subsistence hunt only)

## NONRESIDENT HUNTERS

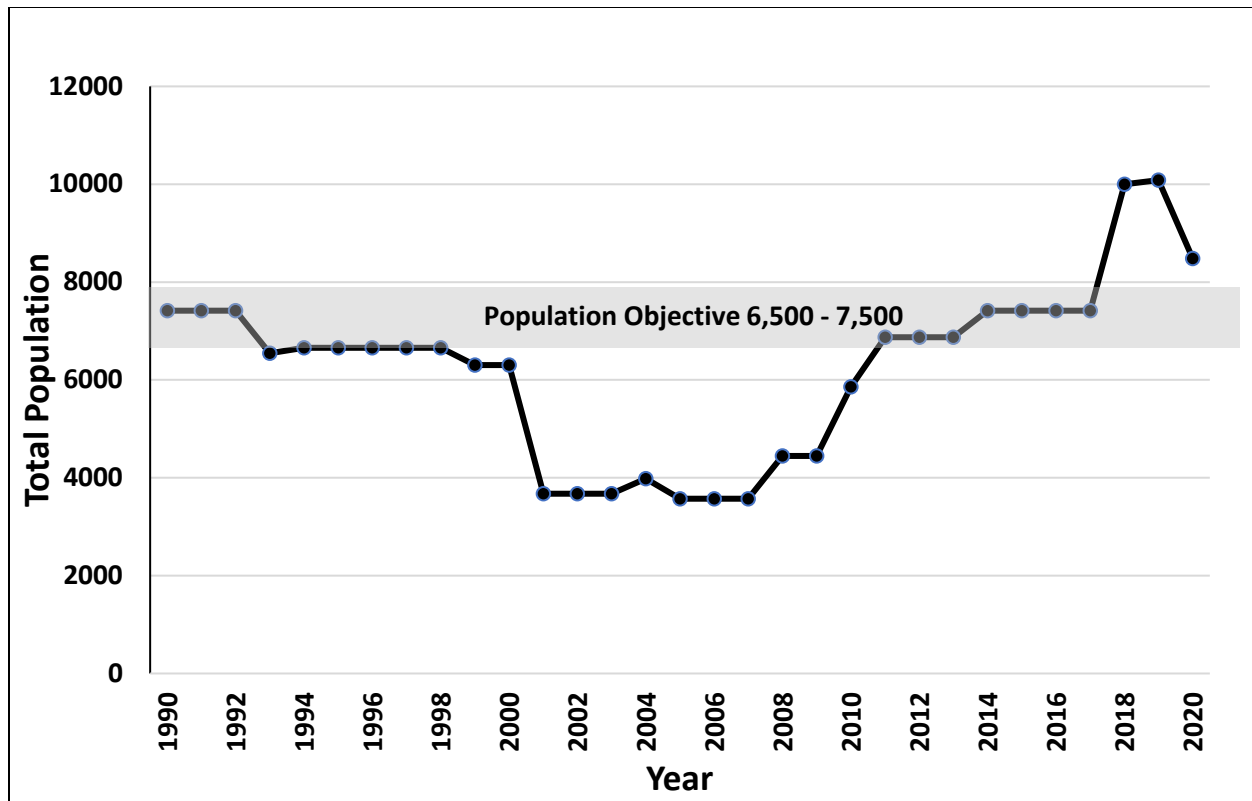
1 bull with spike-fork antlers or  
50-inch antlers with 3 or more  
brow tines on one side; if the  
harvestable portion is greater  
than 240 moose

Aug. 20–Sept. 25

There is a positive C&T use finding for moose in Unit 16B in the Redoubt Bay drainages with an ANS of 10 moose. There is a positive C&T use finding for moose in Unit 16B in that portion south of the Beluga River and north of Redoubt Bay with an ANS of 29–37 moose. There is a positive C&T use finding for moose in Unit 16B in that portion north of the Beluga River with an ANS of 160–180 moose.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would provide additional registration opportunity to resident hunters who wish to take moose with a bow during the fall season. Currently there are 2 draw hunts with an any-bull bag limit and a general season with a spike or fork, 50 inch or 3 brow tines on at least one side bag limit.

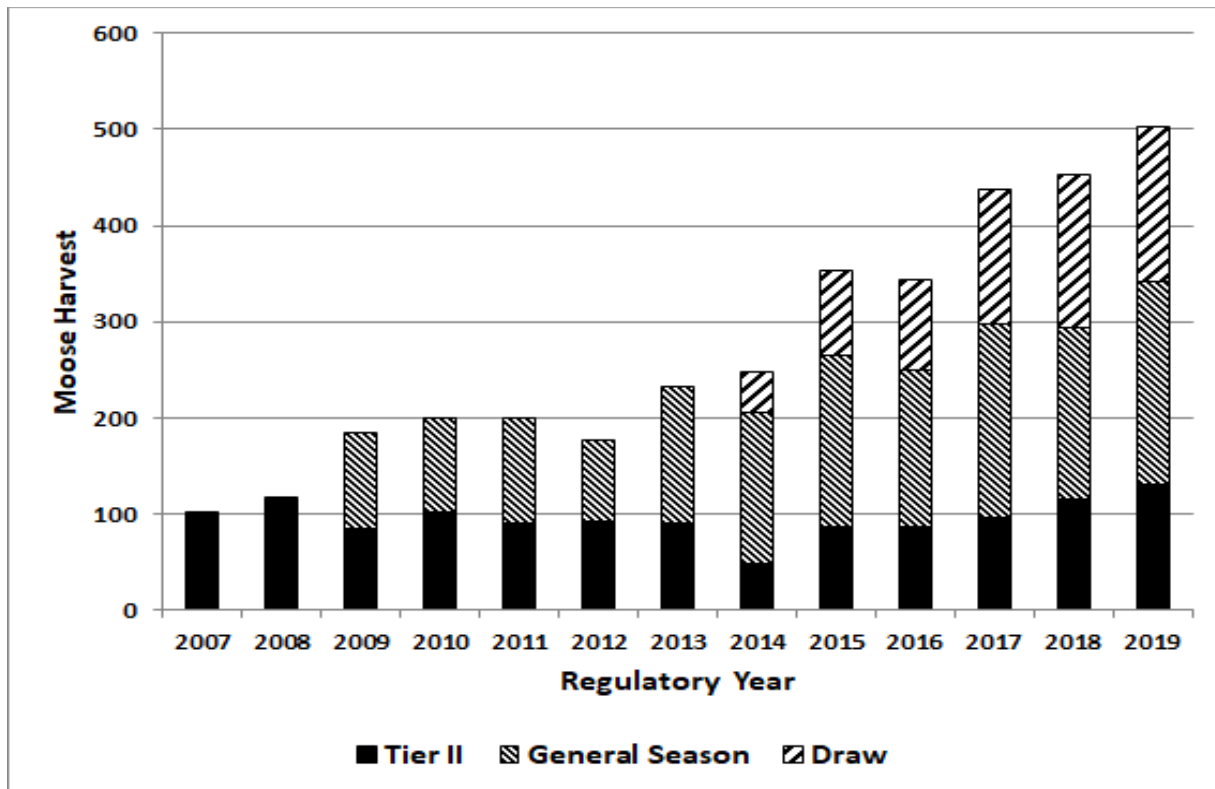
**BACKGROUND:** The moose population of Unit 16B is estimated at  $10,000 \pm 1,714$  (80% CI) as of February 2019, which is above the population objective (Figure 85-1). However, during the winter of RY19 the unit experienced significant snowfall and many winter-killed moose were reported. Winter severity affected the moose population but the magnitude is unknown at this



**Figure 85-1.** Annual moose population estimates in Unit 16B, RY1990–2020.

time. Moose harvest over the past 5 years has averaged 422, and the harvest objective is 310 to 600 moose (Figure 85-2).

Bull-to-cow ratios in the unit range from 32 to 60, exceeding the management objective of 20–25 bulls:100 cows. During the past 5 years, 31 out of 949 successful hunters reported taking moose during the general season in Unit 16B with archery equipment. In comparison, 12% of moose harvested in Unit 14A, 4% in 14B are taken by bow and arrow, and 2% in Unit 16A are taken by bow and arrow annually. Approximately 75% of moose taken by archery in these units are taken during archery-only seasons. Season dates in these areas are August 10–August 17. Given the low success rates of archers and the remoteness of the unit, this proposal if adopted, may not result in a large increase in harvest.



**Figure 85-2.** Annual moose harvest in Unit 16B, RY2007–2019.

Although there currently is a registration hunt for any-bull in the unit with season dates of December 15 to the last day of February, managers have not implemented the hunt at this time. Additional opportunity was provided by increasing the number of any bull permits available to hunters in the fall. This has resulted in decreases in the bull to cow ratios, although they are still above the objective. Local residents have been reluctant to have a mid-winter any bull season due to concerns for hunters stressing cows while looking for available bulls. Harvest has steadily increased with the increase in the number of any-bull permits available and the increase in the population.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of moose hunting opportunity to archery hunters. It is unclear how many of the 23,000 certified archers would participate in a new hunt like this. The board may want to consider an archery season like those in Units 14A, 14B, and 16A with season dates of 10 August–17 August and a spike-fork, 50”, or 3 brow tines on at least 1 side bag limit. If adopted, the board should consider whether reasonable opportunity for success in harvesting moose for subsistence uses is continued.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 86 – 5 AAC 85.055 Hunting seasons and bag limits for Dall sheep.** Change the bag limit for Dall sheep in Unit 14A to full-curl ram.

**PROPOSED BY:** Matanuska Valley Fish & Game Advisory Committee

**WHAT WOULD THE PROPOSAL DO?** This proposal would change the bag limit for Dall sheep in Unit 14A-South and east of the Matanuska River from 1 ram to 1 ram with full-curl horns or larger, both horns broken, or at least eight-years-old.

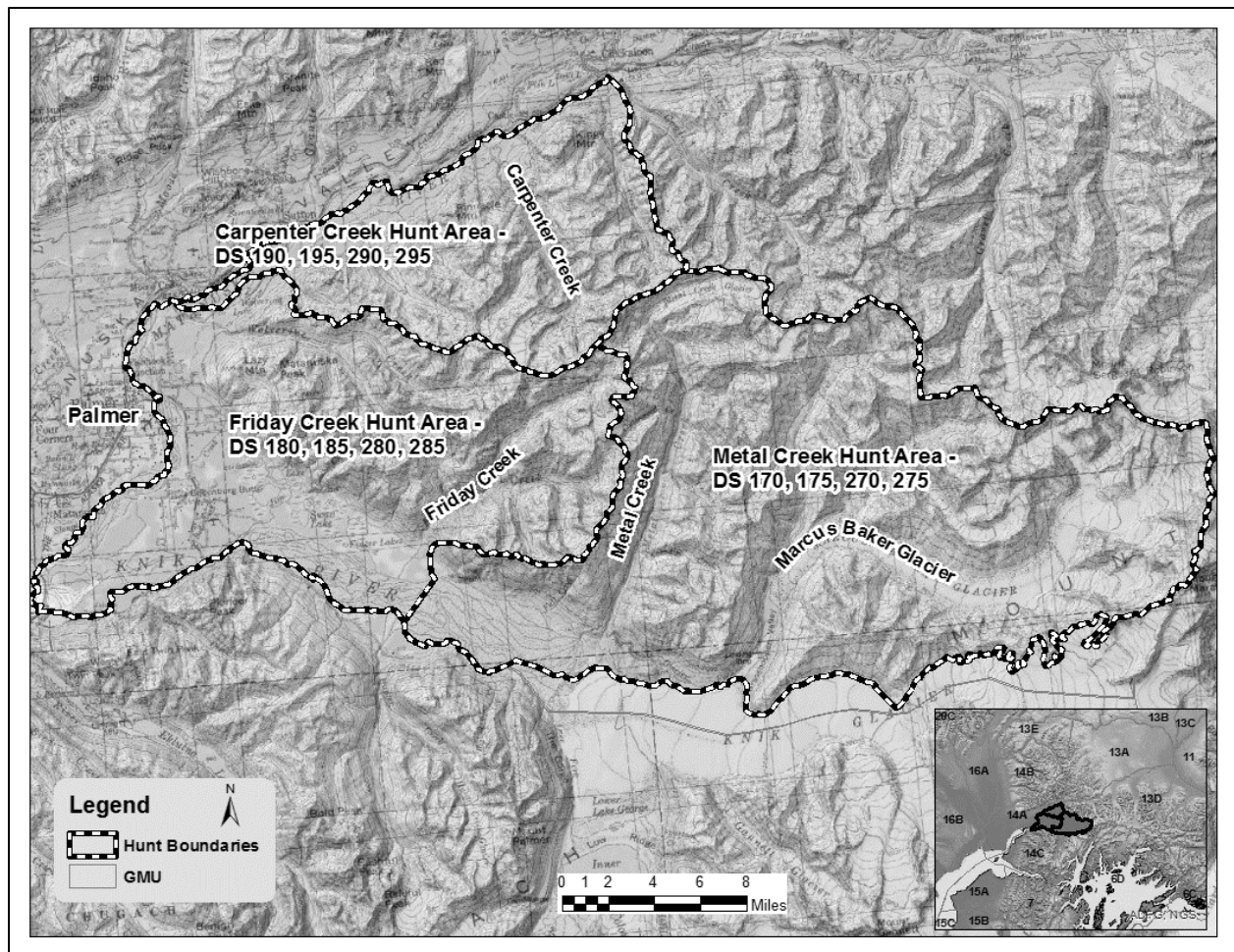
**WHAT ARE THE CURRENT REGULATIONS?** The current Dall sheep hunting regulations for Unit 14A can be found in 5 AAC 85.055 and in the *2020–2021 Alaska Hunting Regulations*.

<b>Units and Bag Limits</b>	<b>Resident Open Season (Subsistence and General Hunts)</b>	<b>Nonresident Open Season</b>
Unit 14(A), south and east of the Matanuska River; up to 100 permits may be issued		
RESIDENT HUNTERS: 1 ram by drawing permit only	Aug. 10 – Sept.20	
NONRESIDENT HUNTERS: 1 ram, every 4 regulatory years, by drawing permit only		Aug. 10 – Sept. 20

Under the current hunt structure, the season is divided into 2 seasons, August 10–August 25 or August 26–September 20, and the hunt area is divided into 3 areas as shown on the map below (Figure 86-1). Ten percent of permits are allocated to nonresidents.

This unit is entirely within the Anchorage-Matsu-Kenai nonsubsistence area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted this proposal would change the bag limit in Unit 14A from any-ram to a ram with horns that are full-curl or larger, both horns broken, or eight-years old. Because the segment of rams available for harvest would be reduced under a full-curl strategy, the number of drawing permits may need to be adjusted accordingly.



**Figure 86-1.** Location of the 3 Chugach Sheep Draw Hunt Areas in the Unit 14A portion of the Chugach Mountains.

**BACKGROUND:** The Board of Game adopted the current hunting regulations in 2007 following a decline in sheep numbers and continued high hunting pressure. The regulatory changes included the establishment of a drawing hunt structure in the Chugach Mountain areas, liberalization of bag limits in Unit 14A and western 13D to include any-ram hunts, and the allocation of harvest opportunity between residents and nonresidents. The current hunt structure was also designed to improve hunt quality by reducing “hunter crowding” through a drawing permit hunt structure, which reduced the number of hunters in the field by 62% in Unit 14A.

After the any ram drawing hunts were implemented in Unit 14A, sheep harvest decreased from an average of 24 rams (2000–2007) to 16 rams (2008–2019) (Table 86-1). The reduced harvest was a direct result of limiting the number of hunters that could participate in the hunt under the new draw permit system. The current level of harvest is sustainable and has not had a negative impact on the sheep population. In fact, under the any ram hunt structure the pressure on the full curl segment of the population has been significantly reduced while still allowing for several trophy rams to be available to hunters dedicated to finding a large ram (Table 86-2).

**Table 86-1.** Unit 14A Dall sheep harvest, hunter success, horn length, and associated age pre- and post-draw, regulatory years 2000–2019.

Regulatory Year	Total Permits	Total Hunters	Total Harvest	% Success	Average Length of Longest Horn	Average Age
<i>Pre-Draw</i>						
2000	-	114	21	18%	35.8	8.4
2001	-	101	19	19%	35.8	8.5
2002	-	104	20	19%	34.5	8.4
2003	-	103	22	21%	35.9	8.9
2004	-	113	32	28%	36.1	8.5
2005	-	104	29	28%	36.5	8.4
2006	-	125	24	19%	36.1	8.5
2007	-	104	22	21%	35.4	8.6
<i>Post-Draw</i>						
2008	40	28	9	32%	32.8	6.7
2009	40	26	11	42%	28.0	5.9
2010	40	21	6	29%	29.4	6.7
2011	50	40	14	35%	35.0	7.4
2012	50	40	13	33%	32.2	6.8
2013	75	41	18	44%	30.6	6.9
2014	75	53	18	34%	33.4	7.2
2015	75	53	22	42%	32.5	7.3
2016	75	53	15	28%	33.1	7.2
2017	71	51	24	47%	30.6	6.4
2018	64	49	20	41%	30.8	5.8
2019	64	50	24	48%	30.1	5.1



**Table 86-2.** Unit 14A Dall sheep ram composition survey results and associated harvest, regulatory years 2000–2019.

Survey Year	Total Rams Observed	$\geq$ Full curl Rams Observed	$\geq$ Full curl Harvested	% Full curl Harvested <sup>a</sup>	Sub-full curl Observed	Sub-full curl Harvested	% Sub-full curl Harvested
1998	218	28	38	136%	190	0	0%
2002	276	19	32	168%	257	0	0%
2006	167	26	35	135%	141	0	0%
2007	145	18	34	189%	127	0	0%
2009	134	8	0	0%	126	11	9%
2010	167	14	3	21%	153	3	2%
2012	177	16	5	31%	161	8	5%
2013	168	11	7	64%	157	11	7%
2014	172	13	9	69%	155	9	6%
2017	254	14	7	50%	240	18	8%
2019	207	10	4	40%	197	20	10%

<sup>a</sup> Percent full curl harvested is in relation to the number of full-curl rams observed during the most recent surveys. Percentages greater than 100% indicate that more rams were harvested than were observed during that year's survey.

Hunter success increased from 22% to 38% after the drawing permit hunt was implemented. The horn length of sheep harvested decreased from an average of 36 inches to 32 inches during the same periods, after moving from full-curl to any-ram. While the department anticipated a decrease in the overall horn length because of the change in the management strategy, Taz-West in Unit 13D did not experience a decrease in horn length. Part of the reason for the decrease appears to be because of the method of access in the area. In the Unit 14A portion of the Chugach there are a few places where hunters on foot or ATV can access the area. Among those hunters who reported taking a  $<3/4$  curl ram since the area went to an any ram bag limit in 2007, 46% accessed the area by ATV, horse, or on foot, and 54% used airplanes. Among hunters who took sheep  $\geq 7/8$  curl to over full curl, 73% used airplanes and only 27% accessed the area by other methods.

The any ram opportunity provided by these drawing hunts is extremely popular because it removes the legal requirement of judging full-curl before harvesting a sheep. This is demonstrated by the

6,949 applications received for these hunts in 2019. The only sheep drawing more popular is in the Tok Management Area which received 9,552 applications for 2019.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal because either the current or proposed management strategy can be used to sustainably manage sheep in the unit. The current management strategy has not resulted in a decrease in the number of sheep or the number of rams observed during surveys.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 87 - 5 AAC 85. 055 Hunting seasons and bag limits for Dall sheep.** Change the bag limit for the Dall sheep in Unit 14A and convert the early season to archery-only permit hunts.

**PROPOSED BY:** Austin Manelick

**WHAT WOULD THE PROPOSAL DO?** This proposal would shift 50% of the current any-ram drawing permits (27 permits) in Unit 14A to archery-only and shift the remaining any-ram permits (26 permits) to full-curl without a weapons restriction.

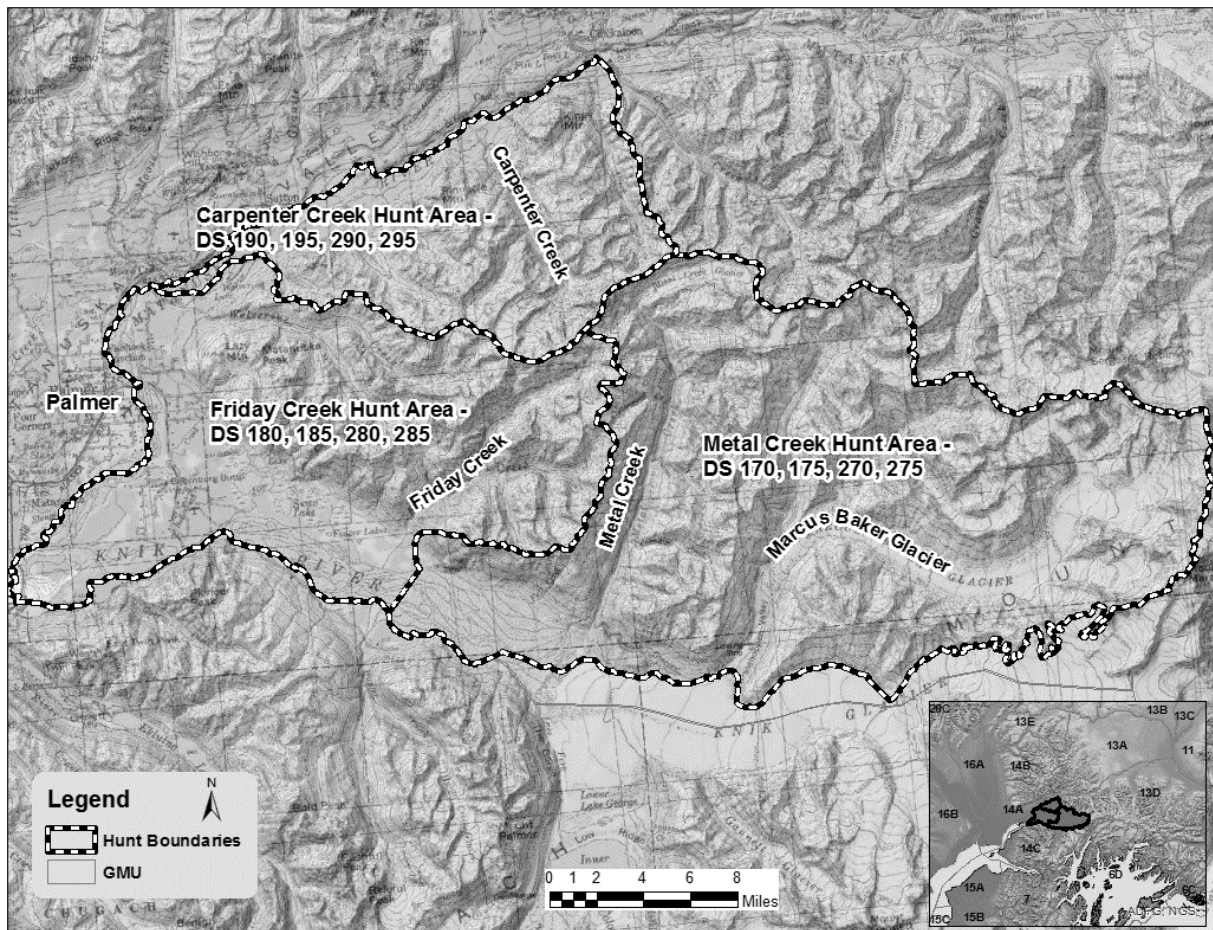
**WHAT ARE THE CURRENT REGULATIONS?** The current sheep hunting regulations can be found in 5 AAC 85.055 and in the *2020–2021 Alaska Hunting Regulations*.

	<b>Resident Open Season (Subsistence and General Hunts)</b>	<b>Nonresident Open Season</b>
<b>Units and Bag Limits</b>		
Unit 14(A), south and east of the Matanuska River; up to 100 permits may be issued		
<b>RESIDENT HUNTERS:</b>	Aug. 10–Sept.20	
1 ram by drawing permit only		
<b>NONRESIDENT HUNTERS:</b>		Aug. 10–Sept. 20
1 ram, every 4 regulatory years, by drawing permit only		

The hunt area is divided into 3 areas with 2 seasons under the current hunt structure, Aug. 10–Aug. 25 or Aug. 26–Sept. 20 (Figure 87-1).

This unit is entirely within the Anchorage-Matsu-Kenai nonsubsistence area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If this proposal were adopted the early season Dall sheep draw permits (DS170, DS180, DS190, DS270, DS280, or DS290) would be limited to archery equipment only. The bag limit would remain 1 ram. The second draw-hunt period (DS175, DS185, DS195, DS275, DS285, or DS295) would not have any weapons restrictions and the bag limit would be a ram with full-curl horns or larger, horn tips broken on both sides, or rams at least 8 years old. The number of permits available in any given year would be split evenly between the 2 seasons. Given the low success rates of bow hunters, permit levels would need to be adjusted. Additional permits allocated to the non-weapons restricted season may result in hunter crowding issues, or a decrease in harvest opportunity. For example, if 70 permits were issued with half to the early season and half to the late season, 35 permits would go to the early season any-ram archery permit. Currently the nearest comparable unit with archery only draw hunts is in Unit 14C (DS140, DS141, DS240 and DS241). From RY10–RY19 the average hunter participation in these archery hunts in 14C was 59% and of the hunters participating, 9% were successful. Assuming similar rates in Unit 14A for the hunts under this proposal, 35 permits would result in approximately 21 hunters participating and 2 sheep taken in the early hunt. For the late hunt under this proposal, 35 permits would also be issued. Using the data from the full-curl draw hunts in Unit 13D (DS165 and DS265), average hunter participation and success rates between RY08 and RY20 were 65% and 38% respectively. Assuming similar participation and success rates under this proposal would result in 23 hunters and an additional 9 sheep taken, or 11 sheep between the 2 hunts. On average we have observed 14 full-curl rams in our surveys between 2010 and 2020. Since Unit 14A-Chugach went to draw in RY08, participation has averaged 78% and success rate for hunters has averaged 38%. Our average harvest has been 16 sheep since the draw began.



**Figure 87-1.** Location of the 3 sheep draw hunt areas in the Unit 14A portion of the Chugach Mountains.

**BACKGROUND:** The Board of Game adopted the current regulations in 2007 following a decline in sheep numbers and high hunting pressure. The regulatory changes included the establishment of a drawing hunt structure in the Chugach Mountain areas, liberalization of bag limits in Unit 14A and western 13D to include any-ram hunts, and the allocation of harvest opportunity between residents and nonresidents. The current hunt structure was also designed to improve hunt quality by reducing “hunter crowding” through a drawing permit hunt structure, which reduced the number of hunters in the field by 62% in Unit 14A.

After the any-ram drawing hunts were implemented in Unit 14A, sheep harvest decreased from an average of 24 rams (2000–2007) to 16 rams (2008–2019) (Table 87-1). The reduced harvest was a direct result of limiting the number of hunters that could participate in the hunt under the new draw permit system. Hunter success increased from 22% to 38% after the drawing permit hunt was implemented.

The horn length of sheep harvested decreased from an average of 36 inches to 32 inches during the same periods after moving from full-curl to any-ram. While the department anticipated a

decrease in the overall horn length because of the change in the management strategy, Taz-West in Unit 13D did not experience a decrease in horn length. Part of the reason for the decrease appears to be due to the method of access in the area. In Unit 14A-Chugach there are a few places where hunters on foot or ATV can access the area. Among those hunters who reported taking a  $<3/4$  curl ram since the area went to an any ram bag limit in 2007, 46% accessed the area by ATV, horse, or on foot, and 54% used airplanes. Among hunters who took sheep  $>7/8$  curl to over full curl, 73% used airplanes and only 27% accessed the area by other methods.

**Table 87-1.** Unit 14A Dall sheep harvest, hunter success, horn length, and associated age pre- and post-draw, regulatory years 2000–2019.

Regulatory Year	Total Permits	Total Hunters	Total Harvest	% Success	Average Length of Longest Horn	Average Age
<i>Pre-Draw</i>						
2000	-	114	21	18%	35.8	8.4
2001	-	101	19	19%	35.8	8.5
2002	-	104	20	19%	34.5	8.4
2003	-	103	22	21%	35.9	8.9
2004	-	113	32	28%	36.1	8.5
2005	-	104	29	28%	36.5	8.4
2006	-	125	24	19%	36.1	8.5
2007	-	104	22	21%	35.4	8.6
<i>Post-Draw</i>						
2008	40	28	9	32%	32.8	6.7
2009	40	26	11	42%	28.0	5.9
2010	40	21	6	29%	29.4	6.7
2011	50	40	14	35%	35.0	7.4
2012	50	40	13	33%	32.2	6.8
2013	75	41	18	44%	30.6	6.9
2014	75	53	18	34%	33.4	7.2
2015	75	53	22	42%	32.5	7.3
2016	75	53	15	28%	33.1	7.2
2017	71	51	24	47%	30.6	6.4
2018	64	49	20	41%	30.8	5.8
2019	64	50	24	48%	30.1	5.1

The any-ram opportunity provided by these drawing hunts is extremely popular because it removes the legal requirement of judging full curl before harvesting a sheep. This is demonstrated by the 6,949 applications received for these hunts in 2019. The only sheep drawing more popular is in the Tok Management Area which received 9,552 applications for 2019. The current level of harvest is sustainable and has not had a negative impact on the sheep population. In fact, under the any ram hunt structure the pressure on the full-curl segment of the population is significantly reduced while still allowing for several trophy rams to be available to hunters dedicated to finding a large ram.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal because it is allocative in nature. Either management strategy (current or proposed) can be used to sustainably manage sheep in the unit. The current management strategy has not resulted in a decrease in the number of sheep or the number of rams observed during surveys.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 88 - 5 AAC 85. 055 (4) Hunting seasons and bag limits for Dall sheep.** Establish an archery-only general season hunt for Dall sheep in the remainder of Units 14A and in Unit 14B.

**PROPOSED BY:** Drew Kress

**WHAT WOULD THE PROPOSAL DO?** This proposal would create an archery-only general season hunt for residents and nonresidents for Dall sheep in Units 14A, remainder and 14B from August 1 to August 9 with a bag limit of 1 ram with full-curl horn or larger for residents; and 1 ram with full curl horn or larger every four regulatory years for nonresidents.

**WHAT ARE THE CURRENT REGULATIONS?** The current sheep hunting regulations can be found in 5 AAC 85.055 and in the *2020–2021 Alaska Hunting Regulations*.

In Units 14A, remainder and 14B, resident hunters may take 1 ram with full-curl horns or larger from August 10 to September 20 under a general season harvest ticket. Nonresidents may take 1 ram with full curl horns or larger every 4 regulatory years from August 10 to September 20 under general season harvest restrictions.

Resident youth hunters may take 1 ram with full-curl horns or larger August 1–August 5 and nonresident youth hunters may take 1 ram with full-curl horns or larger every 4 regulatory years August 1–August 5.

In Unit 14A there are also drawing hunts for any ram. Bag limits for the drawing hunts are 1 every year for residents and 1 every 4 years for nonresidents. The dates for the drawing hunts fall within

the August 10–September 20 period. The changes requested by this proposal do not include the area where the drawing hunts apply.

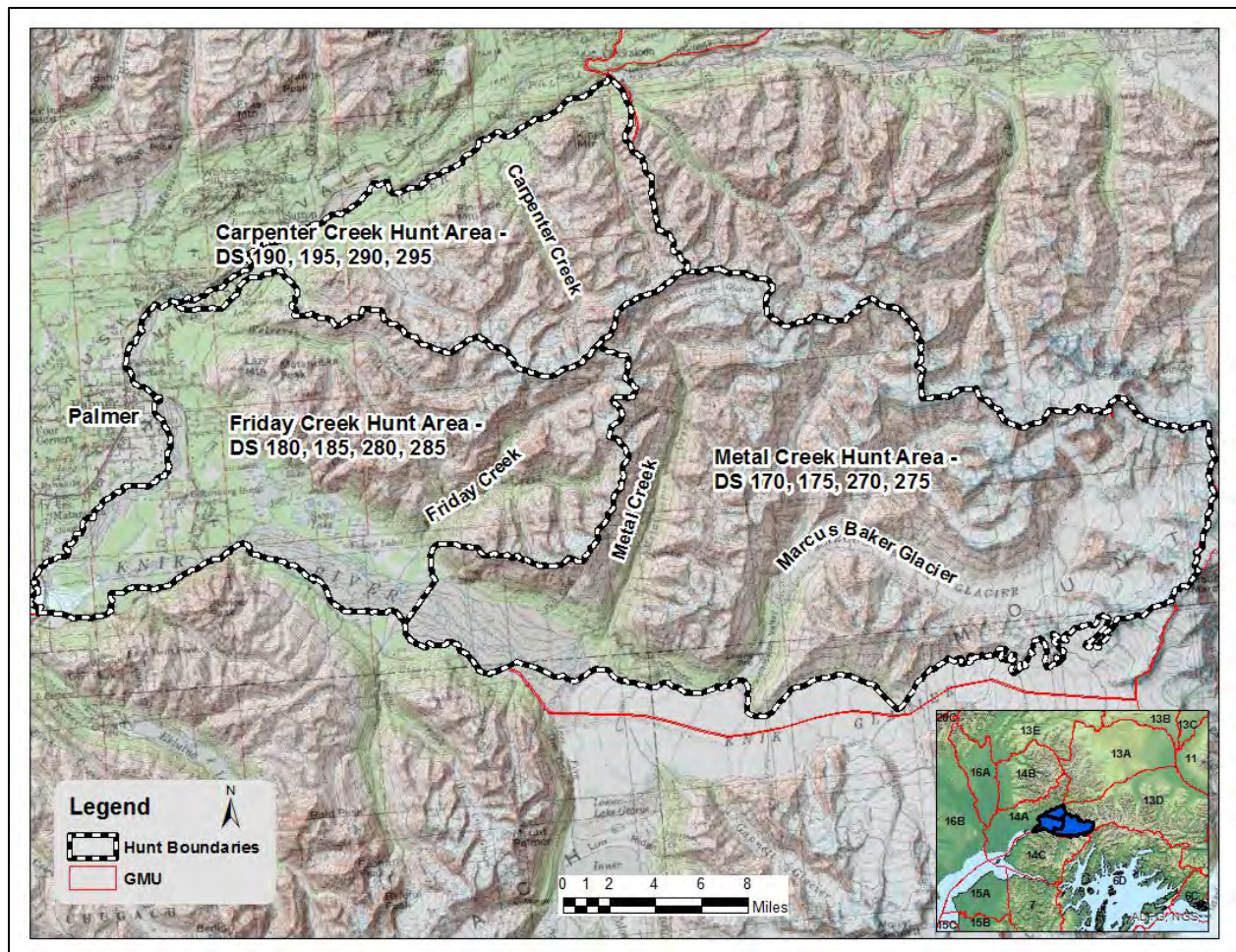
There is a restriction on the flying and spotting of sheep or directing hunters to sheep from August 10—September 20.

These units are entirely within the Anchorage-Matsu-Kenai nonsubsistence area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal if adopted would create additional opportunity for hunters who wish to take a Dall sheep with a bow and arrow prior to the general season and would overlap the youth hunt. Any harvest that occurs because of this proposal would result in a reduction in available full-curl rams for the general season. In addition, archers hunting during this period would not be subject to the same aircraft restrictions imposed on hunters during the general harvest sheep season.

**BACKGROUND:** The Dall sheep population is monitored through minimum count surveys, primarily in a portion of Unit 14A; surveys of the remainder of the Unit 14 portion of the Talkeetna mountains is sporadic (Figure 88-1).



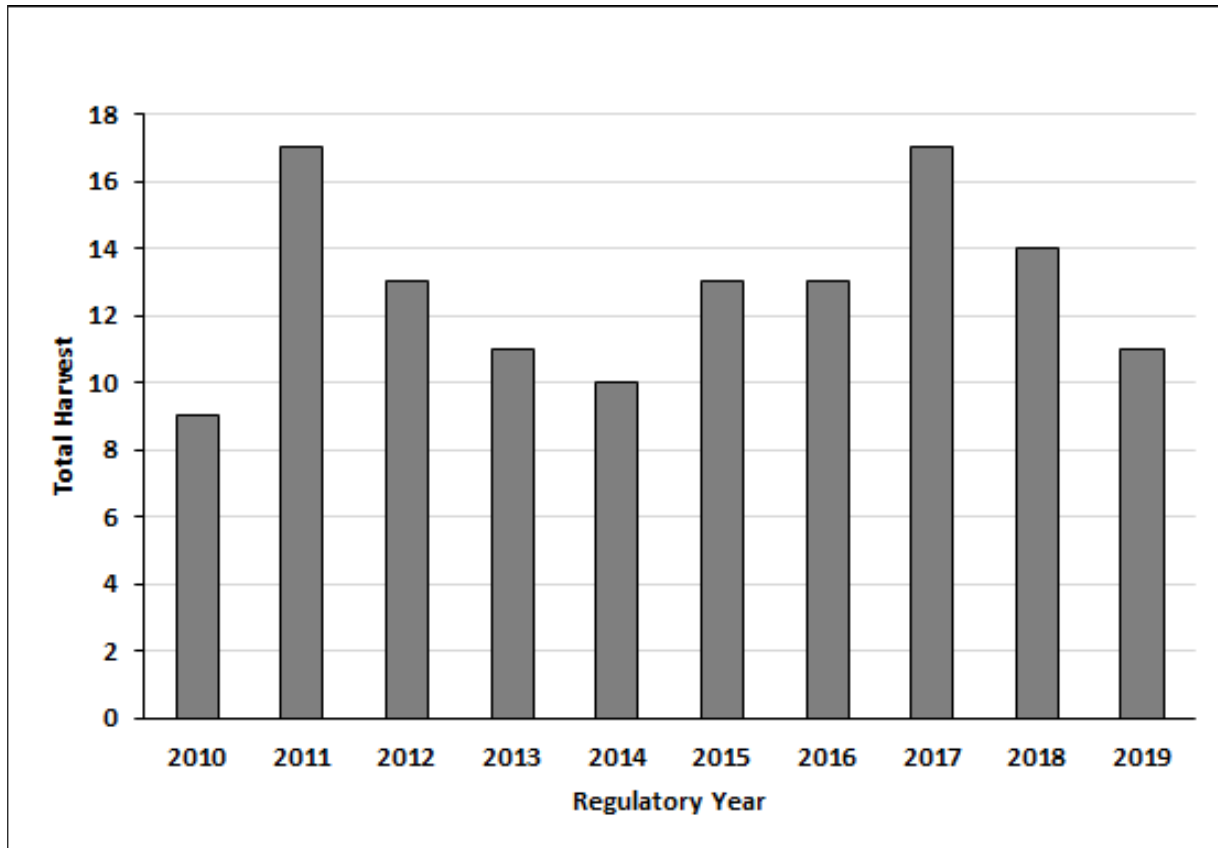


**Figure 88-1.** Location of the 3 Chugach Sheep Draw Hunt Areas in the Unit 14A portion of the Chugach Mountains.

**Table 88-1.** Results of the Unit 14A Talkeetna Mountains minimum sheep counts, RY2014–2020.

R <sub>Y</sub>	Full Rams	<Full Rams	Total Rams	Ewes	Lambs	Unkn. Sex	Total
2014	8	61	69	129	27	7	232
2015	4	38	42	80	37	7	166
2018	4	48	52	81	15	1	149
2019	5	54	59	113	61	2	235
2020	6	64	70	86	11	0	167
2014–2020 average	5	53	58	98	30	3	190

Sheep harvest in Units 14A&B Talkeetna Mountains has averaged 13 sheep annually for the last 10 years (Figure 88-2). Harvest remains stable with an average of 6 per year coming from the Unit 14A portion of the area and 7 from 14B.



**Figure 88-2.** Annual reported sheep harvest in the Units 14A&B portion of the Talkeetna Mountains by regulatory year, 2010–2019.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of Dall sheep hunting opportunity to archery hunters. The department has not identified a biological concern for sheep managed under the full-curl harvest strategy. Adoption of this proposal is expected to increase harvest of full-curl sheep.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 89 – 5 AAC 85. 055 Hunting seasons and bag limits for Dall sheep.** Establish an archery-only registration hunt for Dall sheep for certified bowhunters only in Unit 14A, Metal Creek area.

**PROPOSED BY:** Mike Harris

**WHAT WOULD THE PROPOSAL DO?** This proposal would create a traditional archery only registration hunt for residents and nonresidents for Dall Sheep in Units 14A Metal Creek (area described in DS170) October 5–October 15. Bag limit of 1 Dall Sheep with full curl horn

or larger for residents and 1 Dall Sheep with full curl horn or larger every four regulatory years for nonresidents.

**WHAT ARE THE CURRENT REGULATIONS?** In Unit 14A-Metal Creek (DS170, DS175, DS 270 and DS275) resident hunters may take 1 ram per regulatory year by drawing permit August 10–August 25 and August 26–September 20. Nonresidents may take 1 ram by drawing permit every 4 regulatory years August 10–August 25 and August 26–September 20.

This area is entirely within the Anchorage-Matsu-Kenai nonsubsistence area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted this proposal would create an additional 10 days to hunt sheep in the Metal Creek hunt area. This hunt would be a late season hunt occurring in October and would be limited to archers who wished to use traditional archery equipment only (i.e., recurve & longbows). This hunt would be for full-curl rams only, whereas the existing drawings are open to any-ram.

**BACKGROUND:** The board adopted the current regulations in 2007 following a decline in sheep numbers and continued high hunting pressure. The regulatory changes included the establishment of a drawing hunt structure in the Chugach Mountain areas, liberalization of bag limits in Unit 14A and western 13D to include any-ram hunts, and the allocation of harvest opportunity between residents and nonresidents. The current hunt structure was also designed to improve hunt quality by reducing “hunter crowding” through a drawing permit hunt structure, which reduced the number of hunters in the field by 62% in Unit 14A.

After the any ram drawing hunts were implemented in Unit 14A, sheep harvest decreased from an average of 24 rams (2000–2007) to 16 rams (2008–2019) (Table 89-1). The current level of harvest is sustainable and has not had a negative impact on the sheep population. In fact, under the any ram hunt structure the pressure on the full curl segment of the population is significantly reduced while still allowing for a number of trophy rams to be available to hunters dedicated to finding a large ram (Table 89-2). The reduced harvest was a direct result of limiting the number of hunters that could participate in the hunt under the new draw permit system. Hunter success increased from an average of 22% between (RY00–RY07) to 38% (RY08–RY19) after the drawing permit hunt was implemented. The horn length of sheep harvested decreased from an average of 36 inches to 32 inches during the same periods after moving from full-curl to any ram. While the department anticipated a decrease in the overall horn length because of the change in the management strategy, Taz-West in Unit 13D did not experience a decrease in horn length. Part of the reason for the decrease appears to be due to the method of access in the area. In 14A Chugach there are a few places where hunters on foot or ATV can access the area. Among those hunters who reported taking a <3/4 curl ram since the area went to an any ram bag limit in 2007, 46% accessed the area by ATV, horse, or on foot, and 54% used airplanes. Among hunters who took sheep >7/8 curl to over full curl, 73% used airplanes and only 27% accessed the area by other methods.

**Table 89-1.** Unit 14A Dall sheep harvest, hunter success, horn length, and associated age pre- and post-draw, regulatory years 2000–2019.

Regulatory Year	Total Permits	Total Hunters	Total Harvest	% Success	Average Length of Longest Horn	Average Age
<i>Pre-Draw</i>						
2000	-	114	21	18%	35.8	8.4
2001	-	101	19	19%	35.8	8.5
2002	-	104	20	19%	34.5	8.4
2003	-	103	22	21%	35.9	8.9
2004	-	113	32	28%	36.1	8.5
2005	-	104	29	28%	36.5	8.4
2006	-	125	24	19%	36.1	8.5
2007	-	104	22	21%	35.4	8.6
<i>Post-Draw</i>						
2008	40	28	9	32%	32.8	6.7
2009	40	26	11	42%	28.0	5.9
2010	40	21	6	29%	29.4	6.7
2011	50	40	14	35%	35.0	7.4
2012	50	40	13	33%	32.2	6.8
2013	75	41	18	44%	30.6	6.9
2014	75	53	18	34%	33.4	7.2
2015	75	53	22	42%	32.5	7.3
2016	75	53	15	28%	33.1	7.2
2017	71	51	24	47%	30.6	6.4
2018	64	49	20	41%	30.8	5.8
2019	64	50	24	48%	30.1	5.1

**Table 89-2.** Unit 14A Dall sheep survey composition results and harvest, regulatory years 1998–2019.

Survey Year	Total Rams Observed	≥ Full- curl Observed	≥ Full-curl Harvested	% Full-curl Harvested <sup>a</sup>	Sub-full curl Observed	Sub-full curl Harvested	% Sub-full curl Harvested
1998	218	28	38	136%	190	0	0%
2002	276	19	32	168%	257	0	0%
2006	167	26	35	135%	141	0	0%
2007	145	18	34	189%	127	0	0%
2009	134	8	0	0%	126	11	9%
2010	167	14	3	21%	153	3	2%
2012	177	16	5	31%	161	8	5%
2013	168	11	7	64%	157	11	7%
2014	172	13	9	69%	155	9	6%
2017	254	14	7	50%	240	18	8%
2019	207	10	4	40%	197	20	10%

<sup>a</sup> Percent full curl harvested is in relation to the number of full curl rams observed during the most recent surveys. Percentages greater than 100% indicate that more rams were harvested than were observed during that year's survey.

The any ram opportunity provided by these drawing hunts is extremely popular because it removes the legal requirement of judging full curl before harvesting a sheep. This is demonstrated by the 6,949 applications received for these hunts in 2019. The only sheep drawing more popular is in the Tok Management Area, which received 9,552 applications for 2019.

The current hunt structure was also designed to improve hunt quality by reducing “hunter crowding” through a drawing permit hunt structure, which reduced the number of hunters in the field by 62% in Unit 14A.

The Metal Creek area is a subset of the 14A Chugach sheep hunt areas and the survey data overlap with the other hunt units. Some full curl rams survive the regular hunting season each year based on the survey and harvest data. The harvest of full curl rams is not considered to create a biological concern for the sheep population.

Access to the proposed hunt area is difficult and is primarily aircraft (87%). There will likely be weather related complications that are associated with access and the ability to hunt since this area frequently has early winter conditions during the proposed hunt dates.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of Dall sheep hunting opportunity to archery hunters. The department has not identified a biological concern for sheep managed under the full-curl harvest strategy. Adoption of this proposal is not expected to increase the harvest of sheep more than an animal or two.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 90 – 5 AAC 85.020 Hunting seasons and bag limits for brown bear.** Extend the brown bear hunting season in Units 14A and 14B.

**PROPOSED BY:** Landon Albertson

**WHAT WOULD THE PROPOSAL DO?** Extend the brown bear season in Units 14A and 14B by 30 days with a later closure date from May 31 to June 30.

**WHAT ARE THE CURRENT REGULATIONS?** The current bear hunting regulations can be found in 5 AAC 85.020 and in the *2020–2021 Alaska Hunting Regulations*.

In Unit 14A regulations allow 1 brown bear every regulatory year between September 1–May 31 and they may be taken over a black bear bait station. The current regulations in Unit 14B are 1 brown bear every regulatory year August 1–May 31, and brown bears can be taken at bear bait stations. Baiting season for black bears is April 15–June 30.

In Units 14A and 14B there is no baiting allowed within one-quarter mile of the shorelines of the Susitna River, and the Little Susitna River, south of the Parks Highway bridge in addition to other standard baiting restrictions (5 AAC 92.044). In less developed areas and more remote areas of the region (i.e., Units 11 & 13) where brown bear densities are likely higher, seasons extend until the end of June and allow the taking of brown bears at bait stations.

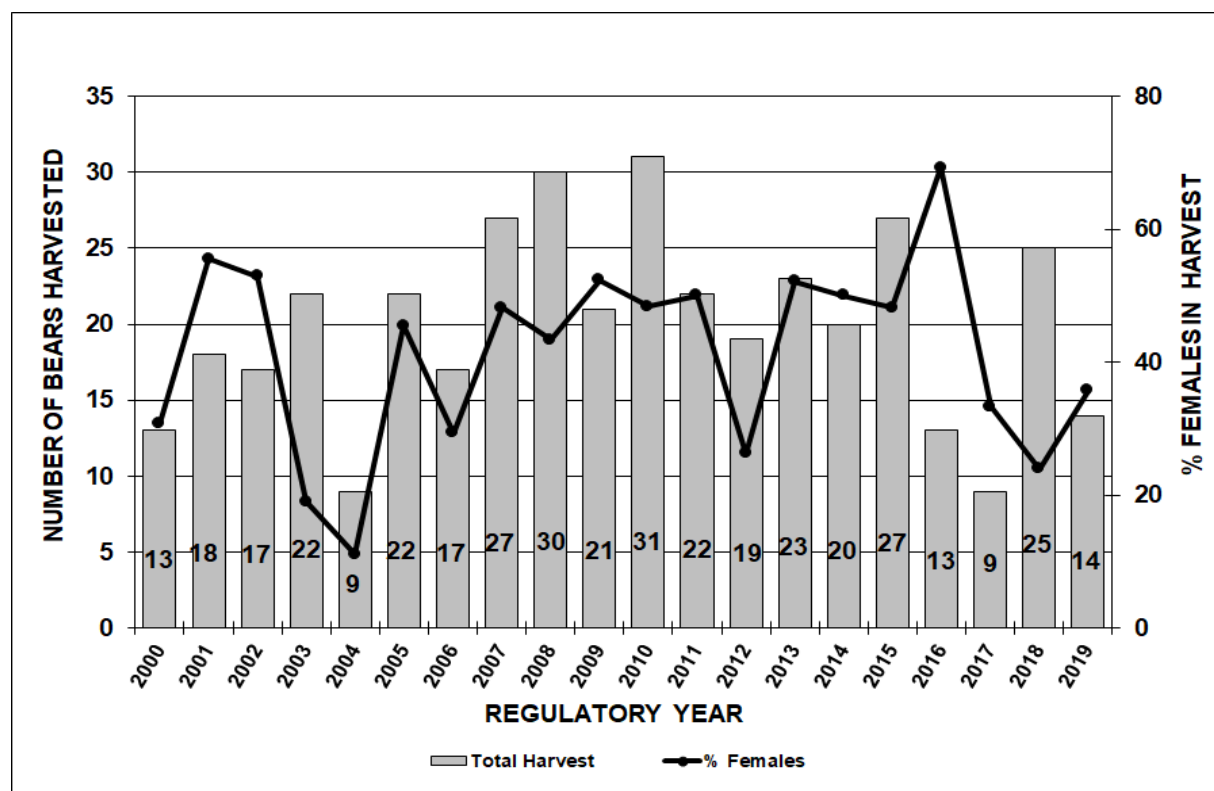
These units are entirely within the Anchorage-Matsu-Kenai nonsubsistence area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Adoption of this proposal is expected to increase harvest of brown bears and may lead to localized depletions of the bear population in areas where bear baiting is popular.

**BACKGROUND:** The brown bear management objective is to maintain a population that can sustain an annual harvest of 25 bears composed of at least 50% males. The 10-year average harvest from RY10–RY19 was 21 bears and the average percent of males was 56% (Figure 90-1).

Brown bear populations in these units are very difficult to survey because the units are heavily forested and other methods have yet to be used to develop an estimate, so the department has used other measures of abundance such as harvest, and the number of nuisance bear complaints and defense of life and property (DLP) killed bears. On average, fewer than 3 bears are killed by DLP in the units combined. There appears to be no trend in DLPs. Nuisance bear complaints are minimal.

Taking brown bears at black bear bait stations became legal in Unit 14B in RY15. Since that time, an average of 83% of bears taken in the spring have been taken over bait. Eight of the 10 brown bears taken in the spring RY18 season, and all 7 of the brown bears taken in the spring of RY19 in Unit 14A were taken over bait. The harvest chronology in Units 14A & 14B has shifted from being relatively equally distributed throughout the season to having the majority of brown bears harvested during the second half of May, starting in RY18 when taking of brown bears at black bear bait stations became legal in these units (Table 90-1).



**Figure 90-1.** Unit 14A&B total brown bear harvest and percent female of harvest, RY2000–2019.



**Table 90-1.** Chronology of the harvest of brown bears in Units 14A & 14B, RY2015–19.

Reg Year	July	August		September		Oct –	May		June	Total
	1–31	1–15	16–31	1–15	16–30	April	1–15	16–31	1–30	
RY15	0%	4%	7%	19%	11%	7%	19%	30%	4%	27
RY16	0%	0%	17%	25%	25%	8%	17%	8%	0%	12
RY17	0%	0%	25%	13%	13%	13%	25%	13%	0%	8
RY18	0%	4%	12%	16%	4%	0%	0%	64%	0%	25
RY19	0%	0%	14%	14%	7%	7%	0%	57%	0%	14

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal since it has not identified a biological concern for bears in Unit 14A&B; however, additional take may exceed management objectives. Adoption of this proposal is expected to increase harvest of brown bears and may lead to localized depletions of bear populations in areas where bear baiting is popular.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 91 – 5 AAC 85.020 (13) Hunting seasons and bag limits for brown bear.**  
Establish an archery-only general season for brown bear within Units 14A and 14B.

**PROPOSED BY:** Alaska Bowhunters Association

**WHAT WOULD THE PROPOSAL DO?** This proposal would create an archery-only season for brown bears in Units 14A and 14B from June 1 to June 30.

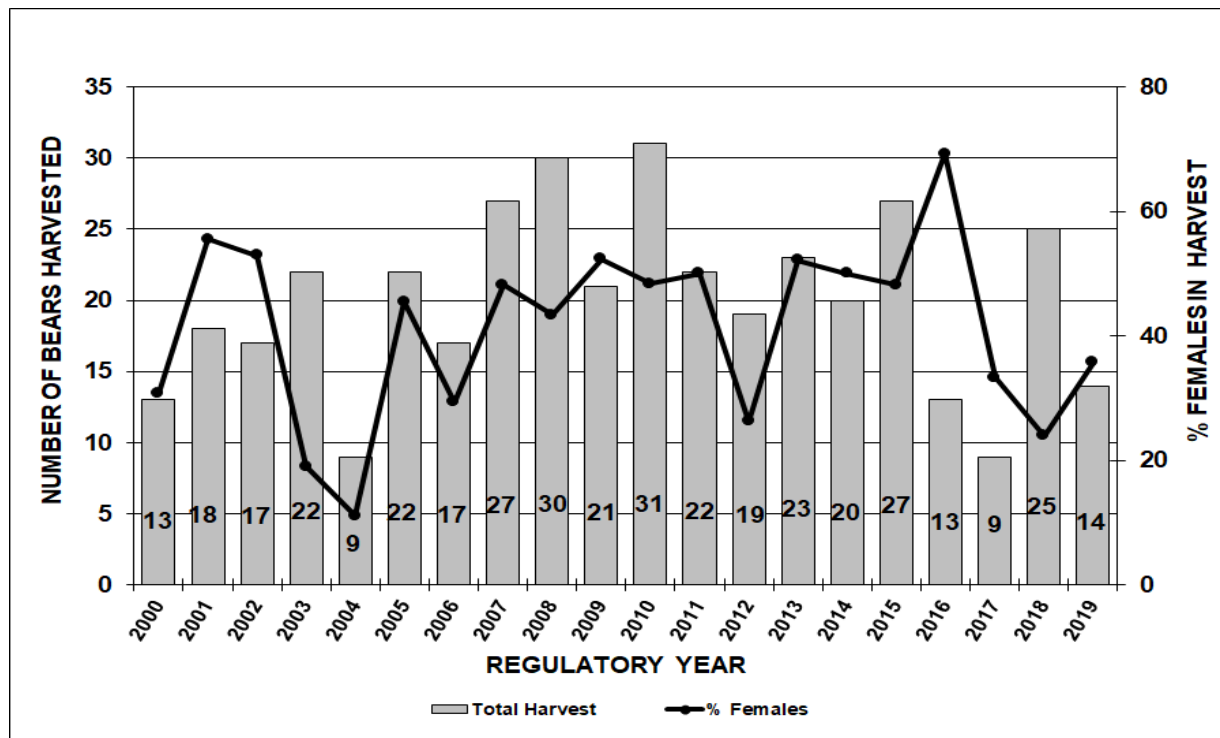
**WHAT ARE THE CURRENT REGULATIONS?** The current brown bear hunting regulations can be found in 5 AAC 85.020 and in the *2020–2021 Alaska Hunting Regulations*.

In Unit 14A regulations allow 1 brown bear every regulatory year between September 1–May 31 and they may be taken over a black bear bait station. The current regulations in Unit 14B are 1 brown bear every regulatory year August 1–May 31, and brown bears can be taken at bear bait stations. Baiting season for black bears is April 15–June 30.

In Units 14A and 14B there is no baiting allowed within one-quarter mile of the shorelines of the Susitna River, and the Little Susitna River, south of the Parks Highway bridge in addition to other standard baiting restrictions (5 AAC 92.044). In less developed areas, and the more remote areas of the region (i.e., Units 11 & 13) where brown bear densities are likely higher, seasons extend until the end of June and allow the taking of brown bears at bait stations.

These units are entirely within the Anchorage-Matsu-Kenai nonsubsistence area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Adoption of this proposal is expected to increase harvest of brown bears and may lead to localized depletions in areas where bear baiting is popular.



**Figure 91-1.** Unit 14A&B total brown bear harvest and percent of females in harvest, RY2000-2019.

**BACKGROUND:** The brown bear management objective is to maintain a population that can sustain an annual harvest of 25 bears composed of at least 50% males. The 10-year average harvest from RY09–RY18 was 21 bears and the average percent of males was 55% (Figure 91-1). The department has not identified a biological concern for bears in Unit 14A or 14B, and has not identified a trend in the number of nuisance bear complaints or DLP killed bears. Over the past 20 years Units 14A & 14B combined have averaged 3 DLP bears annually, few nuisance reports, and there are no discernable trends in the data.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of brown bear hunting opportunity to archery hunters. The department has not identified a biological concern for bears in Unit 14A or 14B; however, additional harvest may exceed management objectives. Adoption of this proposal is expected to increase harvest of brown bears.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 92 – 5 AAC 85.020 Hunting seasons and bag limits for brown bear.** Open a year-round hunting season for brown bears in Unit 16.

**PROPOSED BY:** Matanuska Valley Fish & Game Advisory Committee

**WHAT WOULD THE PROPOSAL DO?** This proposal would extend the brown bear season in Unit 16 by 56 days from August 10–June 15 to no closed season.

**WHAT ARE THE CURRENT REGULATIONS?** The current brown bear regulations for Unit 16 can be found in 5 AAC 85.020 and in the *2020–2021 Alaska Hunting Regulations*.

<b>Units and Bag Limits</b>	<b>Resident Open Season (Subsistence and General Hunts)</b>	<b>Nonresident Open Season</b>
Unit 16(A) 2 bears every regulatory year	Aug. 10 – June 15	Aug. 10 – June 15
Unit 16(B), that portion within a one-mile radius of the mouth of Wolverine Creek at 60.80° N. lat., 152.31° W. long.  2 bears every regulatory year	Sept. 15 – May 31	Sept. 15 – May 31
Remainder of Unit 16(B)  2 bears every regulatory year	Aug. 10 – June 15	Aug. 10 – June 15.

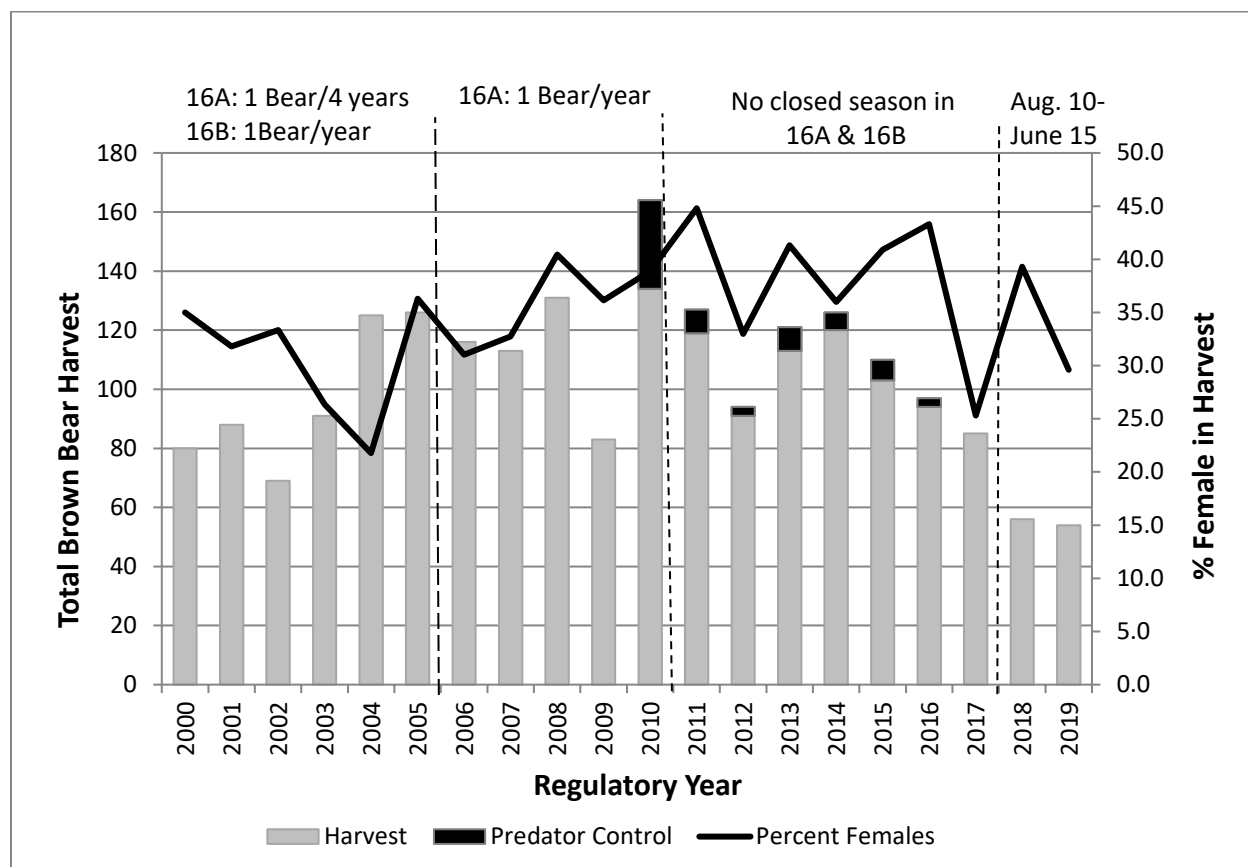
Hunters can harvest brown bears over bait. The black bear baiting seasons are July 1 – Oct. 15 and Apr. 15 – June 30.

Unit 16A is located within the Anchorage-Matsu-Kenai Nonsubsistence area, and Unit 16B has a negative customary and traditional use finding for brown bears.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal if adopted would add 56 days to the brown bear season in Unit 16. From RY2011 to RY2018, when there was no closed season, bears taken between June 1 and August 9 averaged 37% of the total harvest. This proposal, if passed, can be expected to increase the total harvest of bears in Units 16A and 16B.

**BACKGROUND:** The brown bear harvest regulations have a complex history. Season dates within one mile of the mouth of Wolverine Creek were changed to September 15 – May 31 in RY2003. In the rest of the unit, season dates have been adjusted over time to allow hunters greater opportunity to take bears in the spring and to take bears during the general harvest moose

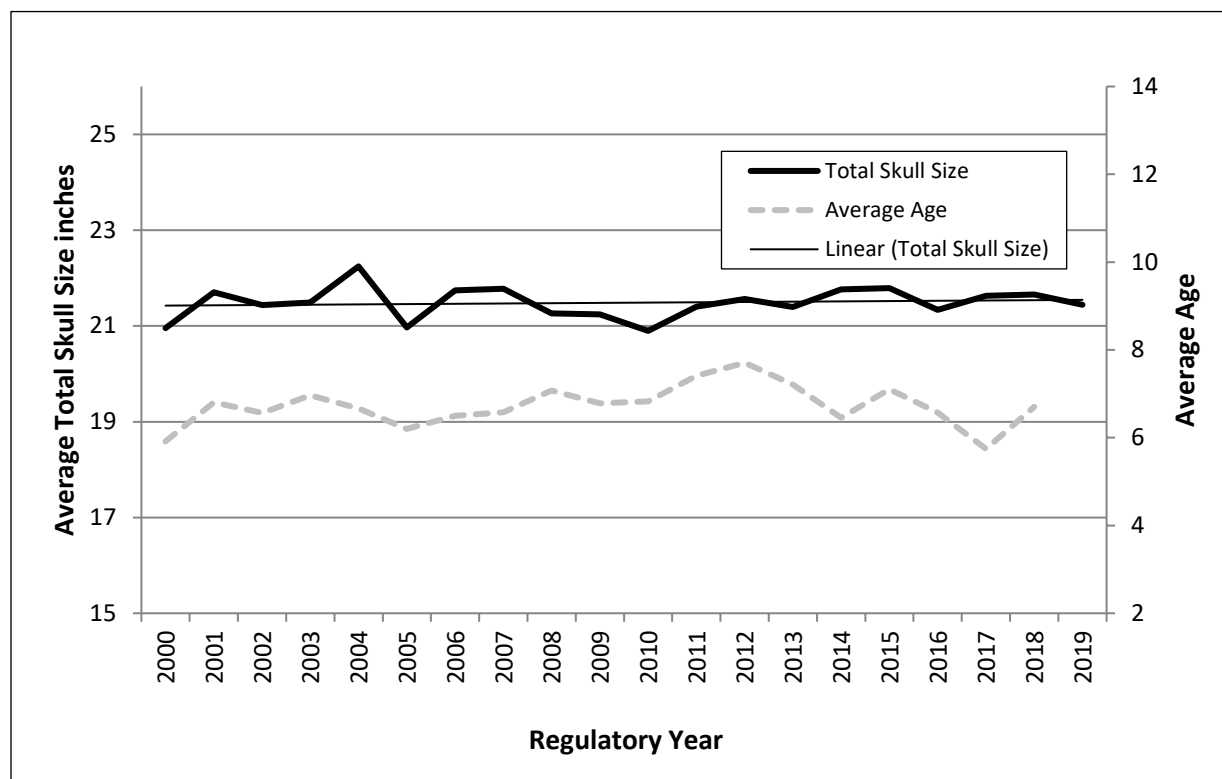
season. More opportunity was created when the regulations were changed to allow hunters to take a bear each year and again by an increase in the bag limit in Unit 16B. Beginning in RY 2011 there was no closed season in Unit 16. Brown bears could be taken at bait stations beginning in RY13. In 2018 the BOG received a proposal from a member of the public who lived in the area requesting a reduced season and bag limit of 1. The justification for the proposal was that the moose population had recovered, and the bear population no longer needed to be reduced. The BOG compromised on the proposal and the season was reduced from no closed season to the current dates for the remainder of 16B to August 10–June 15, but the limit of 2 bears was not changed (Figure 92-1).



**Figure 92-1.** Unit 16 brown bear harvest, percent females in the harvest, and associated seasons, RY2006–2019.

The Unit 16 brown bear population was estimated using the line-transect method in 2007. The population was estimated to be  $937 \pm 313$  brown bears. As a component of the Intensive Management Plan for Moose in Unit 16, a 960 square mile portion of Unit 16B was included in the predation control program by the Board of Game in the spring of 2010. The expedited regulation was approved in time for the spring brown bear season. That spring, permittees took 30 bears. Predation control accounted for fewer than 6 bears annually between 2011 and 2016. The department has no reason to believe that the brown bear population has changed substantially from

2007 when the last estimate was conducted. Modelling by the department completed in 2013 showed that the harvest had little effect on the brown bear population. Traditional indicators used to evaluate trends, such as skull size, age, and percent composition of females, are being relied on to a lesser extent in recent years due to their limitations. These parameters, however, indicated no trends or large scale changes in the population (Figure 92-2).



**Figure 92-2.** Unit 16 average brown bear skull size and age in harvest, RY 2000–2019.

Since 2005 the maximum number of people who harvested at least 2 brown bears in a regulatory year is 7 and the average is 3 (Table 92-1). The two-bear bag limit has a very minimal impact on the total harvest because it is rarely fulfilled.

**Table 92-1.** Number of hunters that took more than one bear, RY2008–19.

Reg Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Harvest	131	83	135	119	91	113	121	105	94	85	56	54
# Hunters Harvested ≥2 Bears	4	3	3	7	2	4	2	4	1	1	1	0

The average harvest from 2000–2010 (open season approximately August 10–May 31) is 105 brown bears. Average harvest from 2011–2016 (no closed season) is 107 bears. Average harvest with an August 10–June 15 season was 55 bears.

Most brown bear harvest occurs in the spring. This remains true even after the implementation of the closed season in RY18 (Table 92-2).

**Table 92-2.** Harvest chronology of brown bears in Unit 16B, RY2015–19.

Reg. Year	July		August		September		Oct - April	May		June		Total
	1–15	16–31	1–15	16–31	1–15	16–30		1–15	16–31	1–15	16–30	
RY15	6%	4%	6%	4%	5%	8%	7%	2%	19%	27%	13%	107
RY16	8%	4%	2%	7%	12%	14%	6%	1%	8%	20%	16%	97
RY17	11%	1%	4%	9%	21%	9%	9%	0%	7%	16%	15%	82
RY18	2%	0%	4%	9%	11%	13%	0%	0%	16%	44%	2%	55
RY19	0%	0%	8%	6%	9%	17%	15%	0%	11%	34%	0%	53

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal and has not identified a biological concern for bears in Unit 16. Adoption of this proposal is expected to increase harvest of brown bears.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 93 – 5 AAC 85.020 Hunting seasons and bag limits for brown bear.** Open a year-round season for brown bears in Unit 16.

**PROPOSED BY:** Steven Perrins

**WHAT WOULD THE PROPOSAL DO?** This proposal would extend the brown bear season in Unit 16 from an August 10 to June 15 season to no closed season.

**WHAT ARE THE CURRENT REGULATIONS?** The current brown bear hunting regulations for Unit 16 can be found in 5 AAC 85.020 and in the *2020–2021 Alaska Hunting Regulations*.

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Unit 16(A) 2 bears every regulatory year	Aug. 10 – June 15	Aug. 10 – June 15

Unit 16(B), that portion  
within a one-mile radius of the  
mouth of Wolverine Creek at  
60.80° N. lat., 152.31° W. long.

Sept. 15 – May 31

Sept. 15 – May 31

2 bears every regulatory year

Remainder of Unit 16(B)

Aug. 10 – June 15

Aug. 10 – June 15

2 bears every regulatory year

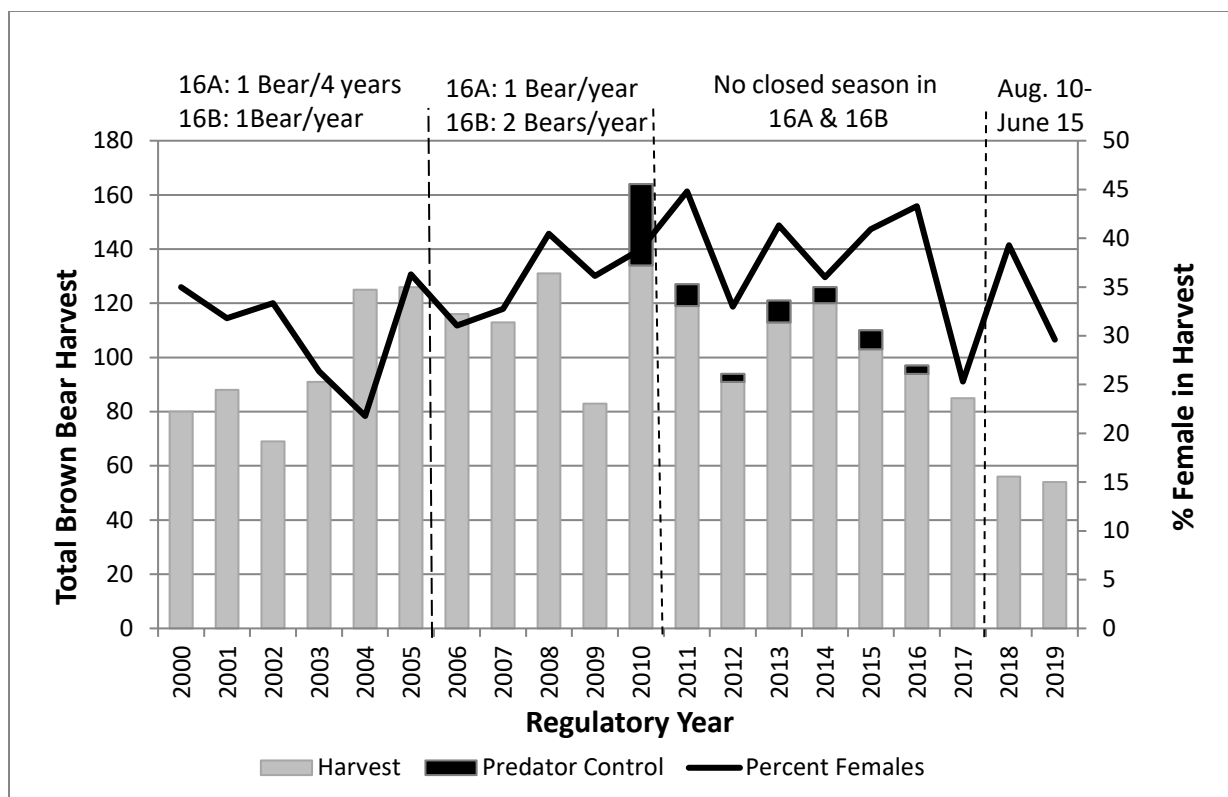
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Brown bears may be taken over bait. Baiting season for black bears is April 15–June 30.

Unit 16A is located within the Anchorage-Matsu-Kenai Nonsubsistence area, and Unit 16B has a negative customary and traditional use finding for brown bears.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal if adopted would extend the brown bear season in Unit 16 by 55 days from August 10–June 15 to no closed season. The extended season will allow hunters to harvest brown bears while baiting black bears, harvest bears opportunistically while in the field, and will likely decrease bears reported as Defense of Life or Property (DLP).

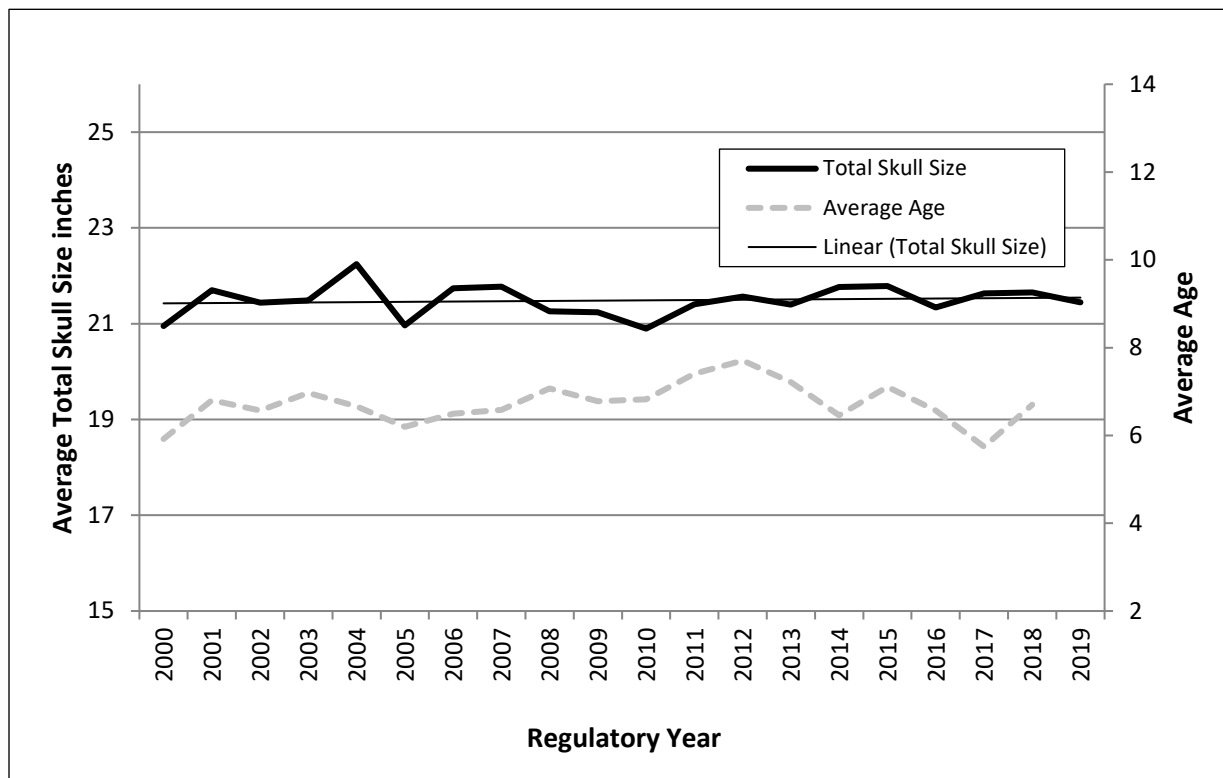
**BACKGROUND:** The brown bear harvest regulations have a complex history. Season dates have been adjusted over time to allow hunters a greater opportunity to take bears in the spring and to take bears during the general harvest moose season. More opportunity was created when the regulations were changed to allow hunters to take a bear each year and again by an increase in the bag limit in Unit 16B. Beginning in RY 2011 there was no closed season in Unit 16. In 2018 the BOG received a proposal from a member of the public who lived in the area requesting a reduced season and bag limit of 1. The justification for the proposal was that the moose population had recovered, and the bear population no longer needed to be reduced. The BOG compromised on the proposal and the season was reduced from no closed season to the current dates for the remainder of 16B to August 10–June 15, but the limit of 2 bears was not changed (Figure 93-1).



**Figure 93-1.** Unit 16 brown bear harvest, percent females in the harvest, and associated regulations, RY2000–2019.

The Unit 16 brown bear population was surveyed using the line-transect method in 2007. The population was estimated to be  $937 \pm 313$  brown bears. As a component of the Intensive Management Plan for Moose in Unit 16, a 960 square mile portion of Unit 16B was included in the predation control program by the board in the spring of 2010. The expedited regulation was approved in time for the spring brown bear season. That spring, permittees took 30 bears. Since that time, predation control accounted for fewer than six bears annually between 2011 and 2016. The department has no reason to believe that the brown bear population has changed substantially from 2007 when the last estimate was conducted. Modelling by the department completed in 2013 showed that the harvest had little effect on the brown bear population. Traditional indicators used to evaluate trends, such as skull size, age and percent composition of females, are being relied on to a lesser extent in recent years due to their limitations. These parameters, however, indicate no trends or large-scale differences in the population (Figure 93-2).





**Figure 93-2.** Unit 16 average brown bear skull size and age, RY2000–2019.

Since 2005 the maximum number of people who harvested two brown bears in a regulatory year is seven and the average is three. The two bear bag limit has a very minimal impact on the total harvest (Table 93-1).

**Table 93-1.** Number of hunters who harvested more than 1 bear per year.

Regulatory Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Harvest	131	83	135	119	91	113	121	105	94	85	56	54
# Hunters who Harvested 2 Bears	4	3	3	7	2	4	2	4	1	1	1	0

The average harvest from 2000–2010 (open season approximately August 10–May 31) is 105 brown bears. Average harvest from 2011–2016 (no closed season) is 107 bears. From 2010 to 2017, when the season was no closed season, 72% of the harvest has occurred between August 10 and May 31. Average harvest in 2018 and 2019, with the season August 10–June 15, was 54. The

majority of brown bear harvest occurs in the spring. This remains true even after the implementation of the closed season in RY18 (Table 93-2)

**Table 93-2.** Harvest chronology of brown bears in Unit 16B, RY2015–19.

Reg. Year	July		August		September		Oct - April	May		June		Total
	1–15	16–31	1–15	16–31	1–15	16–30		1–15	16–31	1–15	16–30	
RY15	6%	4%	6%	4%	5%	8%	7%	2%	19%	27%	13%	107
RY16	8%	4%	2%	7%	12%	14%	6%	1%	8%	20%	16%	97
RY17	11%	1%	4%	9%	21%	9%	9%	0%	7%	16%	15%	82
RY18	2%	0%	4%	9%	11%	13%	0%	0%	16%	44%	2%	55
RY19	0%	0%	8%	6%	9%	17%	15%	0%	11%	34%	0%	53

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal and has not identified a biological concern for bears in Unit 16. Adoption of this proposal is expected to increase harvest of brown bears.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 94 – 5 AAC 85.020 Hunting seasons and bag limits for brown bear.** Establish a general season by bow and arrow only for brown bears within Units 16A and 16B, remainder.

**PROPOSED BY:** Alaska Bowhunters Association

**WHAT WOULD THE PROPOSAL DO?** This proposal would create an archery only brown bear season in Units 16A and 16B remainder from June 16 to August 9.

**WHAT ARE THE CURRENT REGULATIONS?**

<b>Units and Bag Limits</b>	<b>Resident Open Season (Subsistence and General Hunts)</b>	<b>Nonresident Open Season</b>
Unit 16(A) 2 bears every regulatory year	Aug. 10 – June 15	Aug. 10 – June 15
Unit 16(B), that portion within a one-mile radius of the mouth of Wolverine Creek at 60.80° N. lat., 152.31° W. long.	Sept. 15 – May 31	Sept. 15 – May 31

2 bears every regulatory year

Remainder of Unit 16(B)

Aug. 10 – June 15

Aug. 10 – June 15

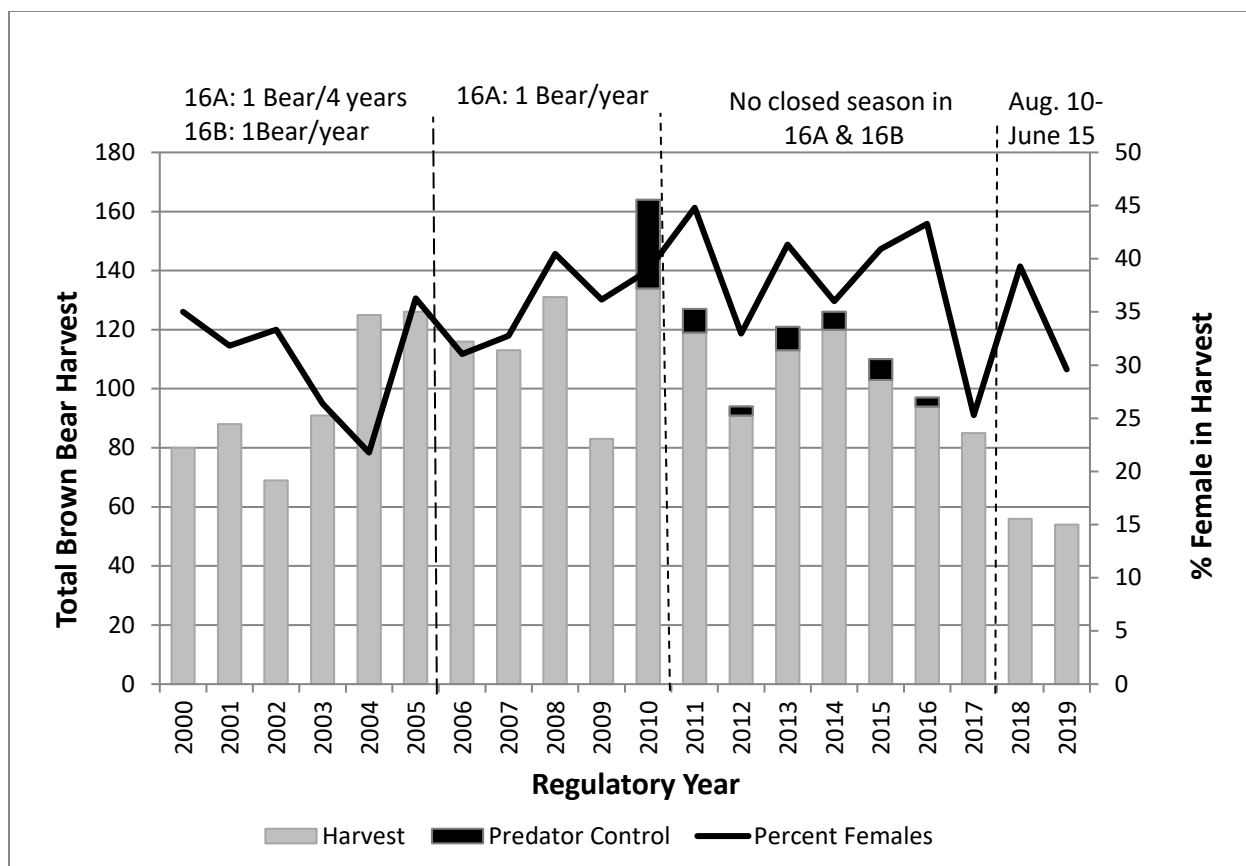
2 bears every regulatory year

Hunters can harvest brown bears over bait. The black bear baiting seasons are July 1 – Oct. 15 and Apr. 15 – June 30.

Unit 16A is located within the Anchorage-Matsu-Kenai Nonsubsistence area, and Unit 16B has a negative customary and traditional use finding for brown bears.

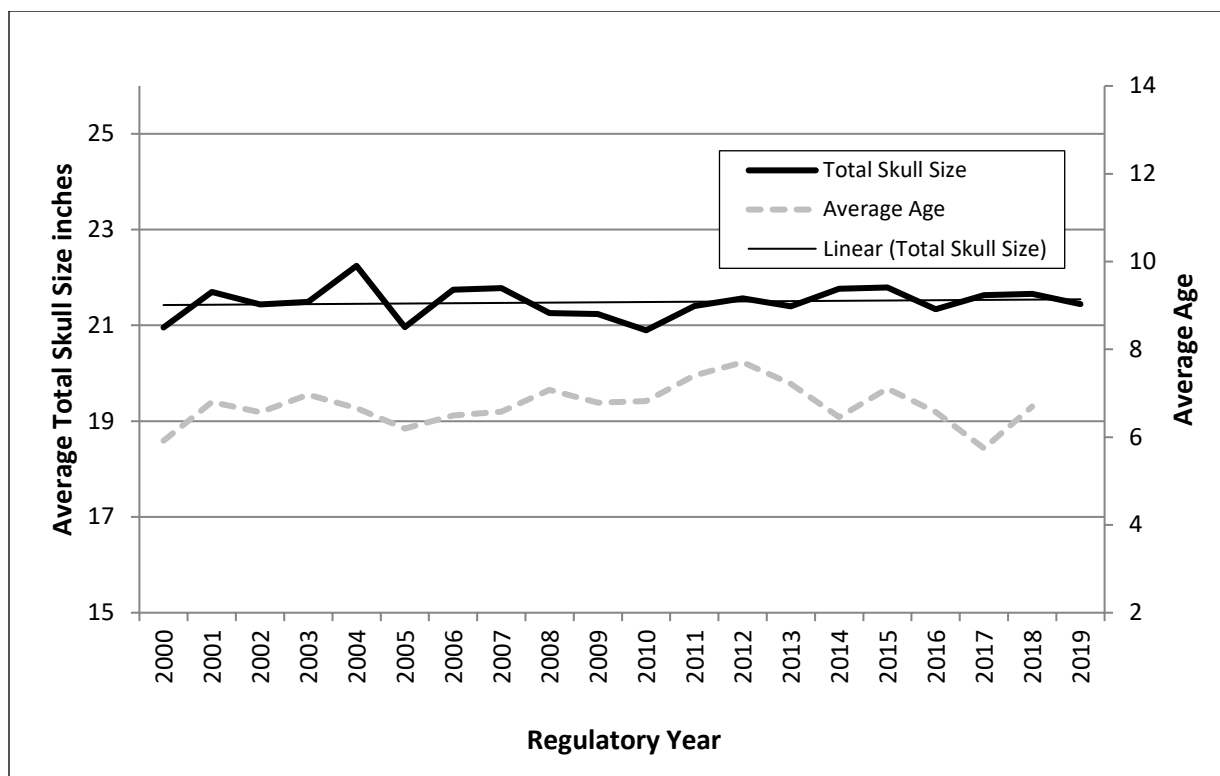
**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal if adopted would extend the brown bear season in Unit 16 (outside of the Wolverine Creek area) by 55 days for archery only. The proposed season would be August 10—June 15 and archery only June 16—August 9. The extended season will allow hunters to harvest brown bears over bait, and harvest bears opportunistically while in the field.

**BACKGROUND:** The brown bear harvest regulations have a complex history. Season dates have been adjusted over time to allow hunters a greater opportunity to take bears in the spring and to take bears during the general harvest moose season. More opportunity was created when the regulations were changed to allow hunters to take a bear each year and again by an increase in the bag limit in Unit 16B. Beginning in RY 2011 there was no closed season in Unit 16. In 2018 the BOG received a proposal from a member of the public who lived in the area requesting a reduced season and bag limit of 1. The justification for the proposal was that the moose population had recovered, and the bear population no longer needed to be reduced. The BOG compromised on the proposal and the season was reduced from no closed season to the current dates for the remainder of 16B to August 10–June 15, but the limit of 2 bears was not changed (Figure 94-1).



**Figure 94-1.** Unit 16 brown bear harvest, percent females in the harvest, and associated regulations, RY2000–2019.

The Unit 16 brown bear population was surveyed using the line-transect method in 2007. The population was estimated to be  $937 \pm 313$  brown bears. As a component of the Intensive Management Plan for Moose in Unit 16, a 960 square mile portion of Unit 16B was included in the predation control program by the board in the spring of 2010. The expedited regulation was approved in time for the spring brown bear season. That spring, permittees took 30 bears. Since that time, predation control accounted for fewer than six bears annually between 2011 and 2016. The department has no reason to believe that the brown bear population has changed substantially from 2007 when the last estimate was conducted. Modelling by the department completed in 2013 showed that the harvest had little effect on the brown bear population. Traditional indicators used to evaluate trends, such as skull size and percent composition of females, are being relied on to a lesser extent in recent years due to their limitations. These parameters, however, indicate no trends or large scale changes exist in the population (Figure 94-2).



**Figure 94-2.** Unit 16 average brown bear skull size and age, RY 2000 – 2019.

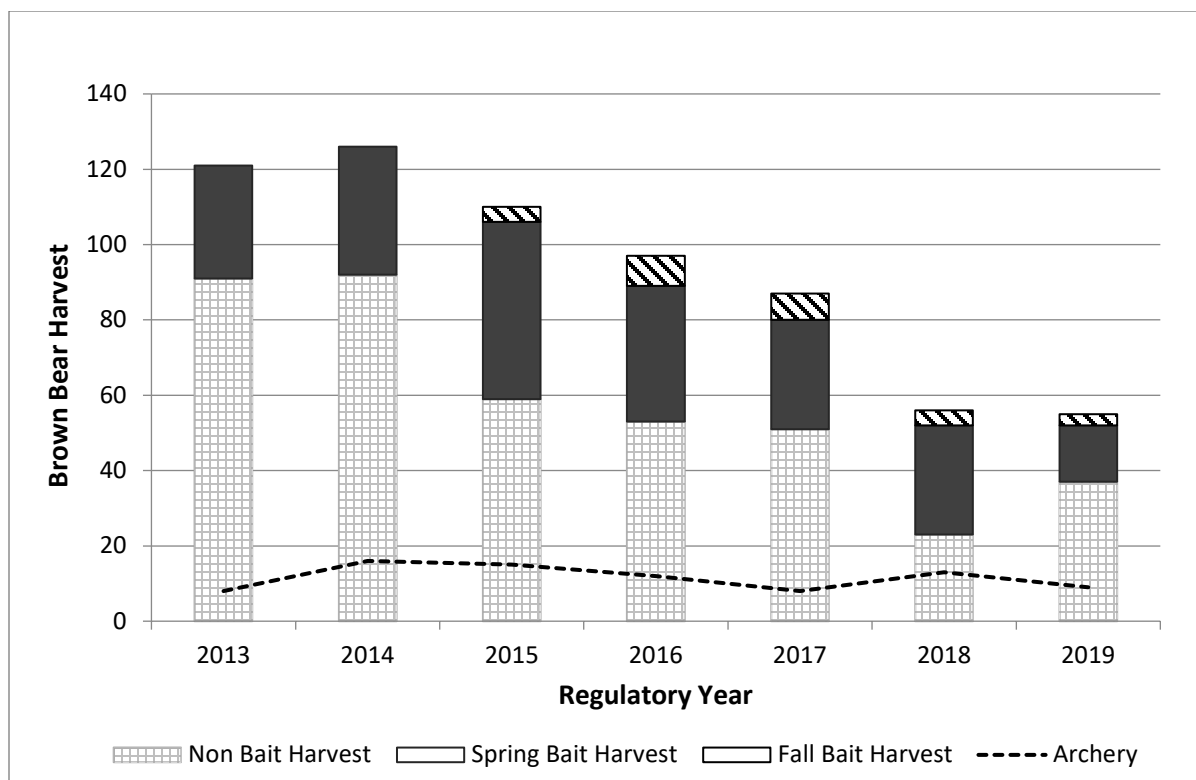
Since 2005 the maximum number of people who harvested two brown bears in a regulatory year is seven and the average is three. The two bear bag limit has a very minimal impact on the total harvest (Table 94-1).

**Table 94-1.** Number of hunters who harvested more than 1 bear per year.

Regulatory Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Harvest	131	83	135	119	91	113	121	105	94	85	56	54
# Hunters who Harvested 2 Bears	4	3	3	7	2	4	2	4	1	1	1	0

The average harvest from 2000–2010 (open season approximately August 10–May 31) is 105 brown bears. Average harvest from 2011–2016 (no closed season) is 107 bears. Average harvest with the season August 10–June 15 was 55.

Archers harvest a relatively low proportion of the brown bears in Unit 16. The average annual harvest of brown bears with archery equipment from 2013–2019 is 11.6 (Figure 94-3).



**Figure 94-3.** Unit 16 brown bear harvest, spring bait harvest, fall bait harvest, and archery harvest RY2013–2019.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of brown bear hunting opportunity to archery hunters and does not have a biological concern for bears in Unit 16. Adoption of this proposal is expected to increase harvest of brown bears.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 95– 5 AAC 85.020. Hunting seasons and bag limits for brown bear.** Extend the brown bear hunting season in Unit 16B.

**PROPOSED BY:** Jonah Stewart

**WHAT WOULD THE PROPOSAL DO?** This proposal would extend the brown bear hunting season in Units 16B by 15 days from June 15 to June 30.

**WHAT ARE THE CURRENT REGULATIONS?** The current brown bear hunting regulations can be found in 5 AAC 85.020 and in the *2020–2021 Alaska Hunting Regulations*.

**Resident  
Open Season**

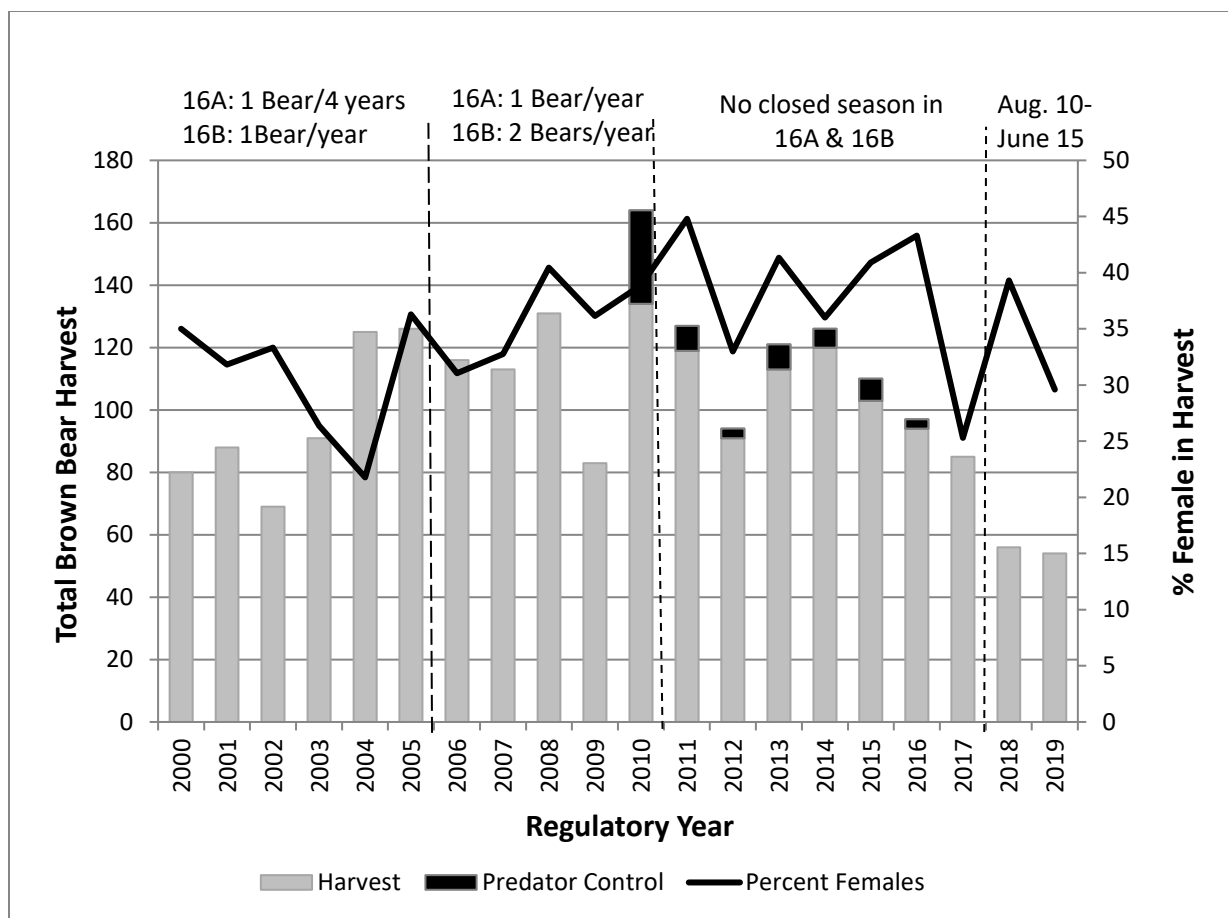
<b>Units and Bag Limits</b>	<b>(Subsistence and General Hunts)</b>	<b>Nonresident Open Season</b>
Unit 16(A) 2 bears every regulatory year	Aug. 10 – June 15	Aug. 10 – June 15
Unit 16(B), that portion within a one-mile radius of the mouth of Wolverine Creek at 60.80° N. lat., 152.31° W. long.  2 bears every regulatory year	Sept. 15 – May 31	Sept. 15 – May 31
Remainder of Unit 16(B)  2 bears every regulatory year	Aug. 10 – June 15	Aug. 10 – June 15

Hunters can harvest brown bears over bait. The black bear baiting seasons are July 1 – Oct. 15 and Apr. 15 – June 30.

Unit 16B has a negative customary and traditional use finding for brown bears.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted, the extended season will allow hunters to harvest brown bears while baiting black bears, harvest bears opportunistically while in the field, and will likely decrease bears reported as Defense of Life or Property (DLP). Adoption of this proposal is expected to increase harvest of brown bears.

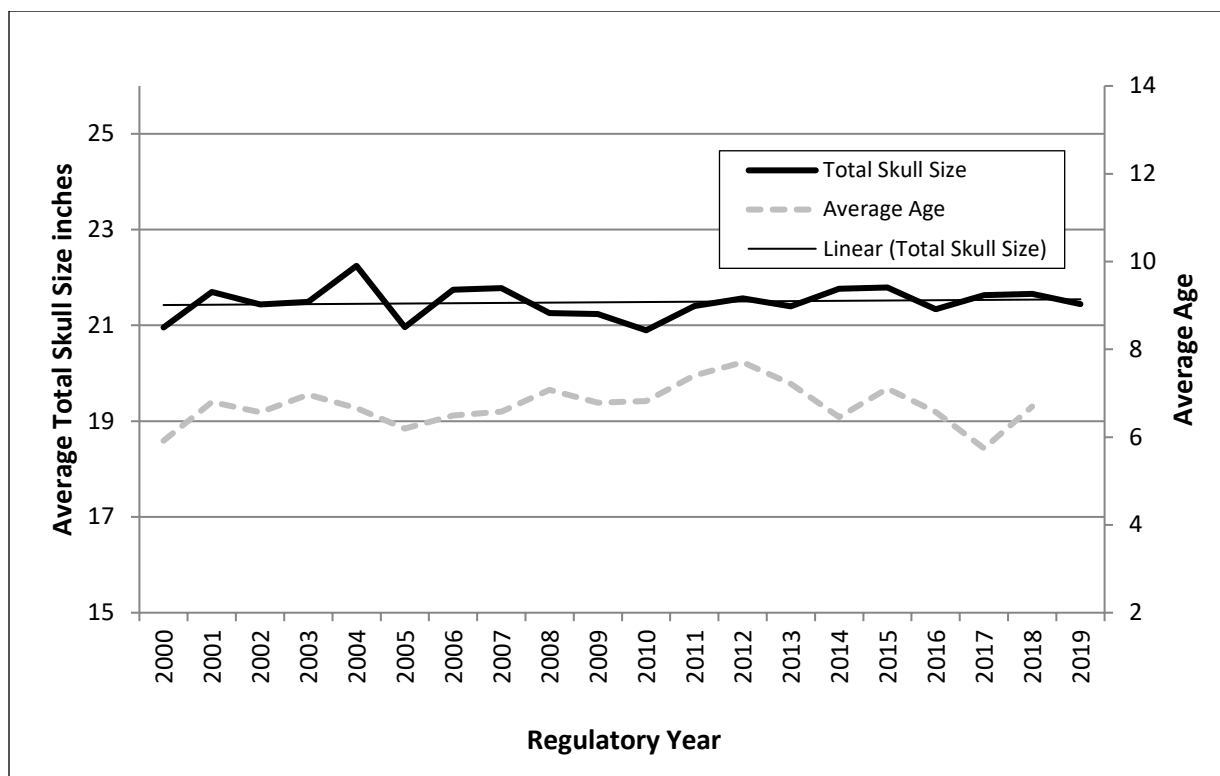
**BACKGROUND:** The brown bear harvest regulations have a complex history. Season dates have been adjusted over time to allow hunters a greater opportunity to take bears in the spring and to take bears during the general harvest moose season. More opportunity was created when the regulations were changed to allow hunters to take a bear each year and again by an increase in the bag limit in Unit 16B. Beginning in Regulatory Year (RY) 2011 there was no closed season in Unit 16. In 2018 the BOG received a proposal from a member of the public who lived in the area requesting a reduced season and bag limit of 1. The justification for the proposal was that the moose population had recovered, and the bear population no longer needed to be reduced. The BOG compromised on the proposal and the season was reduced from no closed season to the current dates for the remainder of 16B to August 10–June 15, but the limit remained 2 bears (Figure 95-1).



**Figure 95 -1.** Unit 16 brown bear harvest, percent females in the harvest, and associated season dates, RY2006–2019.

The Unit 16 brown bear population was surveyed using the line-transect method in 2007. The population was estimated to be  $937 \pm 313$  brown bears. As a component of the Intensive Management Plan for Moose in Unit 16, a 960 square mile portion of Unit 16B was included in the predation control program by the Board of Game in the spring of 2010. The expedited regulation was approved in time for the spring brown bear season. That spring, permittees took 30 bears. Since that time, predation control accounted for fewer than six bears annually between 2011 and 2016. The department has no reason to believe that the brown bear population has changed substantially from 2007 when the last estimate was conducted. Modelling by the department completed in 2013 showed that the harvest had little effect on the brown bear population. Traditional indicators used to evaluate trends, such as skull size, age, and percent composition of females, are being relied on to a lesser extent in recent years due to their limitations. These parameters, however, indicated no trends or large scale changes in the population (Figure 95 -2).





**Figure 95-2.** Unit 16 average brown bear skull size and age harvested, RY 2000–2019.

Since 2005 the maximum number of people who harvested 2 brown bears in a regulatory year is 7 and the average is 3. The two-bear bag limit has a very minimal impact on the total harvest (Table 95-1).

Table 95-1. Number of hunters who harvested more than 1 bear per year in Unit 16, RY2008–2019.

Regulatory Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Harvest	131	83	135	119	91	113	121	105	94	85	56	54
# Hunters who Harvested 2 Bears	4	3	3	7	2	4	2	4	1	1	1	0

The average harvest from 2000–2010 (open season approximately August 10–May 31) is 105 brown bears. Average harvest from 2011–2016 (no closed season) is 107 bears. From 2010 to 2017, when there was no closed season, 72% of the harvest occurred between August 10 and May 31. Average harvest with the season August 10–June 15 was 54.

Most brown bear harvest occurs in the spring. This remained true after the implementation of a mid-summer closed season of June 15—August 10 in RY18 (Table 95-2)

**Table 95-2.** Harvest chronology of brown bears in Unit 16B, RY2015–19.

Reg. Year	July		August		September		Oct - April	May		June		Total
	1–15	16– 31	1–15	16–31	1–15	16–30		1–15	16–31	1– 15	16– 30	
RY15	6%	4%	6%	4%	5%	8%	7%	2%	19%	27%	13%	107
RY16	8%	4%	2%	7%	12%	14%	6%	1%	8%	20%	16%	97
RY17	11%	1%	4%	9%	21%	9%	9%	0%	7%	16%	15%	82
RY18	2%	0%	4%	9%	11%	13%	0%	0%	16%	44%	2%	55
RY19	0%	0%	8%	6%	9%	17%	15%	0%	11%	34%	0%	53

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal since it has not identified a biological concern for brown bears in Unit 16B. If the board adopts this proposal, the department suggests similar changes to Unit 16A for consistent regulations.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 96 – 5 AAC 92.085 (8) Unlawful methods and means; exceptions.** Allow the take of black bears in Unit 16B the same day the hunter has flown.

**PROPOSED BY:** Jonah Stewart

**WHAT WOULD THE PROPOSAL DO?** This proposal would allow the harvest of black bears in Unit 16B the same day the hunter was airborne, provided the hunter was at least 300 feet from the airplane, and the bears would not have to be at permitted bait stations.

**WHAT ARE THE CURRENT REGULATIONS?** The current black bear hunting regulations can be found in 5 AAC 85.015 and in the *2020–2021 Alaska Hunting Regulations*.

For black bears in Unit 16B, there is no closed season and the bag limit is 3 bears. There is a positive C&T use finding for black bears in Unit 16B and an ANS of 15–40.

It is against the law to hunt or help someone take big game until 3:00 am the day following the day a hunter has flown.

Exceptions:

- You may hunt deer the same day airborne (provided you are at least 300 feet from the airplane)

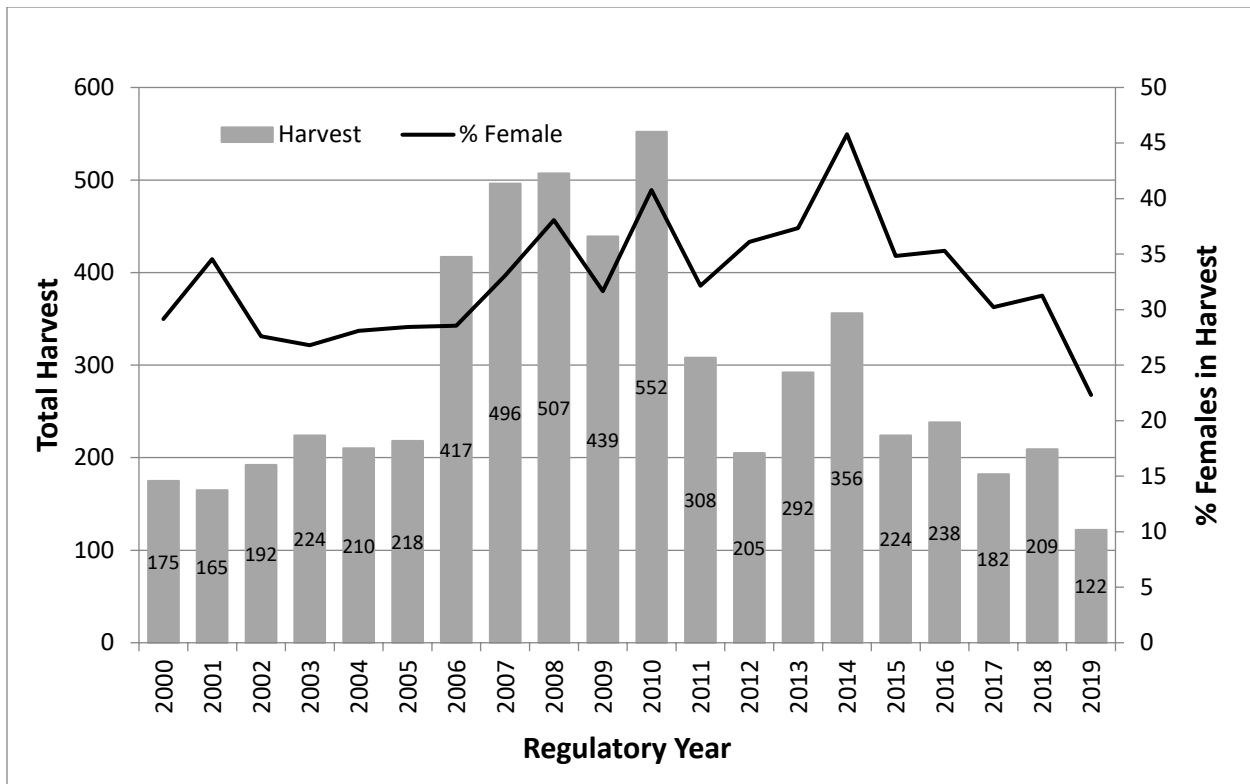
- In specified units (including Unit 16) black bears may be taken at permitted bait stations provided you are at least 300 feet from the airplane.
- In specified units (including Unit 16) brown bears may be taken at permitted bait stations provided you are at least 300 feet from the airplane.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted this proposal would allow bear hunters to hunt black bears the same day they have flown in Unit 16B. This specifically allows the practice of spotting black bears from the air and then landing to pursue them. It will also provide the opportunity to harvest bears that were not seen from the air but were encountered the day that the hunter flew into the unit. Adoption of this proposal is expected to increase harvest of black bears and may lead to localized depletions of the bear population, and allowing same-day-airborne for black bears would be more restrictive than under the control program.

**BACKGROUND:** In 2007, line transect surveys for bears in Unit 16B showed a black bear population of  $3,500 \pm 300$ . The goal of the intensive management program was to reduce the black bear population to 600–800 bears within the predation control area beginning in RY11. Bear harvests increased initially under the program but have since returned to their pre-control levels. Modelling by the department showed that the predator control program had little effect on the black bear population in Unit 16 and it was suspended in November 2016.

As a component of the predation control program in Unit 16, same-day-airborne hunting for black bear began in 2007. At that time hunters interested in participating in the program were required to obtain a predation control permit. In addition, under that program there was no limit and permittees could take any bear including cubs and sows with cubs.

During the control program the department did not track same-day-airborne harvest of black bears. On average during the control program 23 black bears per year were harvested by people who used airplanes for hunting, did not harvest the bear at bait, and hunted either 0 or 1 days.



**Figure 96-1.** Unit 16 black bear harvest and percent females in harvest, RY2000–2019.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal since it has not identified a biological concern for bears in Unit 16B. Currently this provision is only allowed at bait stations, and the same day airborne take of bears is not currently allowed outside of active predator control programs by permitted participants. Adoption of this proposal would make unit 16B unique in the state.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 97 – 5 AAC 92.095 Unlawful methods of taking furbearers; exceptions.** Allow beaver to be taken with firearm or archery equipment in Unit 16.

**PROPOSED BY:** Steven Perrins

**WHAT WOULD THE PROPOSAL DO?** This proposal would allow the harvest of beaver throughout the trapping season with a bow and arrow in Unit 16. Firearm use is currently allowed for taking beaver during the trapping season.

**WHAT ARE THE CURRENT REGULATIONS?** The current beaver trapping regulations for Unit 16 can be found in 5 AAC 85.060 and in the *2020–2021 Alaska Trapping Regulations*.

- It is against the law to take a beaver by any means other than a steel trap or snare except:
  - In Units 9 and 17 from April 15–May 31, a firearm may be used to take 2 beaver per day provided that the meat is salvaged for human consumption; and in Unit 17 a firearm or bow and arrow may be used to harvest beaver from December 1–April 14 provided that the meat is salvaged;
  - In Units 11, 13, and 16 from September 25–November 9, traps and snares must be submerged.
  - In Unit 16 a firearm may be used to take beaver throughout the trapping season.
  - In Unit 16 there is no sealing requirement for beaver.
- You may not disturb or destroy any beaver house or den.

Unit	Season Date	Bag Limit
Unit 9	Oct. 1–Apr. 30	No Limit
Units 10, 11, and 14A	Nov. 10–Mar. 31	No Limit
Units 13 & 16	Oct. 15–Apr. 30	No Limit
Units 14B & 17	Nov. 10–Apr. 30	No Limit

There is a positive C&T use finding for beavers in all units with a harvestable portion, and an ANS of 90% of the harvestable surplus.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would change current methods and means for taking beaver in Unit 16. The department anticipates additional beaver harvest will result if the proposal is adopted. The season is currently open for 197 days.

Salvage of beaver may be difficult unless bowfishing gear is used: beaver shot in open water often sink, making retrieval difficult. Without sealing requirements in Unit 16 the additional legal incentive to salvage is absent and tracking additional harvest under this method will not be possible.

**BACKGROUND:** Beaver must be sealed in all units within Region IV except Unit 16. The sealing requirement for beaver taken in Unit 16 was eliminated in 2011.

Currently beaver may be harvested with a firearm under a trapping license in Units 1–5, 8, 9, 12, 17, 18, 19, 20A, 20C, 20E, 20F, 21, 22, 23, 24, and 25. In the early 2000s, a hunting season for beaver was established in Units 18, 21A, 21E, 22, and 23 with no closures and no bag limit. The addition of a hunting season was in response to an increase in the number of nuisance beaver requests from several local communities (i.e., Unit 18) and apparent range expansion (i.e., Units

22 and 23). While some communities continue to consume beaver, most beavers are harvested for fur and as trapping bait (Table 97-1).

**Table 97-1.** Beaver harvest in Units 9, 10, 11, 13, 14A & 14B, and 17, RY201519.

Regulatory	Beaver Harvest Unit					
Year	9	10	11	13	14A&B	17
2015	117	0	9	90	104	81
2016	98	0	3	142	74	91
2017	71	0	8	146	68	82
2018	114	0	12	104	71	40
2019	42	0	6	143	46	57

The average annual harvest in Unit 16 from 2001 through 2010, when sealing was last required, was 86 beavers. A household survey was done in Tyonek (Unit 16B) for the year 2013; survey findings estimated that 5 beaver were harvested between August and November. This was estimated to be 24% of the small land mammal harvest (porcupine were 53% and snowshoe hare were 23%). Eight percent of Tyonek households used beaver, 6% attempted to harvest, and 4% were successful.

Household surveys were also done for the 2012 data year in Talkeetna, which is on the border between Unit 16A, 14B, and 13E; Trapper Creek in Unit 16A; Alexander/Susitna in Unit 16B (Susitna borders on Unit 14A); and Skwentna in Unit 16B.

In Talkeetna, an estimated 147 beaver were harvested, which was 98% of the small land mammal harvest. Beavers were used by 5% of households, 3% attempted to harvest, and 3% were successful. The majority of the search areas for small land mammals was in Units 14B and 13E; however, some effort did occur in Unit 16A. In Trapper Creek, an estimated 13 beavers were harvested; beavers were used by 3% of households; 2% attempted to harvest, and 2% were successful. Most effort took place in the immediate area of the community. In Alexander/Susitna in 2012, no beaver were estimated to have been harvested, used, or attempted to harvest. In Skwentna, an estimated 7 beaver were harvested; beaver were used by 7% of households, and 7% of households attempted to harvest them, with 7% successful. Small land mammal search and harvest areas extended on the rivers, lakes, and sloughs around the community.

The department does not have any conservation concerns with beavers in Region IV. The amount of trapping effort appears to be a fraction of what it was in the past, and harvest likely reflects that decline in effort. Observations of beaver sign and activity during aerial surveys as well as discussions with moose hunters, trappers, and department fisheries staff indicate that beavers are widespread and abundant throughout most of the Central/Southwest Region.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal because it has not documented a biological concern for the beaver populations in these Units. Anecdotal information suggests that beaver remain abundant.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 98 – 5 AAC 84.270(1). Furbearer trapping.** Extend beaver trapping season in Unit 16B.

**PROPOSED BY:** Steven Perrins

**WHAT WOULD THE PROPOSAL DO?** This proposal would change the beginning of beaver trapping season in Unit 16B from September 25 to August 10, increasing the season by 46 days.

**WHAT ARE THE CURRENT REGULATIONS?** The current beaver trapping regulations for Unit 16B can be found in 5 AAC 85.060 and in the *2020–2021 Alaska Trapping Regulations*.

- Beaver taken in Units 9–11, 13,14A, 14B, and 17 must be sealed within 30 days after the close of the season. There is no sealing requirement in Unit 16.
- You may not disturb or destroy any beaver house or den.
- It is against the law to take a beaver by any means other than a steel trap or snare except:
  - In Units 9 and 17 from April 15–May 31, a firearm may be used to take 2 beaver per day provided that the meat is salvaged for human consumption; and in Unit 17 a firearm or bow and arrow may be used to harvest beaver from December 1–April 14 provided that the meat is salvaged;
  - In Units 11, 13, and 16 from September 25–November 9, traps and snares must be submerged.
  - In Unit 16 a firearm may be used to take beaver throughout the trapping season.

Unit	Season Date	Bag Limit
Unit 9	Oct. 1–Apr. 30	No Limit
Units 10, 11, and 14A	Nov. 10–Mar. 31	No Limit
Units 13 & 16	Oct. 15–Apr. 30	No Limit
Units 14B & 17	Nov. 10–Apr. 30	No Limit

There is a positive C&T finding for beaver in all units with a harvestable portion, and an ANS of 90% of the harvestable portion.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would change the beginning of beaver trapping season in Unit 16B from September 25 to August 10. The earlier opening of the beaver season is proposed to align with the beginning of the fall hunting season so that beavers may be taken incidentally by hunters who are primarily targeting other species. It is expected that this change would result in very minimal or no increase in harvest and no measurable impact on the population of beaver in Unit 16. Allowing harvest earlier will result in a reduction in requests for nuisance beaver permits.

**BACKGROUND:** Beaver must be sealed in all Units within Region IV except Unit 16. The sealing requirement for beaver taken in Unit 16 was eliminated in 2011.

Currently beaver may be harvested with a firearm under a trapping license in Units 1–5, 8, 9, 12, 17, 18, 19, 20A, 20C, 20E, 20F, 21, 22, 23, 24, and 25. In the early 2000s, a hunting season for beaver was established in Units 18, 21A, 21E, 22, and 23 with no closures and no bag limit. The addition of a hunting season was in response to an increase in the number of nuisance beaver requests from several local communities (i.e., Unit 18) and apparent range expansion (i.e., Units 22 and 23). While some communities continue to consume beaver, most beavers are harvested for fur and as trapping bait.

**Table 98-1.** Beaver harvest in Units 9,10,11, 13, 14A, & 14B, and 17, RY2015–19.

Regulatory	Beaver Harvest Unit					
Year	9	10	11	13	14A&B	17
2015	117	0	9	90	104	81
2016	98	0	3	142	74	91
2017	71	0	8	146	68	82
2018	114	0	12	104	71	40
2019	42	0	6	143	46	57

The average annual harvest in Unit 16 from 2001 through 2010 was 86 beavers. A household survey was done in Tyonek (Unit 16B) for the year 2013; survey findings estimated that 5 beavers were harvested between August and November. This was estimated to be 24% of the small land mammal harvest (porcupines were 53% and snowshoe hares were 23%). Eight percent of Tyonek households used beavers, 6% attempted to harvest, and 4% were successful.

Household surveys were also done for the 2012 data year in Alexander/Susitna in Unit 16B and Skwentna in Unit 16B.

In Alexander/Susitna in 2012, no beaver were estimated to have been harvested, used, or attempted to harvest. In Skwentna, an estimated 7 beavers were harvested; beavers were used by 7% of households, and 7% of households attempted to harvest them, with 7% successful. Small land



mammal search and harvest areas extended on the rivers, lakes, and sloughs around the community.

The department does not have any conservation concerns with beavers in Unit 16B. The amount of trapping effort appears to be a fraction of what it was in the past, and harvest likely reflects that decline in effort. Observations of beaver sign and activity during aerial surveys as well as discussions with moose hunters, trappers, and department fisheries staff indicate that beavers are widespread and abundant throughout most of the Central/Southwest Region.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal because it has not documented a biological concern for the beaver populations in this Unit. Anecdotal information suggests that beaver remain abundant in the unit. If this proposal is intended to allow hunters the ability to take beaver then hunters will also need trapping licenses because beavers are classified as furbearers rather than fur animals or big game.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 99 – 5 AAC 92.550 Areas closed to trapping.** Close areas within Units 14A, 14B, and 16A to trapping.

**PROPOSED BY:** Kneeland Taylor

**WHAT WOULD THE PROPOSAL DO?** This proposal would eliminate trapping:

- 1) Within one quarter mile of any permanent dwellings, and would define permanent dwellings as buildings used primarily as permanent residences or businesses; but which definition does not include cabins that have fewer than 800 square feet of livable space and that are unoccupied a majority of the time;
- 2) Within 50 yards of a developed hiking trail or groomed ski trail. Developed hiking trails are defined as trails for which public funds have been spent within the previous five years for construction and maintenance; and groomed trails are defined as trails which are routinely maintained and groomed to provide the public with recreational skiing venues. A list of developed hiking and groomed ski trails shall be maintained by the Department;
- 3) Within one-quarter mile from the trailhead for any developed hiking or groomed ski trail;
- 4) Within one-quarter mile from any developed campground. Developed campgrounds are defined as campgrounds for which public funds have been spent in the previous five years for construction or maintenance; a list of which shall be maintained by the department;
- 5) Within the Hatcher Pass Public Use Area as designated in AS 41.23.130; and
- 6) Within the Palmer Hay Flats State Game Refuge as designated in AS 16.20.032.

**WHAT ARE THE CURRENT REGULATIONS?** The current list of areas closed to trapping can be found in 5 AAC 92.550 and in the *2020–2021 Alaska Trapping Regulations*.

Under the current regulations the areas in the proposal are open to trapping with no distance restriction in place. These areas are all within the Anchorage-Matsu-Kenai nonsubsistence area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would make it illegal to trap within 50 yards of any maintained hiking trail or groomed ski trail, within ¼ mile of any permanent dwelling, trailhead, and campground, and within Hatcher Pass Public Use Area and within Palmer Hay Flats State Game Refuge.

Landowners with any type of house, cabin, or dwelling, would no longer be able to use trapping to harvest furbearers or to address wildlife conflicts on their own property. This proposal, if adopted, would be difficult to enforce because it would require a knowledge of fine-scale development across a broad area by members of the public and law enforcement. It would require the department to create and maintain a list of campgrounds, hiking trails, and groomed ski trails, which would be a cost to the department. It would also increase the department's need to respond to nuisance wildlife issues and may increase the need to issue nuisance beaver permits and potentially registration trapping permits under 5 AAC 92.051.

**BACKGROUND:** There are currently no regulations requiring trapping activity be a certain distance from a permanent dwelling, trailhead, or campground, or within the Hatcher Pass Public Use Area or the Palmer Hay Flats State Game Refuge within Region IV. However, trappers are required to obtain permission from private landowners prior to trapping on their land and it is the responsibility of the trapper to understand the land status of the area they trap. Ethical and safe trapping practices are actively encouraged and taught throughout the state by the Alaska Trappers Association, and addressed in the Trapper's Code of Ethics, which is reprinted on the last page of the trapping regulations every year. Trappers should "promote trapping methods that will reduce the possibility of catching nontarget animals." The department relies heavily upon the experience and collaboration of local trappers to pursue and deal with furbearers with which people have conflicts on a regular basis. Without this relationship, the department would spend time and money addressing human-wildlife conflicts. Conflict issues include beavers creating dams and raising water levels into houses and septic systems, beavers cutting down trees in yards, squirrels getting into houses and attics, groundhogs digging into gardens and building foundations, and foxes, coyotes, wolves, weasels, and lynx taking pets and livestock. While some of these could be taken under the defense of life or property regulation, allowing licensed trappers to take animals with which humans have a conflict under established trapping seasons and bag limits helps to alleviate this issue.

During RY15, RY16, and RY17 the department issued nuisance beaver permits to take beavers along Archangel Rd. in the Hatcher Pass Public Use Area, in order to alleviate damage to the road from beavers blocking culverts with damming activity.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal because it is primarily allocative. However, the department is generally opposed to a reduction in opportunity where a harvestable surplus exists and encourages trappers to be cognizant of potential conflicts by adhering to the Trapper's Code of Ethics.

**COST ANALYSIS:** If adopted, the department anticipates additional costs associated with nuisance wildlife complaints, and administrative costs to identify and monitor areas where trapping would be prohibited.

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**PROPOSAL 100 - 5 AAC 92.095 Unlawful methods of taking furbearers; exceptions.** Remove requirement that traps and snares for beaver be submerged in Unit 16.

**PROPOSED BY:** James Hoehn

**WHAT WOULD THE PROPOSAL DO?** This proposal if adopted would remove the requirement that traps must be submerged from September 25 through November 9 in Unit 16.

**WHAT ARE THE CURRENT REGULATIONS?** The current beaver trapping regulations can be found in 5 AAC 84.270, 5 AAC 92.095, and in the *2020–2021 Alaska Trapping Regulations*.

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

...

(10) taking beaver in Units 11, 13, and 16 from September 25 through November 9, in the remainder of Unit 20(B) and in Unit 20(D) from September 25 through October 31 and from April 16 through May 31, and in Units 7 and 15 from October 15 through November 9 and from April 1 through April 30, except with underwater traps or snares;

...

There is a positive C&T finding in Unit 16B for beaver in all units with a harvestable portion, and an ANS of 90% of the harvestable portion. Unit 16A is in the Anchorage-Matsu-Kenai Nonsubsistence Area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If this proposal were adopted trappers could set traps for beaver that are not submerged from September

25–November 9 in Unit 16. This proposal would prevent trappers from violating this regulation due to fluctuating water levels. It is unlikely that the adoption of this proposal will affect effort or harvest and does not present any public safety concerns.

**BACKGROUND:** As beaver regulations have been progressively liberalized the season has been extended and now occurs outside the season when most other species are open to trapping (November 10–February 28). The regulation for submerged traps was to reduce incidental take of other species that the season is not open for. In many areas the intent was to reduce the unintentional trapping of dogs (both pets and hunting dogs). There have been 2 river otters reported as incidental take of other furbearers in Unit 16 by beaver trappers since 2000. No other species have been reported as incidental take by beaver trappers. Sealing of beaver was discontinued in RY10, therefore we have no current estimate of beaver take from sealing records over the past 10 years. A household survey was done in Tyonek (Unit 16B) for the year 2013; survey findings estimated that 5 beaver were harvested between August and November. This was estimated to be 24% of the small land mammal harvest (porcupine were 53% and snowshoe hare were 23%). Eight percent of Tyonek households used beaver, 6% attempted to harvest, and 4% were successful.

Household surveys were also done for the 2012 data year in Talkeetna, which is on the border between Unit 16A, 14B, and 13E; Trapper Creek in Unit 16A; Alexander/Susitna in Unit 16B (Susitna borders on Unit 14A); and Skwentna in Unit 16B.

In Talkeetna, an estimated 147 beaver were harvested, which was 98% of the small land mammal harvest. Beavers were used by 5% of households, 3% attempted to harvest, and 3% were successful. The majority of the search areas for small land mammals was in Units 14B and 13E; however, some effort did occur in Unit 16A. In Trapper Creek, an estimated 13 beavers were harvested; beavers were used by 3% of households; 2% attempted to harvest, and 2% were successful. Most effort took place in the immediate area of the community. In Alexander/Susitna in 2012, no beaver were estimated to have been harvested, used, or attempted to harvest. In Skwentna, an estimated 7 beaver were harvested; beaver were used by 7% of households, and 7% of households attempted to harvest them, with 7% successful. Small land mammal search and harvest areas extended on the rivers, lakes, and sloughs around the community.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal since it has not identified a biological concern for incidental take of furbearers or other non-target animals by beaver trappers in Unit 16.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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Proposals 101-196 are Statewide Proposals.

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**PROPOSAL 197 – 5 AAC 92.015. Brown bear tag fee exemption.** Reauthorize the brown bear tag fee exemptions for the Central/Southwest Region.

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** This proposal will reauthorize the brown bear tag fee exemptions in Units 9, 11, 13, 16, and 17.

**WHAT ARE THE CURRENT REGULATIONS?** The following regulations are currently in effect for Region IV brown bear hunts:

5AAC 92.015. Brown bear tag fee exemption

(a) A resident tag is not required for taking a brown bear in the following units:

(1) Unit 11;

(2) Units 13 and 16A;

(3) Units 16B and 17;

...

(11) Unit 9, within the following areas, unless a smaller area is defined by the department in an applicable permit:

(A) Unit 9B, within five miles of the communities of Port Alsworth, Nondalton, Iliamna, Newhalen, Pile Bay, Pedro Bay, Pope Vannoy Landing, Kokhonak, Igiugig, and Levelock;

(B) Unit 9C, within five miles of the communities of King Salmon, Naknek, and South Naknek;

(C) Unit 9D, within five miles of the communities of Cold Bay, King Cove, Sand Point, and Nelson Lagoon;

(D) Unit 9E, within five miles of the communities of Egegik, Pilot Point, Ugashik, Port Heiden, Port Moller, Chignik Lake, Chignik Lagoon, Chignik Bay, Perryville, and Ivanof Bay;

(12) Unit 10, within three miles of the community of False Pass, unless a smaller area is defined by the department in an applicable permit.

(b) In addition to the units as specified in (a) of this section, if a hunter obtains a subsistence registration permit before hunting, that hunter is not required to obtain a resident tag to take a brown bear in the following units:

(1) Unit 9B;

(2) Unit 9E, that portion including all drainages that drain into the Pacific Ocean between Cape Kumliun and the border of Units 9D and 9E;

(3) Unit 17;

...

There is a positive customary and traditional use finding for brown bears in those portions of Units 17A and 17B that drain into the Nuyakuk and Tikchik lakes, with an amount reasonably necessary for subsistence of 5. There is a positive customary and traditional use finding for brown bears in the remainder of Unit 17B, and in Unit 17C, with an amount reasonably necessary for subsistence of 10–15 bears.

There is a positive customary and traditional use finding in Unit 9B, with an amount reasonably necessary for subsistence of 10–20 bears, and a positive customary and traditional use finding in 9E, with an amount reasonably necessary for subsistence of 10–15 bears. The remainder of Unit 9 has a negative customary and traditional use finding. Unit 10 has a negative customary and traditional use finding.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Hunters will not be required to purchase a brown bear locking tag before hunting brown bears in Units 11, 13, 16, and 17. In addition, brown bear tag fees will not be required for subsistence hunts in Units 9 and 17 or for permit hunts near communities in Units 9 and 10. Reinstating the fee would provide additional funding for the department.

**BACKGROUND:** Brown bear tag fee exemptions must be reauthorized annually, or the fee will be automatically reinstated.

**General Season Hunts:** The Board liberalized brown bear hunting regulations, including the tag fee exemption, to increase the opportunity to take brown bears in Units 11, 13, and 16 during the March 2003 Board of Game meeting and in Unit 17 during the March 2011 Board of Game meeting. The tag fee exemption in these Units provides greater opportunity to harvest brown bears by allowing opportunistic take.

The board also exempted brown bear tag fees for bear hunts near communities in Units 9 and 10 during the March 2011 Board of Game meeting. Brown bears are abundant in Unit 9 and are

managed as a trophy species. Brown bears are frequently observed in communities destroying property in search of food or garbage and occasionally killing pets. The liberalized bear seasons and bag limits along with the elimination of the tag fee is intended to allow people to take bears before they destroy property, to promote a greater acceptance of the unit's bear population, and to resolve some of the compliance issues associated with bears taken by emergency in defense of life or property (DLP).

**Subsistence Brown Bear Hunts:** The Board waived the brown bear tag fee requirement for subsistence brown bear hunts in Unit 17 and portions of Unit 9.

Subsistence brown bear harvest rates are low and well within sustainable limits. Exempting the resident tag fee has not caused an increase in subsistence harvest in these units. Continuation of the exemption accommodates cultural and traditional uses of brown bears in these units and provides an alternative for hunters who take brown bears primarily for their meat.

**DEPARTMENT COMMENTS:** The department **SUPPORTS** this proposal because it provides greater sustainable harvest opportunity in Units 10, 11, 13, 16, and 17 and provides subsistence harvest opportunity in portions of Units 9 and 17.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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#### Proposal 198

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#### Proposal 199

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#### **PROPOSAL 200 - 5 AAC 85.045(15). Hunting seasons and bag limits for moose.**

Reauthorize the antlerless moose season in Unit 17A.

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** This proposal reauthorizes the antlerless moose seasons for Unit 17A.

**WHAT ARE THE CURRENT REGULATIONS?** The current regulations for Unit 17A allow resident hunters a bag limit of two moose per regulatory year under registration permits; however, only 1 moose can be taken during the fall season. Nonresidents are restricted to a bag limit of one bull moose with antler restrictions by drawing permit.

- There are three fall hunts, one of which allows the harvest of an antlerless moose:

- Registration permit (RM573), for resident hunters only with a bag limit of one bull moose, Aug 25–Sept 25;
- Registration permit (RM571), for resident hunters only with a bag limit of one antlerless moose, Aug 25–Sept 25;
- Drawing permit (DM570 - up to 20 permits are available), for non-resident hunters only, with a bag limit of one bull moose with 50” antlers or antlers with 4 or more brow tines on at least one side, Sept 5–Sept 15.
- There are two winter hunts, open to resident hunters only, one of which allows for the harvest of antlerless moose (a department proposal has been submitted to adjust the season dates at this BOG meeting).
  - Registration permit (RM575), with a bag limit of one antlered bull moose;
  - Registration permit (RM576), with a bag limit of one antlerless moose.
    - Season dates for the winter hunts are as follows: “up to a 31-day season may be announced December 1–the end of February”. The seasons are opened concurrently by emergency order when good snow conditions exist for winter travel.

There is a positive customary and traditional use (C&T) finding for moose in Unit 17 and an amount reasonably necessary for subsistence of 100–150 moose.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal would reauthorize the antlerless moose hunts in Unit 17A. These antlerless hunts would continue to provide hunters with additional harvest opportunity while helping managers by limiting the growth of the Unit 17A moose population that is already beyond the upper limit of the population objectives.

**BACKGROUND:** Moose are relative newcomers to much of Unit 17A, with only about 35 animals being present along the eastern border in 1980. Since then, moose have continued to increase in population size and expand throughout Unit 17A and west into Unit 18. Minimum counts of moose in Unit 17A were conducted in 14 different years during the period of 1991–2011, revealing a steady increase in moose numbers over time, with 1,166 moose counted in March 2011. During 2012–2015, surveys were not conducted due to inadequate snow conditions. Beginning in fall 2016, a Geospatial Population Estimator (GSPE) replaced the minimum count for enumerating moose in Unit 17A. In spring 2017, this survey technique produced an estimate corrected for sightability (1.2) of 2,370 moose, ( $\pm 563$ ).



Moose management in Unit 17A has been guided by the Unit 17A Moose Management Group, consisting of members from the Bristol Bay Federal Subsistence Regional Advisory Council, the Nushagak and Togiak Fish and Game advisory committees, the Togiak National Wildlife Refuge, and the Alaska Department of Fish and Game. This group produced a Unit 17A Moose Management Plan that went through several iterations during 1996–2013, with the 2013 plan being used as the guiding document today. This plan has goals and objectives for hunter opportunity, harvest allocation, habitat mapping and population monitoring. The population objective for Unit 17A listed in the plan is 800–1,200 moose. This plan was not recognized by the board the last time it was presented; however, the group continues to meet and provide input to moose management in the unit.

The winter antlerless hunt was adopted by the board and initiated in RY13: it allows for an antlerless harvest when the moose population is above 600 animals and is stable or increasing. During the five years of the RM576 antlerless hunt (RY13-RY17), 73 antlerless moose have been taken (66 cows and 7 bulls), for an average of ~13 cows/year.

Because of the concerns with the increasing moose numbers in Unit 17A, which are already well above population objectives, a proposal was adopted by the board during their spring 2018 meeting in Dillingham to open a fall antlerless hunt in fall 2018 to increase harvest on the female segment of the population. During the first year of this hunt in fall 2018, 8 antlerless moose were harvested; all were cows.

The BOG has made a positive customary and traditional use finding for moose in Unit 17 as a whole, and has found that 100–150 are reasonably necessary for subsistence. During RY2013–2017 the mean annual moose harvest in Unit 17 was 303 moose.

**DEPARTMENT COMMENTS:** The department **SUPPORTS** this proposal. The moose population in this unit is above the upper limit of the population objective. Allowing a small harvest of antlerless moose will help limit population growth while providing additional harvest opportunity for hunters.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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Proposal 201

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**PROPOSAL 202– 5 AAC 84.270. Furbearer trapping. Unlawful methods of taking furbearers; exceptions.** Liberalize the season and methods and means for trapping beaver in Unit 17.

**PROPOSED BY:** Todd Fritze and Kenton Moos

**WHAT WOULD THE PROPOSAL DO?** This proposal would change the beaver trapping season in Unit 17 to allow for an unlimited take of beaver using a firearm throughout the current season.

**WHAT ARE THE CURRENT REGULATIONS?** The current trapping regulations for Unit 17 can be found in 5 AAC 84.270 5 AAC 92.095, and in the 2021–2022 Alaska Trapping Regulations.

- There is no hunting season, only a trapping season.
- Season dates are October 10–May 31.
- No bag limit.
- Firearms may be used to take up to two beaver per day from April 15–May 31.
  - During the rest of the open season, taking beaver by any means other than a steel trap or snare is prohibited, except that a firearm may be used to take two beaver per day in Units 17 from April 15 through May 31 if the meat is salvaged for human consumption; and a firearm or bow and arrow may be used to harvest beaver from December 1–April 14, provided that the meat is salvaged.

There is a positive customary and traditional use finding for beaver populations with a harvestable surplus statewide, with an amount reasonably necessary for subsistence of 90% of the harvestable portion.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Several aspects of this proposal (i.e., the use of firearms throughout the year to harvest beaver) could lead to an increase in beaver harvest, and possibly depletion of beavers in easily accessible areas. Salvage of beaver that are shot in water could be difficult, especially in rivers where moving water makes retrieval difficult.

**BACKGROUND:** The beaver season in Unit 17 has changed substantially over the past 20 years due to changes in beaver pelt value, fuel prices, snowpack, and a general decline in trapping effort.

- 1991–1996: the seasonal bag limit in Unit 17 was 20 beavers, with the season in Unit 17A running from Jan. 1–31 and the season in Unit 17B&C running from Jan. 1–Feb. 28.
- 1997: the season length was increased to Nov. 10–Feb. 28 and the seasonal bag limit was increased to 40 beavers. Additionally, a spring season was initiated that ran from April 15–May 31 with a daily bag limit of 2 beavers by firearm; however, the meat needed to

be salvaged for human consumption. This spring firearm season and the condition requiring the salvage of meat is still in place today.

- 1999: the season was extended from Feb. 28– March 31.
- 2003: the season was again extended to Oct. 10–March 31, and the seasonal bag limit was removed.
- 2010: the season was extended again to Oct. 10–May 31.
- 2015: The period when a person can shoot a beaver was lengthened, and the use of a bow and arrow to shoot beavers was added to the legal method and means.

Reasons for the continued lengthening and liberalization of the beaver season stemmed from an apparent abundance of beavers and a declining constituency of beaver harvesters. Thus, there have not been any unit-wide conservation concerns with the steady liberalization of beaver trapping and harvesting opportunity. However, during advisory committee meetings prior to the 2015 board meeting, several Dillingham trappers voiced concerns regarding local depletions of beavers due to excessive season lengths and unlimited bag limits.

Currently the department does not have any conservation concerns with beavers in Unit 17. The amount of trapping effort is just a fraction of what it was 20 years ago, and the considerably lower harvest is likely a reflection of that decline in effort. Anecdotal observations of beaver sign and activity during aerial surveys as well as discussions with moose hunters, trappers, and department fisheries staff indicate that beavers are widespread and abundant throughout most of the unit.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal and does not see this change causing a biological concern although there could be some depletion of beavers in easily accessible areas due to this liberalization of seasons and bag limits as well as methods and means. The proposers suggested this change in an effort to simplify the regulations but were silent on the use of bow and arrows during a specified season. The board may wish consider including bow and arrows if they intend to adopt this proposal

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 203– 5 AAC 84.270. Furbearer trapping. Unlawful methods of taking furbearers; exceptions.** Liberalize the season for trapping muskrats in Unit 17.

**PROPOSED BY:** Todd Fritze and Kenton Moos

**WHAT WOULD THE PROPOSAL DO?** This proposal would change the muskrat trapping season in Unit 17 to mirror current season closing dates for beaver by adding 61 days in April and May to the current season, which closes on March 31.

**WHAT ARE THE CURRENT REGULATIONS?** The current muskrat regulations for Unit 17 can be found in 5 AAC 84.270, 5AAC 92.095, and in the *2021–2022 Alaska Trapping Regulations*. There is no hunting season for muskrats.

- Season dates are Nov. 10–March 31.
- No bag limit.
- There is no sealing or reporting requirement for muskrats.

There is a positive customary and traditional use finding for muskrat populations with a harvestable surplus statewide, with an amount reasonably necessary for subsistence of 90% of the harvestable portion.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal will likely lead to an increase in muskrat harvest and would allow muskrats taken while beaver trapping to be retained legally and not considered by-catch. Some areas with high trapping pressure could possibly reduce or deplete muskrats in easily accessible areas.

**BACKGROUND:** The muskrat season has not changed substantially over the past 20 years for Unit 17.

- 2001–2006: the seasonal bag limit in Unit 17 was 2 muskrats and the season ran from Nov. 10–Feb. 28.
- 2007: the season length was increased to Nov. 10–Mar. 31 and the seasonal bag limit was increased to no limit. This season and bag limit have persisted into the current season.

Reasons for the continued lengthening and liberalization stemmed from an apparent abundance of muskrats and a declining constituency of muskrat harvesters. Thus, there have not been any unit-wide conservation concerns with the liberalization of muskrat trapping and harvesting opportunity.

Currently the department does not have any conservation concerns with muskrats in Unit 17. The amount of trapping effort appears to be a portion of what it was 20 years ago, and we assume this decline in effort has led to lower harvest. Muskrats do not have to be sealed, so there are no sealing records. Household survey data show occasional harvest in Unit 17 communities: for example, in 2008, Manokotak households harvested an estimated 17 muskrats, and Togiak households an estimated 2 muskrats.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal because no biological concerns are anticipated.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 204 – 5 AAC 85.045 Hunting seasons and bag limits for moose.**

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** This proposal would add 5 days to the fall season in Units 9B&C and 15 days to the winter season in 9C for resident hunters under registration moose permit RM272. This proposal would also remove the split of Unit 9C into Naknek River drainages and the remainder portion (Figure 204-1). The only difference currently is a 2-week later winter season for the remainder portion. The proposed winter season dates would span the entire range of current winter seasons for both portions of Unit 9C. The proposed season dates would be as follows: Unit 9B, September 1–25 and December 15–January 15; and Unit 9C, September 1–25 and December 1–January 15.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations for Unit 9 can be found in 5 AAC 85.045 and in the *2021–2022 Alaska Hunting Regulations*.

**Resident Hunters (RM272)**

- Unit 9B: any bull, September 1–20, or 1 antlered bull, December 15–January 15.
- Unit 9C: that portion draining into the Naknek River: any bull, September 1–20, or 1 antlered bull, December 1–31.
- Unit 9C: remainder: any bull, September 1–20, or 1 antlered bull, December 15–January 15.

**Nonresident Hunters (RM282)**

- Unit 9B: one bull with 50” antlers or antlers with 4 or more brow tines on at least 1 side, September 5–15.
- Unit 9C one bull with 50” antlers or antlers with 3 or more brow tines on at least 1 side, September 5–15.
- Unit 9C: one bull with 50” antlers or antlers with 3 or more brow tines on at least 1 side, September 5–15.

There is a positive customary and traditional use finding for moose in units 9A, 9B, 9C, and 9E, with an amount reasonably necessary of 100-140 moose.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Increasing moose hunting opportunity for residents could provide additional opportunity for those who

normally hunt Mulchatna caribou. The proposal would also simplify regulations by removing the split of Unit 9C and aligning fall season dates.

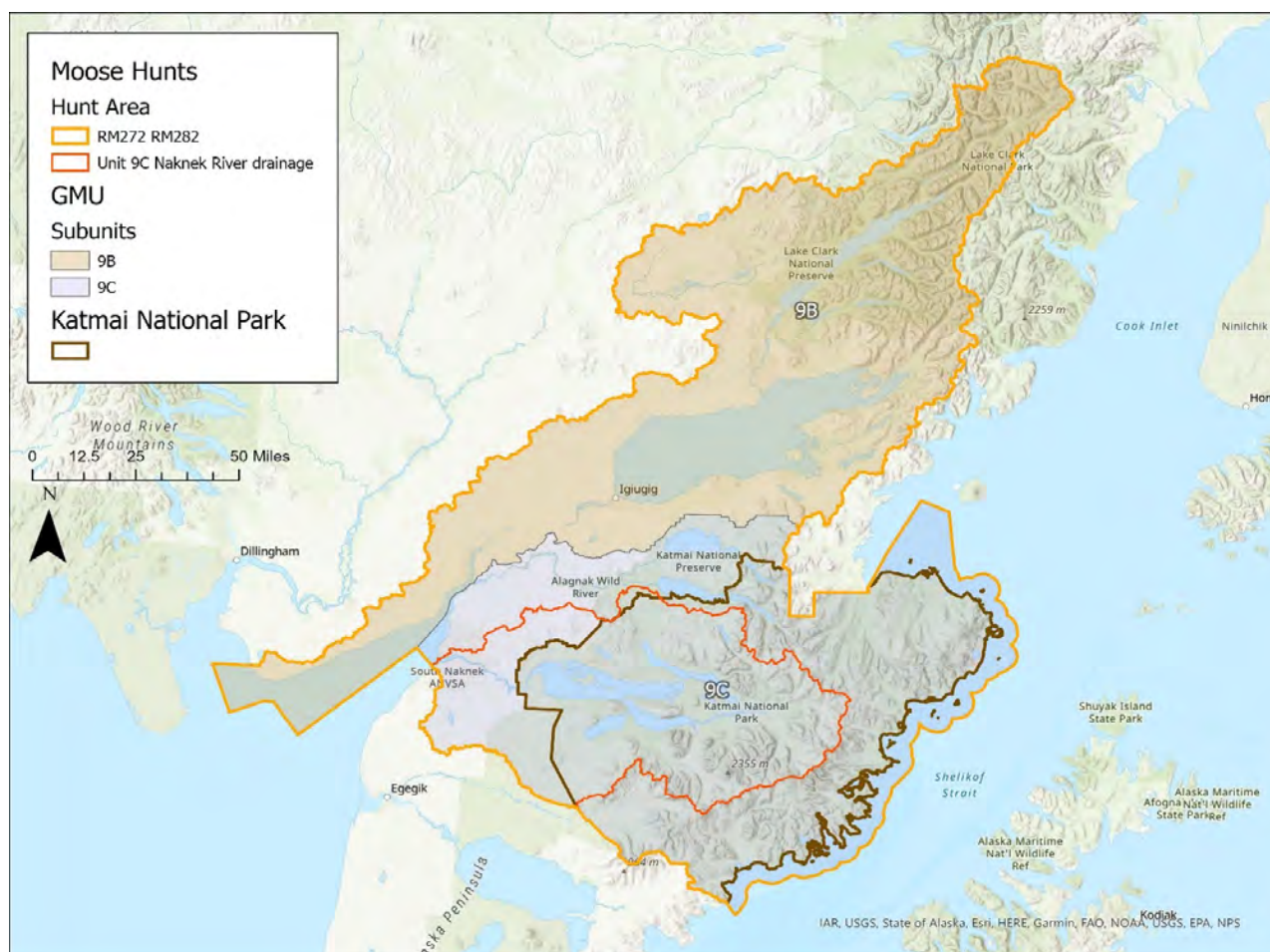
**BACKGROUND:** Moose have a positive customary & traditional use finding, and an amount necessary for subsistence of 100–140 moose for Units 9A, 9B, 9C and 9E, combined. There are no intensive management programs to benefit moose but there are programs designed to benefit Northern Alaska Peninsula (NAP) and Southern Alaska Peninsula (SAP) caribou, which moose may benefit from when active.

Population objectives for moose in Unit 9 are as follows:

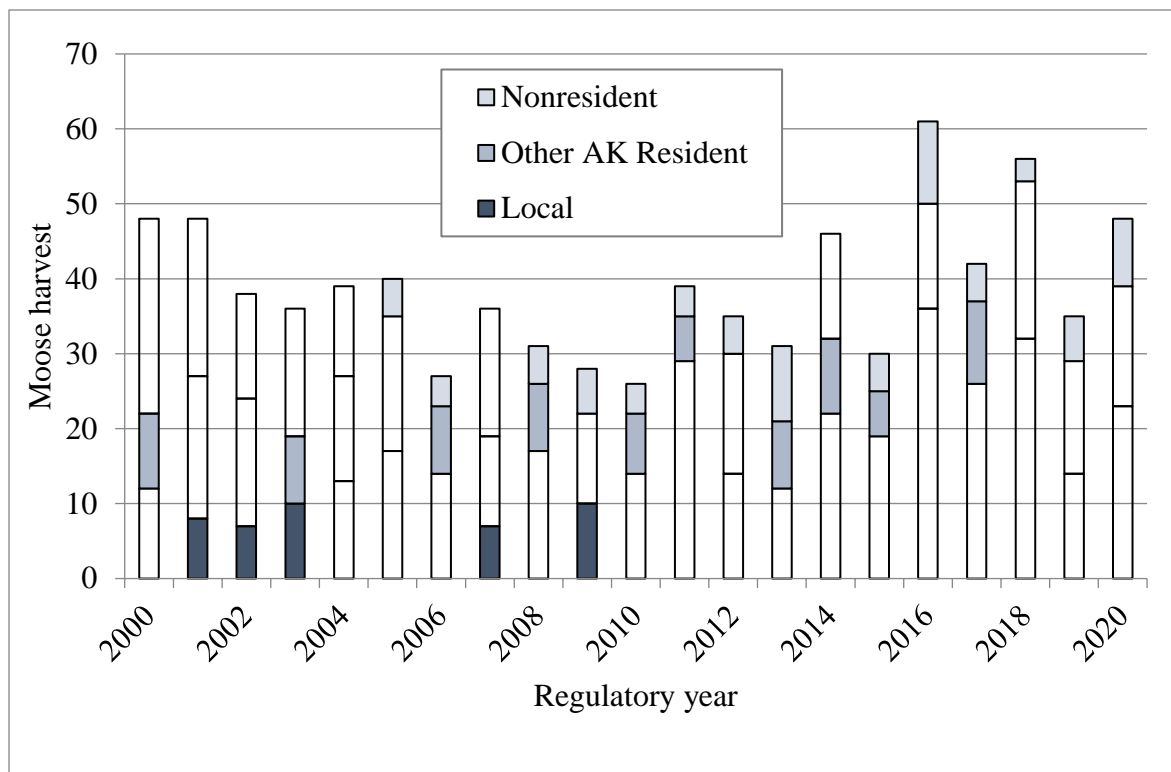
1. Maintain existing densities in areas with moderate (0.5–1.5 moose/mi<sup>2</sup>) or high (1.5–2.5 moose/mi<sup>2</sup>) densities: currently this applies to Unit 9E only.
2. Increase low density populations (where habitat conditions are not limiting) to 0.5 moose/mi<sup>2</sup>: currently applies to Unit 9 remainder.
3. Maintain sex ratios of at least 25 bulls:100 cows in medium to high density populations (Unit 9E) and at least 40 bulls:100 cows in low density areas (Unit 9 remainder).

Moose bull-to-cow ratios in Units 9B&C are above management objectives and could sustain additional bull harvest. There are no moose population estimates for Unit 9; however, composition surveys indicated that the bull:cow ratio in Unit 9B was high in 2018 and was 67 bulls:100 cows in Unit 9C in 2020. A calf mortality study during 2017–2019 indicated a productive population and adequate calf survival to yearling age (23–26%) in Unit 9.

Most harvest in Units 9B&C are by resident hunters (figures 204-2 and 204-3). On average (2011–2019), in Unit 9B there were 35 moose harvested annually during the fall season (86%) and 6 in the winter (14%). In Unit 9C, the averages were 21 moose in the fall (83%) and 4 in the winter (17%). Winter seasons are often hampered by lack of snow. The Department will monitor bull:cow ratios and reduce the season lengths for permit hunts and will propose shorter seasons to the board if necessary.

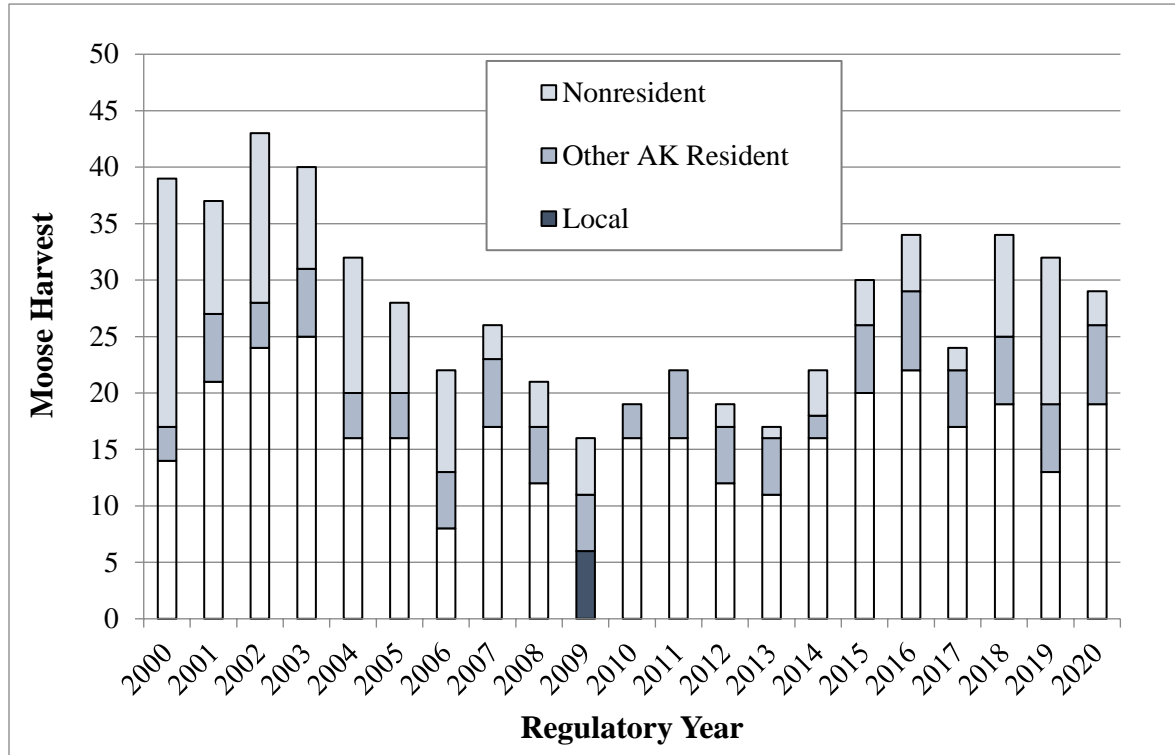


**Figure 204-5.** Naknek River drainage in Unit 9C is open to moose hunting west of Katmai National Park (dark brown boundary). The remainder portion of Unit 9C is Katmai National Preserve and Alagnak River drainage to the north.



**Figure 204-6.** Moose harvest in Unit 9B by nonresidents, local residents of Unit 9B and other Alaska residents, regulatory years 2000–2020





**Figure 204-7.** Moose harvest in Unit 9C by nonresidents, local residents of Unit 9C, and other Alaska residents, regulatory years 2000–2020.

**DEPARTMENT COMMENTS:** The Department **SUPPORTS** providing additional moose hunting opportunity for resident hunters in Units 9B&C. By taking advantage of higher bull:cow ratios and calf survival rates there is additional hunting opportunity for those who would normally rely on the Mulchatna caribou herd for food resources.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 205 – 5 AAC 92.112 Intensive Management Plan I .** Reauthorize the Southern Alaska Peninsula Caribou Herd Intensive Management Plan.

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** Reauthorize and replace language in the Southern Alaska Peninsula Caribou Herd (SAP) Intensive Management Plan (IM) on mainland Unit 9D to comply with protocol for IM plans, by removing unnecessary and outdated information and

introducing specific regulatory language for the IM plan for the SAP predation management area as follows:

(a) **Plans established.** Intensive management plans for the following areas are established in this section:

...

(b) Southern Alaska Peninsula Herd Management Area is entirely deleted and replaced by the following:

(c) **Southern Alaska Peninsula Herd Predation Management Area: to facilitate growth in the Southern Alaska Peninsula (SAP) caribou herd on the mainland portion of Unit 9(D) to aid in achieving intensive management objectives in an area encompassing approximately 3,819 square miles (9,891 square kilometers); the wolf reduction area includes all Alaska Peninsula drainages west of a line from the southernmost head of Port Moller Bay to the head of American Bay;**

(1) **This is a currently inactive control program that was first authorized by the board in March 2008 for wolf control;**

A) **it was designed to increase caribou abundance and harvest by reducing predation on caribou by wolves;**

B) **The program was suspended in July 2010 (RY2010) after achieving the criteria for evaluating success of the intensive management (IM) program in Unit 9(D);**

(2) **Caribou and wolf objectives are as follows:**

(E) **the intensive management objective for the SAP as established in 5 AAC 92.108 is 1,500–4,000 caribou; these objectives were based on historical information regarding population numbers, habitat limitations, human use, and sustainable harvest;**

(F) **the caribou harvest objective for the SAP as established in 5 AAC 92.108 is 150–200 caribou in combination with harvest from the Unimak caribou herd (UCH);**

(G) **There is no IM wolf population objective for Unit 9(D); the objective is to remove wolves during the caribou neonatal period in which calves are most vulnerable to predation to increase calf survival and recruitment.**

(H) **The management objective for Unit 9 wolves is to maintain a wolf population that will sustain a 3-year average annual harvest of at least 50 wolves**

(I) **the brown bear population objective for Unit 9 is to maintain a high-density bear population with a sex and age structure that can sustain**

a harvest composed of 60 percent males, with 50 males eight years of age or older during combined fall and spring seasons;

**(4) Board findings concerning populations and human use are as follows:**

**(J) The board has designated the SAP as important for providing high levels of human consumptive use;**

**(K) the board established objectives for population size and annual sustained harvest of caribou in Units 9(D) consistent with multiple use and principles of sound conservation and management of habitat and all wildlife species in the area;**

**(L) the population criteria are above IM objectives for the SAP; however, harvest is below objectives because of low hunter participation: the number of caribou available for harvest far exceeds the objective and continues to increase.**

**(M) wolves are a major predator of caribou in the range of the SAP and were an important factor in falling below IM objectives during the mid 2000s;**

**(N) a reduction of predation was successful in achieving IM objectives in the late 2000s, setting a precedent for future actions;**

**(O) nutrition is not considered to be the primary factor limiting caribou population growth;**

**(P) future reduction in predation is likely to be effective and feasible using recognized and prudent active management techniques and based on scientific information;**

**(Q) future reduction in predation is likely to be effective given land ownership patterns, and;**

**(R) future reduction in predation may be in the best interests of subsistence users.**

**(5) Authorized methods and means are as follows:**

**A) hunting and trapping of wolves by the public in treatment areas during the term of the management program may occur as provided in the hunting and trapping regulations set out elsewhere in this title, including the use of motorized vehicles as provided in 5 AAC 92.080;**

(B) the commissioner may issue public aerial shooting permits, public land and shoot permits, or ground-based shooting permits, allow agents of the state, or department employees to conduct aerial, land and shoot, or ground-based shooting as a method of wolf removal under AS 16.05.783, including the use of any type of aircraft;

(C) the commissioner may authorize the use of state employees or agents or state owned, privately owned, or chartered equipment, including helicopters, as a method of wolf removal under AS 16.05.783;

**(6) Time frame is as follows:**

(C) through June 30, 2031, the commissioner may authorize the removal of wolves in the SAP Predation Management Area to aid in population growth or improve harvest of SAP caribou;

(D) annually, the department shall, to the extent practicable, provide to the board a report of program activities conducted during the preceding 12 months, including implementation activities, the status of caribou and wolf populations, and recommendations for changes, if necessary, to achieve the objectives of the plan;

**7) The commissioner will activate, review, modify or suspend program activities as follows:**

(I) when IM population criteria for the SAP are below objectives;

(J) if after three years, the harvest of wolves is not sufficient to make progress towards the intensive management population objectives for wolves;

(K) if after three years, there is no detectable increase in the total number of caribou in the control area;

(L) if after three years, bull-to-cow ratios show no appreciable increase or remain below 20 bulls per 100 cows;

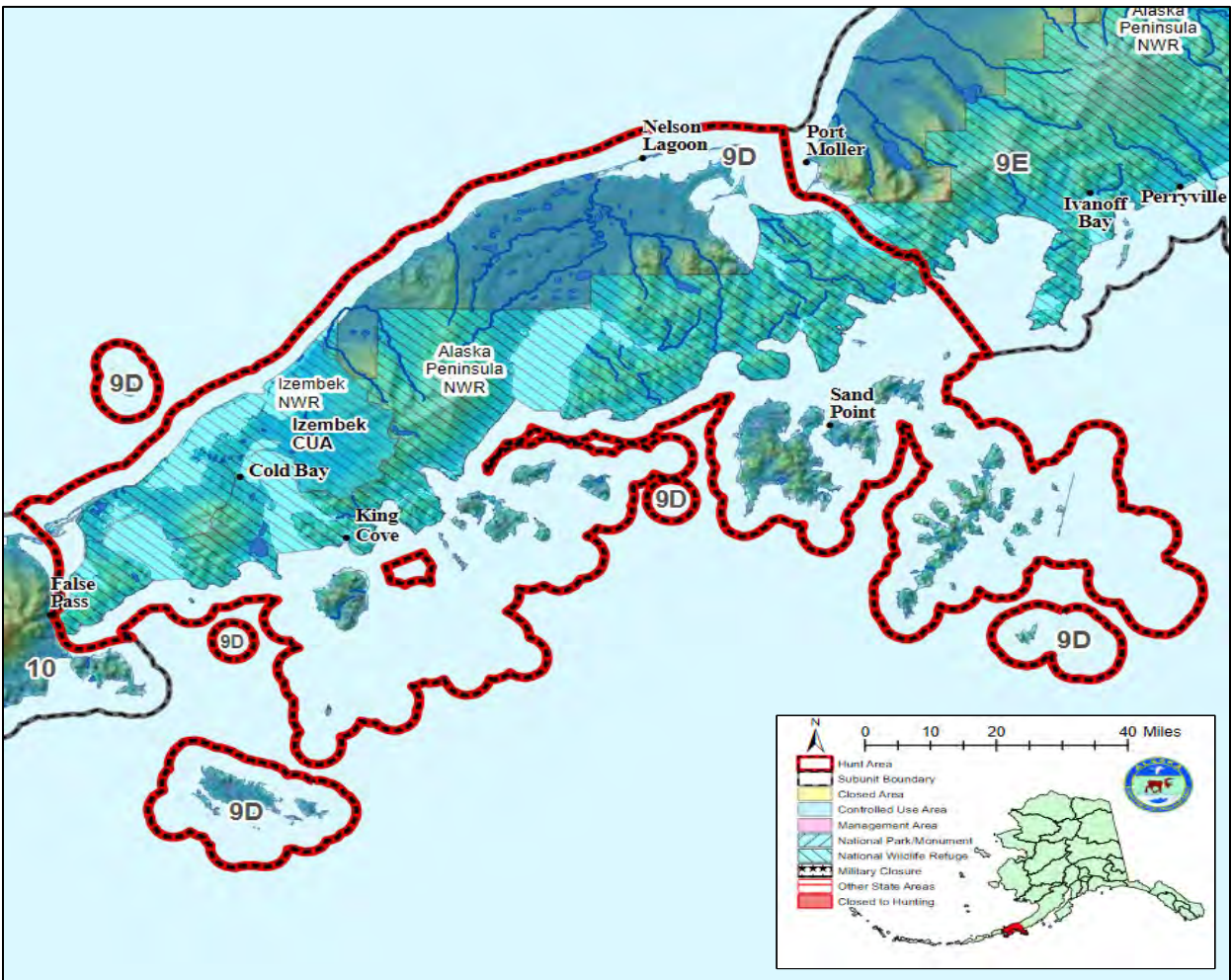
(M) if after three years, fall calf-to-cow ratios show no appreciable increase or can be sustained at 25 or more calves per 100 cows;

(N) if after three years, any measure consistent with significant levels of nutritional stress in the caribou population are identified;

**(O) when the caribou population and harvest objectives within the SAP Predation Management Area have been met; or**

**(P) upon expiration of the period during which the commissioner is authorized to reduce wolf numbers in the wolf reduction areas.**

**WHAT ARE THE CURRENT REGULATIONS?** The current caribou hunting regulations for the SAP (Figure 205-1) can be found in 5 AAC 85.025 and in the 2021–2022 Alaska Hunting Regulations.



**Figure 205-8.** The Southern Alaska Peninsula herd ranges across mainland Unit 9D and is the focus of the SAP IM Plan.

Hunting for caribou is by harvest ticket (HT) in Unit 9D during August 1–September 30 (residents and nonresidents) and November 15– March 30 (residents only). The current bag limit

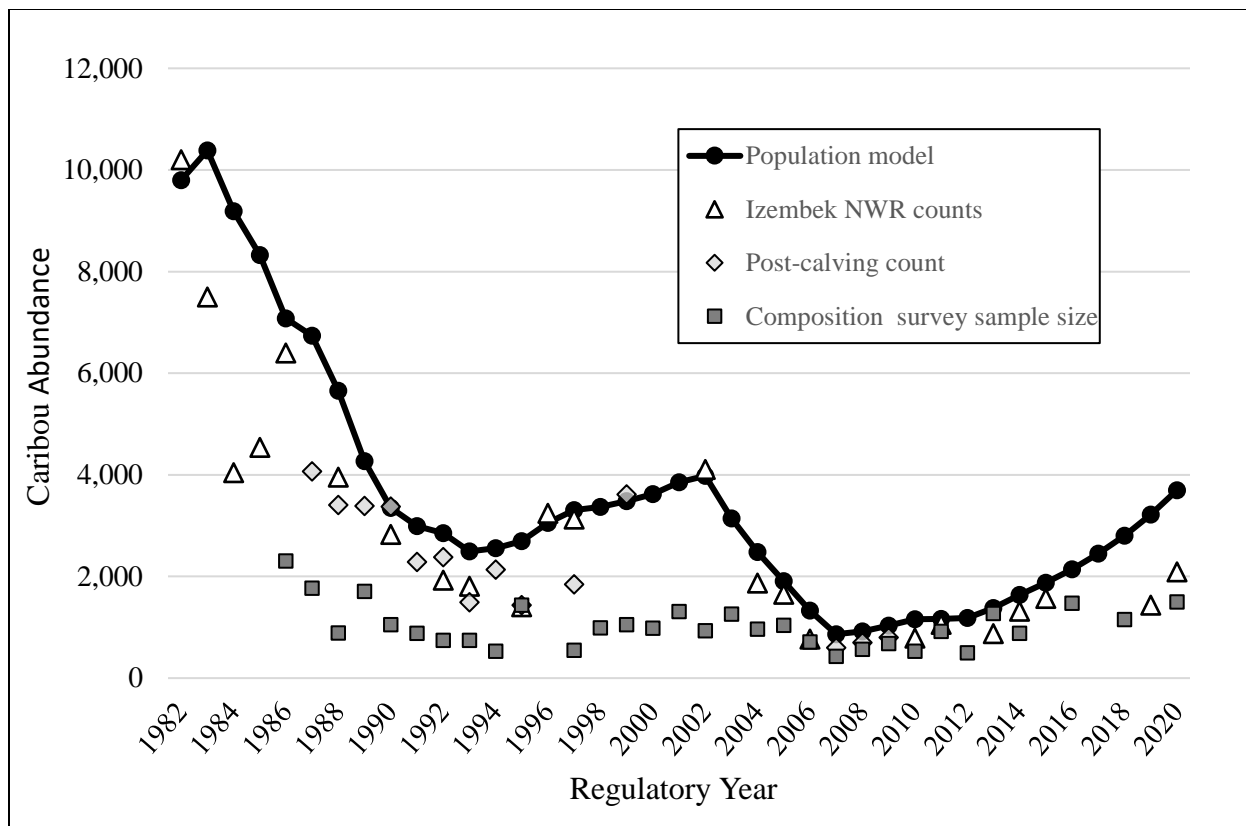
is 3 caribou for residents and 2 bulls for nonresidents. There is a positive customary and traditional use finding in Unit 9D with an amount necessary for subsistence of 100–150 caribou. This amount is currently combined with the Unimak Island herd.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The proposed reinstatement of the SAP IM Plan introduces simplified language removing unnecessary and dated information from regulation. The reauthorized plan has the potential to increase harvest and predator removal through a variety of opportunities to improve the health of the caribou population.

**BACKGROUND:** Under 5AAC 92.112 the BOG authorized an IM program in Unit 9D in March 2008 for wolf control; it was designed to increase caribou abundance and harvest by reducing predation on caribou by wolves. The program was suspended in July 2010 (RY10) after achieving the IM objectives.

During the 3 years that the IM program was active, a total of 38 (64%) wolves were removed by ADFG staff on the calving grounds; 21 (36%) were taken from the wolf assessment area by hunters and trappers. Since suspension of the IM program in RY10, a total of 35 wolves (57%) were harvested by nonresident hunters and 26 wolves (43%) were taken by residents through RY19. Because nonresident hunters have been harvesting the majority of wolves in Unit 9(D), the Department recommends maintaining the tag fee exemption for nonresidents, and does not expect that active predation control will be required in the near future.

Caribou hunting was closed during RY07–RY12 and reopened in RY13 by Tier II hunt, followed by HT hunt in RY16. During the last 5 years annual harvest averaged 65 caribou, with harvest increasing slowly through RY20 to 74 caribou. The population has continued to increase and currently numbers about 4,500 caribou (Fig 205-2). Current composition ratios are 44 bulls:100 cows and 32 calves:100 cows.



**Figure 205-2.** History of population size indicators for the Southern Alaska Peninsula caribou herd in Unit 9D, 1982–2020. Dotted lines represent the upper and lower limits of the population objective. The population model uses composition survey data as inputs.

Under 5AAC 92.112, an IM plan for the SAP was established in March 2008 to facilitate growth in the caribou herd on the mainland portions of Units 9D to aid in achieving intensive management objectives, which may include wolf population reduction. The SAP population objective is 1,400–4,000 caribou and the harvest objective is 150–200 caribou.

**DEPARTMENT COMMENTS:** The Department **submitted this proposal and SUPPORTS** reauthorizing the Southern Alaska Peninsula IM plan. Currently, the department has no intention of active predation control in the near future, but supports the resulting statutory waiver of the nonresident tag fee for wolves.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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Proposal 206

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**PROPOSAL 207 – 5 AAC 85.020, Seasons and bag limits for brown bears.** Close brown bear season in Unit 9A.

**PROPOSED BY:** Wayne Hall

**WHAT WOULD THE PROPOSAL DO?** Close all brown bear hunting in Unit 9A to resident and nonresident hunters.

**WHAT ARE THE CURRENT REGULATIONS?** The current brown bear hunting regulations for Unit 9 can be found in 5 AAC 85.020 and in the *2021–2022 Alaska Hunting Regulations*.

Regulations are 1 brown bear every 4 regulatory years, October 1–21 and May 10–31. Biennial seasons are open every other year during odd years in the fall (RB368) and even years in the spring (RB370); these have been in effect since 1976. Residents and nonresidents have the same seasons and bag limits for registration hunts.

There is a negative finding for customary and traditional uses of brown bears in Unit 9A.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** If adopted, there would be an unnecessary loss of hunting opportunity by both residents and nonresidents. There would be little effect on the 9A bear population, which is already mostly closed to bear hunting, and in reality, there is no way to determine a 9A bear from a 9B or 9C bear because they have large home ranges and move around with the availability of seasonal food resources.

**BACKGROUND:** The proposer incorrectly states that the bear population is managed on a subunit basis. It is widely accepted that bears travel long distances and readily cross subunit boundaries. This fact may sometimes make management challenging when harvest appears too high or very low. The department and Board of Game have for decades supported short seasons and reduced bag limits for nonresident and resident hunters in Unit 9 for bear conservation and hunt quality. The management objective for bears in all of Unit 9 is to maintain a high bear density with a sex and age structure that will sustain a harvest composed of 60% males, with 50 males 8 years or older taken during the combined fall and spring seasons.

Unit 9A has approximately 1,600 mi<sup>2</sup> of available brown bear habitat (with high elevation and large water bodies subtracted) of which about 480 mi<sup>2</sup> is open to bear hunting (Table 207-1, Figure 207-1). The remaining 1,130 mi<sup>2</sup> of bear habitat is located in Lake Clark National Park (LCNP) or McNeil River State Game Refuge and Sanctuary (SGR&S), both of which are closed to hunting and provide large areas of refugia. The shared boundary with Unit 9B is only a few miles to the coast in the area open to hunting (Figure 207-1); the Aleutian Range is not a barrier to bear movements in that area. Bears have large home ranges and move freely across administrative boundaries; harvest that occurs in Unit 9A is not simply drawn from that narrow,



480 mi<sup>2</sup> stretch of coastline. Seasonal and daily movements are largely the result of available food resources. Harvest information is collected on a drainage (hence subunit) basis and reported as such.

Registration permits were required beginning in 2011 to better monitor harvest and hunter participation. Average annual harvest in Unit 9A during 2011–2021 was 24.6 brown bears (Table 207-2). Based on the abundance estimate for Unit 9A by Lake Clark National Park biologists in 2003 (the most recent available), 24.6 bears (about 73% of which were males) represent a harvest rate of approximately 2.9–4.3% for a population ranging from 569 to 837 bears. Even if the subunit was a closed system, this is a sustainable harvest rate for coastal brown bears.

**Table 207-1.** Unit 9A land and hunting closure status. Bear habitat is considered below 2,700 ft elevation with large water bodies removed. Note these calculations do not include lands below mean high water and below mean high tide.

Land Area	mi <sup>2</sup>	km <sup>2</sup>
Unit 9A area	2,149	5,566
Lake Clark NP portion of Unit 9A	1,889	3,081
McNeil River SGR&S portion	426	1,104
All Unit 9A bear habitat area	1,609	4,168
Bear habitat closed to hunting		
Lake Clark NP	726	1,880
McNeil River SGS&R	404	1,046
Total closed	1,130	2,926
Amount of estimated bear habitat open to hunting in Unit 9A	479	1,242

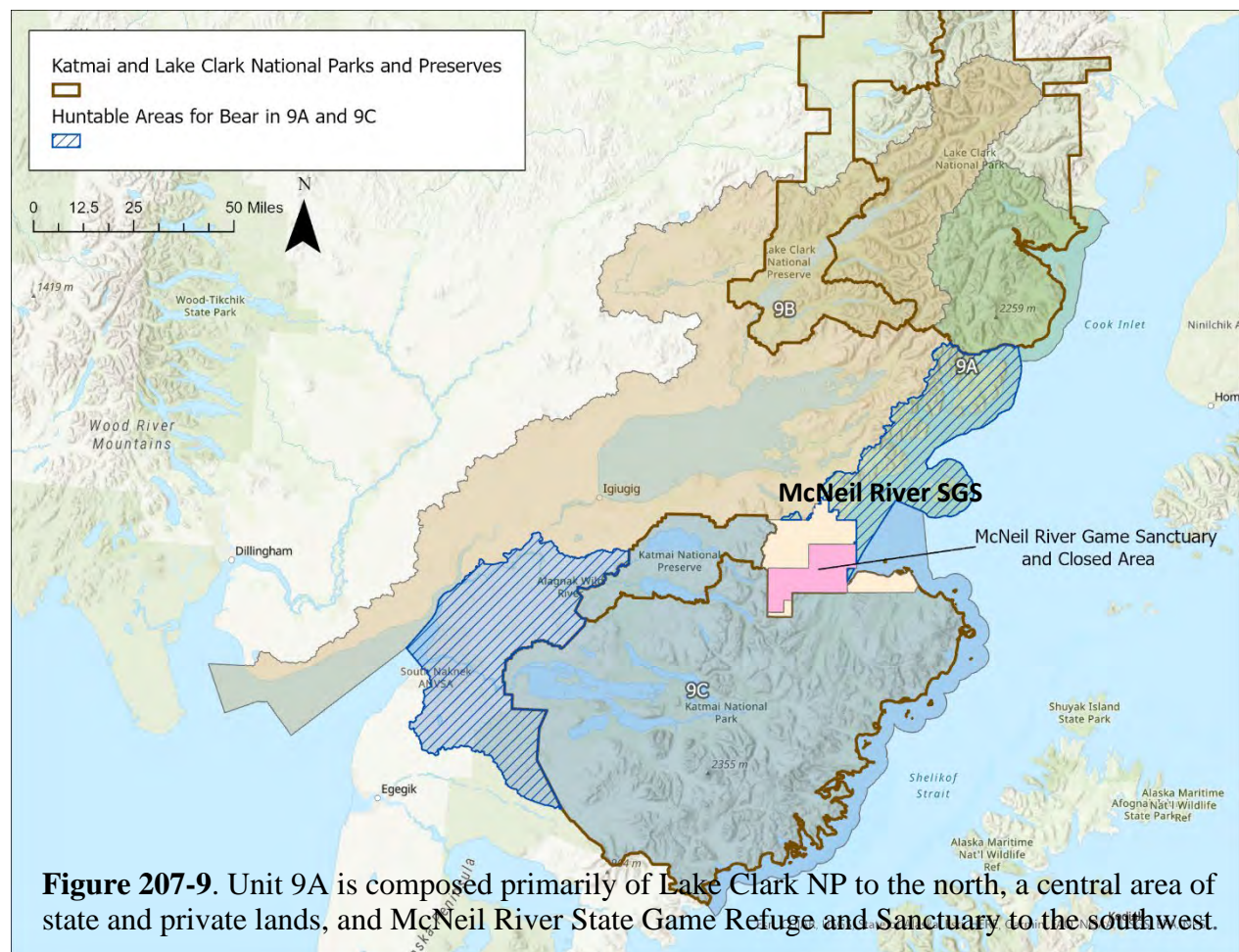
Harvest has rarely exceeded an annual average harvest of 30 bears, but it occurred during the 2016–2017 two-year hunt period (63 bears) when hunter participation increased, and during 1998–2001 hunt periods (63 and 60 bears per biennial season). Increasing harvest and hunter participation can be managed through season, residency restrictions, and Emergency Orders rather than closure to all hunting.

**Table 207-2.** Unit 9A bear harvest and hunter participation for biennial hunts RB368 and RB370, RY2011–2020.

RY	Harvest	Hunters
2011	40	64
2012	0	0
2013	46	78
2014	0	0
2015	48	70
2016	0	0
2017	63	111
2018	0	0
2019 <sup>a</sup>	34	57
2020 <sup>b</sup>	45	63
Average	27.6	44.3

<sup>a</sup> Spring season for residents only

<sup>b</sup> Spring (May 2021) season only



**DEPARTMENT COMMENTS:** The Department is **OPPOSED** to closing bear hunting in Unit 9A because the bear population in the region is managed sustainably. Bear viewing and bear hunting have coexisted in Unit 9 for decades; it is unnecessary to eliminate hunting activities in order to benefit other uses because bear populations are conservatively managed for abundance and trophy value.

**COST ANALYSIS:** If this proposal is approved the department will lose revenue from loss of nonresident brown bear tag fees.

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**PROPOSAL 208 – 5 AAC 85.020, Seasons and bag limits for brown bears.** Align brown bear hunting seasons in Unit 9C with Unit 9A.

**PROPOSED BY:** Cabot Pitts

**WHAT WOULD THE PROPOSAL DO?** Increase brown bear fall and spring seasons in Unit 9C by 1 week each, allowing hunters to hunt earlier in the fall and later in the spring. Season dates would be October 1 – 21 and May 10 – 31, which are the current seasons in Unit 9A.

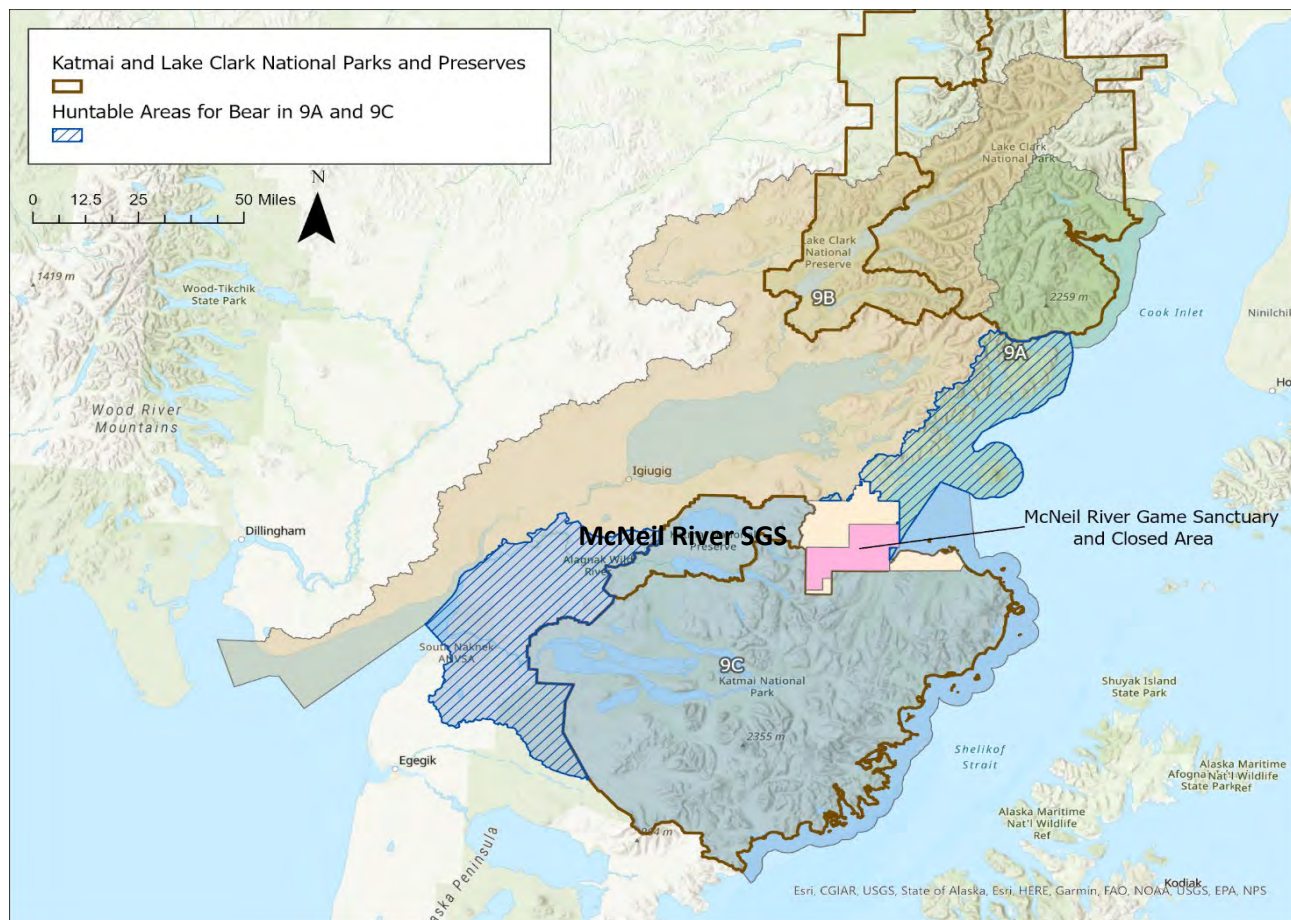
**WHAT ARE THE CURRENT REGULATIONS?** The current brown bear hunting regulations for Unit 9 can be found in 5 AAC 85.020 and in the *2021–2022 Alaska Hunting Regulations*.

Specific to unit 9C, regulations are 1 brown bear every 4 regulatory years, October 7–21 and May 10–25. Biennial seasons are open every other year during odd years in the fall and even years in the spring; these have been in effect since 1976. Residents and nonresidents have the same seasons and bag limits for registration hunts RB368 and RB370. Resident hunters can also hunt with an RB525 permit within 2–4 miles of each community (King Salmon, Naknek and South Naknek) in Unit 9C; this is open year-round with a bag limit of 1 bear per year. There is a negative finding for customary and traditional use of brown bear in Unit 9C.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Harvest chronology suggests that this proposal would result in additional opportunity for hunters and a moderate increase in harvest. During RY18–RY20, for hunts RB368 and RB370, most bears were taken in first week of the fall hunt in Unit 9C, and no bears were harvested after October 15, indicating that bears were moving toward inaccessible elevations to den before the season closed on October 21. In the spring during the same period, all bears but 1 were harvested during the second and third weeks of the hunt, indicating that more bears were becoming available after den emergence. Overall, the Unit 9C bear population is lightly harvested and mostly closed to hunting; additional harvest is unlikely to result in a biological concern.

**BACKGROUND:** Unit 9C is composed primarily of Katmai National Park & Preserve (Figure 208-1). Katmai Park provides a large refugia closed to hunting. Hunting is allowed in Katmai

Preserve and lands west of the park. Registration permits were required beginning in 2011 to better monitor harvest and hunter participation. Average annual harvest in Unit 9C during 2011–2020 was 18 brown bears (Table 208-1). An abundance estimate in 2005 resulted in a population of 1,593–2,389 bears with a density of 89–133 bears per 1,000 km<sup>2</sup>, with lower density on the western side of the unit. Estimated density in Katmai Preserve only (Figure 208-1) was 80–124 bears per 1,000 km<sup>2</sup> in 2005. In 2007, based on stream surveys and a visibility correction factor, biologists estimated that 330–580 bears were in Katmai Preserve during August salmon runs. Assuming the abundance estimate still applies, the current harvest rate would be 1% or less of the unit-wide population. During RY18–RY20, 21 of the 37 bears harvested were by resident hunters under the RB525 near-village hunt.



**Figure 208-10.** Unit 9C is composed primarily of Katmai National Park and Preserve.

**Table 208-1.** Unit 9C bear harvest and hunter participation in registration hunts.

RY	Harvest	Hunters
2011	38	84
2012	7	20
2013	20	59
2014	2	5
2015	43	75
2016	5	13
2017	31	60
2018	5	12
2019 <sup>a</sup>	18	41
2020 <sup>b</sup>	6	12
Average	17.4	41.0

<sup>a</sup> Spring season for residents only

<sup>b</sup> Spring (May 2021) season only

**DEPARTMENT COMMENTS:** The Department is **NEUTRAL** on lengthening season dates for brown bears in Unit 9C. Katmai NP&P provides a large refugia, the population is lightly harvested and there are no conservation concerns.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 209 – 5 AAC 85.010(1)(a). Hunting seasons and bag limits for bison.** Modify the Copper River bison harvest opportunity (DI454) in Units 11 and 13D.

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** Increase the allowable number for DI454 permits from up to 24, to up to 50.

**WHAT ARE THE CURRENT REGULATIONS?** The current bison hunting regulations can be found in 5 AAC 85.010 and in the *2021–2022 Alaska Hunting Regulations*.

<b>Units and Bag Limits</b>	<b>Resident Open Season</b>	<b>Nonresident Open Season</b>
(1)	(General hunt only)	
Unit 11, east of the Copper River, south of the Klawasi River, and west of a line from Mount Sanford to Mount Wrangell to Long Glacier, and west of the Kotsina River, and that portion of Unit 13(D) east of the Edgerton Highway		
1 bison every 10 regulatory years by drawing permit only; up to 24 permits may be issued.	Sept. 1 – Mar. 31	Sept. 1 – Mar. 31

Bison have a negative C&T finding in Unit 11. No C&T finding has been made in Unit 13.



**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Additional harvest opportunity would be available for Copper River bison, and sufficient harvest could be achieved to stabilize the size of the herd.

**BACKGROUND:** The Copper River bison herd originated from animals that were relocated from the National Bison Range in Moise, Montana (now known as the Bison Range) to Delta Junction, Alaska in 1928. In 1950, 5 bulls and 12 cows were moved from the Delta herd to Slana. These bison moved away from the release site, and by 1961 they had relocated down the Copper River to the Dadina and Chetaslina river drainages. Currently the herd makes seasonal movements from the upper Dadina and upper Chetaslina to the Copper River, south to Chitina. Small roaming groups are sometimes seen in Kenny Lake. During the hunting season hunters are successful in finding small, scattered groups along the Copper River, from the Dadina to Chitina. Throughout the years minimum population counts for the herd have varied from a low of 51 bison in 1967 to a high of 225 in 2017 (Table 209-1).

**Table 209-1.** Copper River Bison herd minimum counts, harvest, and success, 2016–2021

Year <sup>a</sup>	Herd Minimum Count	DI454 Permits Issued <sup>b</sup>	Total Harvest <sup>c</sup>	Hunter Success <sup>c</sup>
2016	196	24	11	65%
2017	225	30	12	80%
2018	159	46	19	58%
2019	146	25	15	79%
2020	No count	25	14	88%
2021	156 <sup>d</sup>	24	TBD	TBD

<sup>a</sup> Count occurs during spring of a given calendar year, whereas harvest occurs during fall of that calendar year, which coincides with the regulatory year.

<sup>b</sup> If a hunter notifies ADF&G prior to Sept. 1 that they will not hunt, their permit is voided and an additional permit is issued to the next hunter on the lottery permit winner list.

<sup>c</sup> Includes SI454 Governor's Permit.

<sup>d</sup> Partial count; evidence of closer to 200 animals in the herd.

The department held the first hunt by registration permit for Copper River bison in regulatory year (RY) 1964. The hunt was closed from RY1989 to RY1998 due to a decline in herd size, but annual harvests resumed in RY1999 under a drawing permit hunt. Harvest has ranged from 4 to 18 bison annually since then, which represents 3%–11% of the annual minimum count. In RY2012–16 and RY2018, 1 governor's permit was auctioned annually for this herd, and the permit winners harvested 1 bull bison during each of those years. Permit winners were Alaska residents 4 out of those 6 years. For DI454 draw permit winners, hunter success was 70% over the past five seasons. Overall harvest has been 70% males over the past five seasons.

As the herd has increased in recent years, harvestable surplus sometimes exceeds that which can be achieved with only 24 permits. Permit winners are requested to notify the department of intent

to hunt and for every hunter that declines the permit prior to the start of the season, a new draw winner is awarded a permit in their place to maximize harvest under a limited number of permits.

Prior to the start of RY2021, Ahtna, Inc. ceased to provide land access permits for hunters wishing to have the opportunity to harvest a bison on Ahtna, Inc. lands within the DI454 hunt area. Chitina Native Corporation, however, is offering such a permit for Chitina Native Corporation lands. In previous years, half or more of all DI454 hunters have obtained an Ahtna, Inc. permit for bison hunting.

**DEPARTMENT COMMENTS:** The Department submitted this proposal and **SUPPORTS** increasing the number of permits that may be issued for this herd. If adopted, this proposal will provide increased opportunity throughout the hunt area when herd abundance is high, and to allow for sufficient harvest to control herd growth.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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Proposal 210

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Proposal 211

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Proposal 212

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Proposal 213

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**PROPOSAL 214 – 5 AAC 85.045(a)(11) Hunting seasons and bag limits for moose;**  
Eliminate all Unit 13 draw hunts and comply with Section 16.05.258, if there is a shortage of resources.

**PROPOSED BY:** Ahtna Tene Nené

**WHAT WOULD THE PROPOSAL DO?** This proposal would eliminate all Unit 13 draw hunts for moose, which include resident harvest opportunity for any-bull harvest, antlerless harvest, and nonresident harvest opportunity for bulls with 50-inch or greater antlers, or 4 or more brow tines on at least 1 side. The general season for moose in Unit 13 would remain unchanged with a bag limit of 1 bull with spike-fork antlers or 50” or greater or 4 or more brow tines on at least one side



by general season harvest ticket. The Community Subsistence Harvest (CSH) hunt would remain unchanged.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations in Unit 13 can be found in 5 AAC 85.045 and in the *2021–2022 Alaska Hunting Regulations*. The CSH harvest area is defined in 5 AAC 92.074(d).

The Board of Game has made a positive customary and traditional use finding for moose in Unit 13 with an amount necessary for subsistence (ANS) of 300–600 moose. Consistent with previous findings, the Board of Game at the March 2017 meeting found that, “the ability to take any bull moose regardless of antler size or configuration is an important component of the community pattern of subsistence hunting. The ability to take any bull regardless of characteristics must be limited because of the potential to overharvest certain age classes of bulls. For many hunts, regulations that restrict antler characteristics of legal animals to spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines (SF50/4) protects those age classes, however, they do not provide the any bull opportunity consistent with the community pattern of subsistence harvest”. (2017-220-BOG)

Hunters who wish to hunt moose in Unit 13 may do so under the following seasons and bag limits:

- **CM300** - Copper Basin Community Subsistence Harvest (CSH) Hunt:
  - The board has established an allocation of 100 bull moose that do not meet general season antler restrictions (any-bulls) to the Copper Basin CSH. CSH participants have a bag limit of 1 bull from August 20–September 20 if they are in possession of an any-bull locking tag.
  - CM300 permit holders not in possession of an any-bull locking tag have a bag limit of 1 moose with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines on at least 1 side, with the same season dates.
  - Once the 100 any-bull allocation has been met, the bag limit is changed for all CSH participants by emergency order to 1 bull with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines.
  - 350 CSH participants receive any-bull locking tags based on Tier II scoring criteria. Each community group must have 25 qualified individuals to successfully apply for any CSH program, and Copper Basin CSH groups are locked-in for a two-year commitment upon successful application.
  - Any eligible hunter within a group may act as a designated hunter for other members of the group.
  - Hunters must salvage the head, heart, liver, kidneys, stomach, and hide, as well as all edible meat from the front quarters, hindquarters, ribs, neck, and backbone.
  - Meat of the forequarters, hindquarters, ribs, brisket, neck, and back bone must remain naturally attached to the bones until delivered to the place where it is processed for human consumption.

- The group coordinator must submit an annual Coordinator Community Harvest Report. If the coordinator fails to do so, all group participants will be placed on the Failure to Report list and will not be eligible to participate in the CSH hunt during the following regulatory year.
- No member of a Copper Basin CSH moose hunt household may hold state or federal moose permits outside of the Copper Basin Community Hunt area (Unit 11, 13, and that portion of Unit 13 south of the Little Tok River) or hold general season moose harvest tickets.
- After the CSH hunt has ended, unsuccessful individual household members may then acquire state or federal moose harvest tickets or permits for other areas if the bag limit is greater than one moose per person.
- **GM000** - Resident hunters with general season harvest tickets for Unit 13 may harvest 1 bull with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines on 1 side from September 1–20.
- **DM324** - Resident hunters who successfully draw a Unit 13 bull moose drawing permit are permitted 1 antlered bull from September 1–September 20; up to 5 permits may be issued.
- **DM325** - Resident hunters who successfully draw a Unit 13 antlerless moose drawing permit for 13A can harvest 1 antlerless moose from October 1–31 or March 1–31; up to 200 permits may be issued.
- **DM335–339** - Nonresident hunters who successfully draw a Unit 13 drawing permit are permitted 1 bull with 50-inch antlers or antlers with 4 or more brow tines on 1 side from September 1–20; up to 150 permits may be issued and each permit is valid for only 1 subunit of Unit 13.
- **FM1301** - Federally qualified subsistence users can obtain a federal moose permit from the Glennallen Field Office of the Bureau of Land Management. The season is August 1–September 20 with a bag limit of 1 antlered bull moose per household for residents that qualify for Unit 13E, or 1 antlered bull moose per hunter for residents that qualify for the remainder of Unit 13. Federal permits are valid for federal subsistence lands only. In July 2020, these lands in Units 13A and 13B were closed by the Federal Subsistence Board to non-federally qualified hunters.
- **Federal Community Hunt** Federally qualified subsistence users can obtain community hunt permits for moose valid for federal subsistence lands in Unit 13 from the Ahtna Intertribal Resources Commission in Glennallen. Seasons and bag limits correspond with those of existing federal subsistence hunting opportunities in those areas.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The elimination of the draw hunts would remove opportunity for residents and non-residents, which has been provided by the BOG alongside general season and subsistence hunt opportunities for moose in Unit 13. Bull harvest would not change substantially, nor would overall competition in the field change substantially. Loss of the antlerless moose harvest opportunity in Unit 13A would

eliminate the department's ability to maintain the moose population at a highly productive level below carrying capacity, and, in time, a peak and then drop in abundance would likely occur. Intensive management and wolf control would need to be restructured for Unit 13 if antlerless harvest is not available, or an alternative strategy to provide for antlerless harvest in the fall would be necessary.

**BACKGROUND:** Five nonresident draw hunts (DM335–339) were implemented by the BOG, beginning in RY2009, to allow up to 150 nonresident permits to be issued within Unit 13, with each hunt valid for only one subunit, to spread nonresident effort across Unit 13. When the hunts began in RY2009, only 50 total permits were issued. Permits increased to 110 in RY2010 and fluctuated annually after that. Since RY2014, total permits issued have been 115 each year. The bag limit is one bull with 50" or greater antlers, or 4 or more brow tines on at least one side, and average harvest over the past 5 years is 22 bulls (Table 214-1).

An antlerless draw hunt (DM325) was implemented in a small portion of central 13A in RY2012, with only 10 permits issued annually. Harvest was low in 2012 and 2013 (4 cows and 2 cows, respectively). During the 2013 BOG meeting, the Board adopted a proposal that changed the hunt from September 1–20 to October 1–31 and March 1–31, which resulted in an increase in harvest, but some antlerless bulls were harvested during the March season in some years. As moose abundance in 13A continued to rise, but bull:cow ratios remained at or below objectives, the hunt area was increased to all of 13A West (west of Lake Louise Road, Lake Louise, Lake Susitna, Tyone Lake, and Tyone River) in RY2019. In RY2020 permits increased from 10 to 20 in an effort to gradually increase harvest to reach 1% of the estimated cow population in 13A, per BOG direction, which would be 25–28 cow moose in recent years (Table 214-1).

An any-bull draw hunt was implemented by the BOG (DM324), beginning RY2016, to allow up to 5 draw permits to be issued to residents annually for any bull moose in Unit 13. Five permits have been issued annually, and harvest averages fewer than 4 bulls annually over the past 5 years (Table 214-1). The season dates are September 1–20, which are not during the rut as the proponent suggests. Prior to this hunt, an any-bull resident draw hunt was in place for Units 13A, B, and C from 2009 through 2013, with 160 to 325 permits issued annually.

The ANS for moose in Unit 13 is met or exceeded annually, and additional harvestable surplus is available above ANS (Table 214-1). In most years ANS is met through general season moose harvest and through CSH and federal harvest, but harvest above ANS is available for draw opportunities at the discretion of the Board. Bull-to-cow ratios are currently at or above objectives in all subunits. Moose abundance in Unit 13 as a whole has been within the combined subunit objectives since 2008. Moose abundance in 13D, where predator control is not currently an option, only recently dropped below objectives, and the 3-year average remains at the lower end of the objectives. Moose trends in 13B suggest that the population peaked in 2015 and just within objectives, and more research is underway to assess whether objectives are appropriate for

this subunit. While yearling bull-to-cow ratios are low in some subunits, removing draw permit hunts will not protect young bull moose since only 5 draw permits allow for the take of any bulls and all nonresident draw permits require the harvest of 50” or 4 brow tine moose. There is no evidence that a resource shortage is occurring in Unit 13 for moose, and harvestable surplus is more than adequate to provide for the ANS.

**Table 214-1.** Moose harvest in Unit 13 by hunt, RY2015–2020.

RY <sup>1</sup>	CSH Harvest	General Season Harvest	Resident Draw Any Bull Harvest	Resident Draw Antlerless Harvest	Nonresident Draw Harvest	Federal Harvest	Total Harvest
2015	171	772	No Hunt	7	23	85	1,058
2016	201	757	5	5	21	100	1,089
2017	188	689	3	8	28	90	1,006
2018	154	557	2	7	20	61	801
2019	160	649	4	10	18	71	914 <sup>2</sup>
2020	138	629	5	16	23	67	880 <sup>2</sup>

<sup>1</sup> In RY2015 the CSH moose season dates were August 10–September 20, but in RY2016 and following years the CSH moose season dates were August 20–September 20.

<sup>2</sup> Includes ceremonial harvest reported in Unit 13.

The Unit 13 moose management strategy follows AS 16 05.258 (b) (2). The harvestable portion of the moose population is great enough to provide for subsistence uses and some, but not all, other consumptive uses. The board has adopted regulations that (A) provide reasonable opportunity for subsistence uses of moose; (B) provide for other uses subject to beneficial uses; and (C) differentiate between these uses.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of moose harvest but is **OPPOSED** to eliminating antlerless draw hunts in Unit 13. The current antlerless draw hunt is essential for maximizing harvest and productivity of the Unit 13A moose population under sustained yield and intensive management principles. Should the Board choose to eliminate draw hunts in Unit 13, an alternative harvest strategy for antlerless moose should be devised.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 215 – 5 AAC 85.045(11). Hunting seasons and bag limits for moose.** Reauthorize the antlerless moose seasons in Unit 13.

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** This proposal reauthorizes the antlerless moose hunts in Unit 13; these hunts must be re-authorized annually by the Board of Game (BOG) to comply with statutory requirements.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

The department is authorized to issue up to 200 drawing permits for antlerless moose hunts in Unit 13 for an October 1–31 and March 1–31 season. Hunters are prohibited from taking calves and cows accompanied by calves.

Units and Bag Limits (11)	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Unit 13 1 moose per regulatory year, only as follows: ...	Oct. 1–Oct. 31 Mar. 1–Mar. 31 (General hunt only)	No open season
1 antlerless moose by drawing permit only in Unit 13(A); up to 200 permits may be issued; a person may not take a calf or a cow accompanied by a calf ...		

The BOG has made a positive customary and traditional use finding for moose in all of Unit 13, with an amount reasonably necessary for subsistence of 300–600 moose for the entire game management unit.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal reauthorizes the antlerless moose hunts in Unit 13 for the 2021 regulatory year; these hunts are needed to keep the moose population within intensive management objectives and provide additional hunting opportunity for residents.

**BACKGROUND:** The Unit 13 antlerless hunt was established in March 2011 and the first Unit 13 antlerless hunt under this regulation took place in September 2012. Ten permits have been issued annually for a single hunt area in the central portion of Unit 13A. The hunt area was extended for RY19 to include all of 13A-West, where bull-to-cow ratios are low, twinning rates are low, browse removal is relatively high, and overall moose abundance in 13A was at or above the upper end of the abundance objectives from 2009 to 2018, only recently dropping down to the

midpoint of the objectives. This hunt resulted in the harvest of four cow moose during the 2012 season and two during the 2013 season. During the 2013 Board of Game meeting in Wasilla, the board adopted a proposal that changed the hunt from September 1–20 to October 1–31 and March 1–31. These new season dates were implemented in the fall of 2014, and harvest success increased.

Four cows and 3 bulls were harvested during the 2014 season, 7 cows during the 2015 season, 5 cows during the 2016 season, 6 cows and 2 bulls during the 2017 season, 7 cows during the 2018 season, and 8 cows and 2 bulls during the 2019 season. Twenty permits were issued for RY20, and 16 cows were harvested.

The board has directed the department to issue antlerless moose permits when the moose population is at or above the midpoint of the population objective with the goal of harvesting up to 1% of the cow moose population. The current population objective for Unit 13A is 3,500–4,200, and the population was estimated to be above objective in 2015 and 2016, within objectives in 2017, and near the higher end of the objectives in 2018 and 2019. In 2020 the 13A moose population was estimated to be near the midpoint of the objectives, and the 3-year average remains near the higher end of the objectives. The antlerless hunt in western Unit 13A contributes to maintaining the moose population within the intensive management objectives. The additional harvest provided through this hunt will also assist in achieving the harvest objectives for the population.

**DEPARTMENT COMMENTS:** The department submitted and **SUPPORTS** this proposal. Antlerless moose hunts must be re-authorized annually by the board. These hunts are an essential management tool to regulate the moose populations within the established intensive management objectives for population size, sex ratios, and harvest.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 216 – 5 AAC 85.045(a)(11) Hunting seasons and bag limits for moose.** Establish and antlerless draw hunt in 13C.

**PROPOSED BY:** Alaska Department of Fish and Game

**WHAT WOULD THE PROPOSAL DO?** This proposal would establish a resident antlerless draw hunt for moose in Unit 13C, allowing up to 200 permits to be issued annually, with season dates of October 1–31. Hunters would be prohibited from harvesting calves or cows accompanied by calves.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations can be found in 5 AAC 85.045 and in the *2021–2022 Alaska Hunting Regulations*. The CSH harvest area is defined in 5 AAC 92.074(d).

The Board of Game has made a positive customary and traditional use finding for moose in Unit 13 with an amount necessary for subsistence (ANS) of 300–600 moose. Hunters who wish to hunt moose in Unit 13 may do so under the following seasons and bag limits:

- **CM300** - Copper Basin Community Subsistence Harvest (CSH) Hunt:
  - The board has established an allocation of 100 bull moose that do not meet general season antler restrictions (any-bulls) to the Copper Basin CSH. CSH participants have a bag limit of 1 bull from August 20–September 20 if they are in possession of an any-bull locking tag.
  - CM300 permit holders not in possession of an any-bull locking tag have a bag limit of 1 moose with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines on at least 1 side, with the same season dates.
  - Once the 100 any-bull allocation has been met, the bag limit is changed for all CSH participants by emergency order to 1 bull with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines.
  - 350 CSH participants receive any-bull locking tags based on Tier II scoring criteria. Each community group must have 25 qualified individuals to successfully apply for any CSH program, and Copper Basin CSH groups are locked-in for a two-year commitment upon successful application.
  - Any eligible hunter within a group may act as a designated hunter for other members of the group.
  - Hunters must salvage the head, heart, liver, kidneys, stomach, and hide, as well as all edible meat from the front quarters, hindquarters, ribs, neck, and backbone.
  - Meat of the forequarters, hindquarters, ribs, brisket, neck, and back bone must remain naturally attached to the bones until delivered to the place where it is processed for human consumption.
  - The group coordinator must submit an annual Coordinator Community Harvest Report. If the coordinator fails to do so, all group participants will be placed on the Failure to Report list and will not be eligible to participate in the CSH hunt during the following regulatory year.
  - No member of a Copper Basin CSH moose hunt household may hold state or federal moose permits outside of the Copper Basin Community Hunt area (Unit 11, 13, and that portion of Unit 13 south of the Little Tok River) or hold general season moose harvest tickets.
  - After the CSH hunt has ended, unsuccessful individual household members may then acquire state or federal moose harvest tickets or permits for other areas if the bag limit is greater than one moose per person.

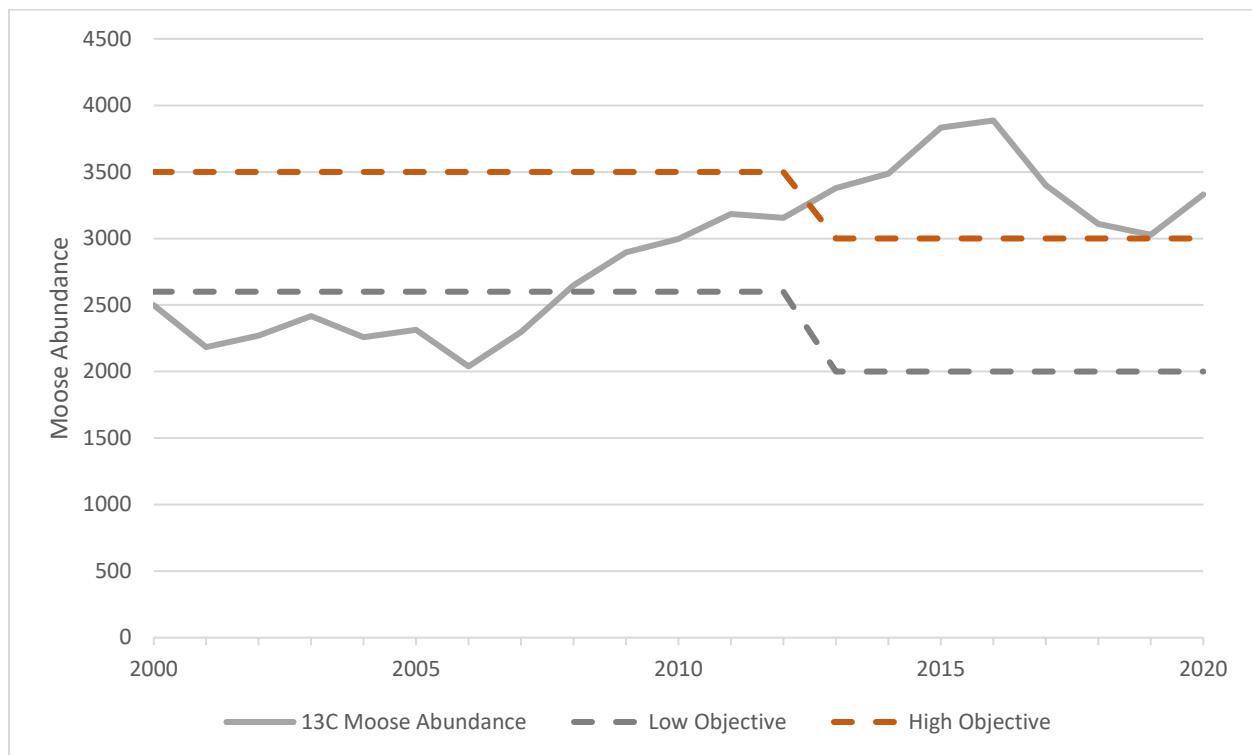
- **GM000** - Resident hunters with general season harvest tickets for Unit 13 may harvest 1 bull with spike-fork antlers or 50-inch antlers or antlers with 4 or more brow tines on 1 side from September 1–20.
- **DM324** - Resident hunters who successfully draw a Unit 13 bull moose drawing permit are permitted 1 antlered bull from September 1–September 20; up to 5 permits may be issued.
- **DM325** - Resident hunters who successfully draw a Unit 13 antlerless moose drawing permit for 13A can harvest 1 antlerless moose from October 1–31 or March 1–31; up to 200 permits may be issued.
- **DM335–339** - Nonresident hunters who successfully draw a Unit 13 drawing permit are permitted 1 bull with 50-inch antlers or antlers with 4 or more brow tines on 1 side from September 1–20; up to 150 permits may be issued and each permit is valid for only 1 subunit of Unit 13.
- **FM1301** - Federally qualified subsistence users can obtain a federal moose permit from the Glennallen Field Office of the Bureau of Land Management. The season is August 1–September 20 with a bag limit of 1 antlered bull moose per household for residents that qualify for Unit 13E, or 1 antlered bull moose per hunter for residents that qualify for the remainder of Unit 13. Federal permits are valid for federal subsistence lands only. In July 2020, these lands in Units 13A and 13B were closed by the Federal Subsistence Board to non-federally qualified hunters.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** An October antlerless moose hunt in 13C would allow for hunters to stabilize the 13C moose population within abundance objectives, which provides for a more productive population than if abundance exceeds objectives. This antlerless draw hunt would provide additional harvest opportunity for residents and result in increased overall harvest, thereby contributing to meeting the harvest objectives for 13C.

**BACKGROUND:** Unit 13 has an active intensive management program, designed to increase moose abundance to within objectives, and increase available harvest for humans. The program has included a predator control component that began in 2004. Since the early 2000s, moose abundance in most subunits has increased until recent years when many subunits have peaked and/or stabilized at, above, or within abundance objectives. As moose populations approach carrying capacity, the population becomes less productive, and may eventually decline. Stabilizing a population below carrying capacity allows it to remain highly productive if additional moose are removed annually. This requires harvest of both cows and bulls. The intensive management abundance objectives for moose in Unit 13 are designed to maintain moose populations in Unit 13 subunits below carrying capacity, at a more productive level. To date, despite the increase in abundance in most subunits, only Unit 13A currently has an antlerless hunt available. Unit 13C has reached abundance levels for which cow harvest is necessary to stabilize the population at a more productive level and allow for human harvest of excess moose (Figure 216-1). In recent years



the bull-to-cow ratio in Unit 13C averages just below the objective of 25 bulls per 100 cows, suggesting that there are not additional bulls available for harvest at this time. Harvest of up to 1% of the estimated cow moose population in 13C would allow for roughly 23 cow moose to be harvested annually in recent years.



**Figure 216-1.** Running three-year average of the moose abundance index in Unit 13C, 2000–2020

Currently Unit 13A has the only antlerless draw hunt available in Unit 13 (DM325). The 13A antlerless draw hunt was implemented in a small portion of central 13A in RY2012, with only 10 permits issued annually. As moose abundance in Unit 13A continued to rise, bull:cow ratios remained at or below objectives. The hunt area was increased to all of 13A West (west of Lake Louise Road, Lake Louise, Lake Susitna, Tyone Lake, and Tyone River) in RY2019. In RY2020 permits were increased from 10 to 20 in an effort to gradually increase harvest to reach 1% of the estimated cow population in 13A, per BOG direction, which would be 25–28 cow moose in recent years (Table 216-1).

**Table 216-1.** Moose harvest in Unit 13 by hunt, RY2015–2020.

RY <sup>1</sup>	CSH Harvest	General Season Harvest	Resident Draw Any Bull Harvest	Resident Draw Antlerless Harvest	Nonresident Draw Harvest	Federal Harvest	Total Harvest
2015	171	772	No Hunt	7	23	85	1,058
2016	201	757	5	5	21	100	1,089
2017	188	689	3	8	28	90	1,006

2018	154	557	2	7	20	61	801
2019	160	649	4	10	18	71	914 <sup>2</sup>
2020	138	629	5	16	23	63	876 <sup>2</sup>

<sup>1</sup>In RY2015 the CSH moose season dates were August 10–September 20, but in RY2016 and following years the CSH moose season dates were August 20–September 20.

<sup>2</sup>Includes ceremonial harvest reported in Unit 13.

Harvest objectives for 13C are 155–350 moose, but those objectives have not been met since 1995, when 154 moose were harvested, and 1996, when 169 moose were harvested. The only other years when harvest exceeded 150 moose was in 1989 (154 harvested), and 1988 (199 harvested), which was the most moose ever reported harvested in a single year in 13C. As moose abundance in 13C increased above objectives in recent years, harvest peaked at 117 moose in 2014 (Table 216-2). Evidence suggests that the current moose harvest objectives for 13C may not be attainable due primarily to accessibility. Harvest of excess cow moose to stabilize the 13C population will increase overall harvest and provide additional opportunity for hunters to harvest cows as well as additional bulls.

**Table 216-2.** Moose harvest in Unit 13C by hunt, RY2005–2020.

RY <sup>1</sup>	CSH Harvest	Tier II Harvest	General Season Harvest	Resident Draw Any Bull Harvest	Nonresident Draw Harvest	Federal Harvest	Total Harvest
2005	-	2	48	-	-	1	51
2006	-	1	55	-	-	1	57
2007	-	1	62	-	-	0	63
2008	-	0	60	-	-	2	62
2009	13	-	74	14	2	2	105
2010 <sup>1</sup>	-	-	81	16	4	1	102
2011	20	-	80	6	6	1	113
2012	18	-	69	5	2	1	95
2013	4	-	42	2	1	1	50
2014	19	-	88	4	4	1	117
2015	17	-	91	-	7	1	116
2016	24	-	79	0	9	2	114
2017	18	-	67	1	4	0	90
2018	9	-	49	0	2	0	60
2019	17	-	85	0	4	2	108
2020	16	-	63	0	3	0	82

<sup>1</sup>The CSH hunt was not held in 2010 due to litigation.

**DEPARTMENT COMMENTS:** The department submitted and **SUPPORTS** this proposal to establish an antlerless hunt in Unit 13C to stabilize the population at a more productive level, and to increase harvest and hunting opportunity. If antlerless harvest is not available for Unit 13C then

the intensive management program will need to be reexamined, since predator control may not be warranted if additional moose will not be utilized, and the population will be allowed to exceed objectives.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 217 – 5AAC 85.025. Hunting seasons and bag limits for caribou.** Eliminate draw hunts for Nelchina caribou in Unit 13 and comply with AS 16.05.258.

**PROPOSED BY:** Ahtna Tene Nené

**WHAT WOULD THE PROPOSAL DO?** This proposal would eliminate all draw hunts for Nelchina caribou in Unit 13. Tier I hunts (RC561, RC562, CC001) would remain unchanged.

**WHAT ARE THE CURRENT REGULATIONS?**

The Board of Game has made a positive customary and traditional use finding for Nelchina caribou in Unit 13 with an amount necessary for subsistence (ANS) of 600–1,000 caribou.

The current caribou hunting regulations can be found in 5 AAC 85.025 and the *2021–2022 Alaska Hunting Regulations*. Hunters who wish to hunt Nelchina caribou in Unit 13 may do so under the following seasons and bag limits:

- **CC001** Copper Basin Community Subsistence Harvest (CSH) Hunt:
  - One permit for Nelchina caribou harvest is issued annually to each household in an eligible Copper Basin CSH group. Each community group must have 25 qualified individuals to successfully apply for any CSH program, and Copper Basin CSH groups are locked-in for a two-year commitment upon successful application.
  - Up to 400 caribou may be taken by CSH hunters. Bag limits are determined annually based on harvestable surplus, but may be changed by Emergency Order, and may include up to 2 caribou. Season dates are Aug 10–Sept 20 and Oct 21–Mar 31.
  - Any eligible hunter within a group may act as a designated hunter for other members of the group.
  - Hunters must salvage the heart, liver, kidneys, and fat, as well as all edible meat from the forequarters, hindquarters, ribs, neck and backbone.
  - Meat of the forequarters, hindquarters, ribs, brisket, neck, and backbone must remain naturally attached to the bones until delivered to the place where it is processed for human consumption.
  - The group coordinator must submit an annual Coordinator Community Harvest Report. If the coordinator fails to do so, all group participants will be placed on the

Failure to Report list and will not be eligible to participate in the CSH hunt during the following regulatory year.

- No member of a Copper Basin CSH caribou hunt household may hold state or federal moose or caribou permits outside of the Copper Basin Community Hunt area (Unit 11, 13, and that portion of Unit 13 south of the Little Tok River) or hold general season caribou harvest tickets.
- After the CSH hunt has ended, unsuccessful household members may then acquire state or federal caribou harvest tickets or permits for other areas if the bag limit is greater than one caribou per household.
- **RC561/RC562** Resident households will receive one Tier I RC561 or RC562 permit of their choice per household if they apply online during the application period the year prior and agree to all the conditions of the permit. All household members 10 years of age and older must be listed on the application.
  - No member of the household may hunt moose or caribou outside of Unit 13.
  - Any member of the household may harvest the bag limit.
  - Prior to Oct. 1, meat of the forequarters, hindquarters, and ribs must remain naturally attached to the bone until delivered to the place where it is processed for human consumption.
  - Bag limits are determined annually but may include up to 2 caribou. The bag limit may be changed by Emergency Order, or the hunt may be closed by Emergency Order.
  - No member of the household may proxy hunt for caribou or moose outside of Unit 13.
  - A hunter may only proxy hunt for one Unit 13 caribou per regulatory year.
  - Any Tier I proxy hunter must abide by the Tier I hunt conditions during that regulatory year.
  - RC561 season dates: Aug 10–Aug 31 and Oct 21–Mar 31
  - RC562 season dates: Sept 1–Sept 20 and Oct 21–Mar 31
- **YC495** Resident youth hunters who successfully draw a Unit 13 youth caribou drawing permit are permitted 1 caribou (bag limit may change by Emergency Order) with season dates of Aug 1–5; up to 200 permits may be issued.
- **DC475** Non-resident hunters who successfully draw a Unit 13 caribou drawing permit are permitted 1 bull with season dates of Aug 20–Sept 20; up to 200 permits may be issued.
- **DC485** Resident hunters who successfully draw a Unit 13 caribou drawing permit are permitted 1 caribou (bag limit may change by Emergency Order) with season dates of Aug 20–Sept 20 and Oct 21–Mar 31. Up to 5,000 permits may be issued.
- **FCI302** Federally qualified subsistence users can obtain federal caribou permits from the Glennallen Field Office of the Bureau of Land Management. The season is August 1–September 30 and October 21–March 31 with a bag limit of 2 caribou in Units 13A and 13B, or 2 bull caribou in the rest of Unit 13. Federal permits are valid for federal

subsistence lands only. In July 2020, these lands in Units 13A and 13B were closed by the Federal Subsistence Board for to non-federally qualified hunters for RY2020 and RY2021.

- ***Federal Community Hunt*** Federally qualified subsistence users can obtain community hunt permits for caribou valid for federal subsistence lands in Unit 13 from the Ahtna Intertribal Resources Commission in Glennallen. Seasons and bag limits correspond with those of existing federal subsistence hunting opportunities in those areas.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Hunting opportunities through drawing permits for residents and nonresidents would no longer be offered for Nelchina caribou in Unit 13. Only Tier I subsistence opportunities would be available to state hunters: these are guaranteed household permits with a series of stipulations associated with the customary and traditional use pattern. Nelchina caribou harvest in Unit 13 will continue to be managed on a sustained yield basis using quotas that are derived annually based on available harvestable surplus.

**BACKGROUND:** Resident draw hunts have been available for Nelchina caribou harvest opportunity in Unit 13 since RY2011 and permits vary annually according to the size of the herd, but up to 5,000 permits may be issued for the draw hunt with season dates of August 20–September 20 and October 21–March 31 and a bag limit of 1 caribou (season dates and bag limits may be changed by emergency order; Table 217-1). These draw hunts were originally split into 4 different hunts (DC480–483) to spread hunter effort across the fall caribou range in Unit 13, but in RY2016 they were combined into one hunt (DC485) to allow draw permit holders to harvest animals more effectively as the herd grew and harvest became more necessary to control the growth of the herd.

The BOG established a youth draw permit hunt (YC495) in 2018, which was implemented beginning RY2019, with a bag limit of 1 caribou and season dates of August 1–August 5; up to 200 permits may be issued, and all 200 permits were issued in RY2019, RY2020, and RY2021 (Table 217-1).

The BOG also established a nonresident draw permit (DC475) with a bag limit of 1 bull and season dates of August 20–September 20; up to 200 permits may be issued. RY2020 was the first year that this hunt opportunity was available, and 50 permits were issued (Table 217-1). Fifty permits were also issued in RY2021, but no permits will be issued in RY2022 because the size of the herd has decreased below that for which BOG direction has suggested nonresident opportunity should be offered.

**Table 217-1.** Unit 13 Nelchina caribou permits and associated harvest, RY2011–2021

RY	DC480–483 and DC485		YC495		DC475		Unit 13 State Subsistence		Unit 13 Federal Subsistence		Total Harvest <sup>a</sup>
	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	Permits	Harvest	
2011	1,127	319	-	-	-	-	3,471	1,713	2,980	395	2,484
2012	3,001	1,024	-	-	-	-	5,448	2,693	2,953	537	4,397
2013	5,008	609	-	-	-	-	7,567	1,687	2,783	279	2,615
2014	1,000	299	-	-	-	-	6,164	2,412	2,953	237	2,993
2015	1,001	296	-	-	-	-	7,894	3,102	3,083	595	4,169
2016	4,999	1,898	-	-	-	-	9,684	3,888	3,151	491	6,297
2017	4,998	1,534	-	-	-	-	9,448	2,995	3,071	358	4,920
2018	5,000	260	-	-	-	-	9,605	1,228	3,082	370	1,885
2019	399	172	200	113	-	-	6,485	2,428	2,789	102	2,891
2020	2,000	819	200	112	50	12	7,709	2,808	2,915	306	4,132
2021	2,000	TBD	200	53	50	TBD	8,003	TBD	TBD	TBD	Harvestable Surplus: 1,600

<sup>a</sup> All documented harvest of Nelchina caribou, including Unit 13 harvest on other permits and Nelchina harvest outside of Unit 13.

Subsistence hunters have the option of participating in 1 of 3 Tier I hunts for Nelchina caribou in Unit 13 (CC001, RC561, RC562). CC001 has a longer fall season than any other subsistence or drawing hunt for Unit 13 caribou, and that remained the case in RY2020, even though winter seasons closed early once harvestable surplus was met (Table 217-2).

**Table 217-2.** Unit 13 Nelchina caribou permits, harvest, success, and season dates, RY2020.

Hunt	Permits	Hunters	Harvest	Hunter Success	Season Length (days)	Season Dates	
						Fall	Winter
YC495	200	155	112	72%	15	Aug 1–5; Sep 21–30	No season
DC485	2,000	1,320	819	62%	123	Aug 20–Sep 30	Oct 21–Jan 10
DC475	50	26	12	46%	42	Aug 20–Sep 30	No season
CC001	812	476	294	62%	146	Aug 10–Sep 30	Oct 21–Jan 22
RC561	3,065	1,937	1,160	60%	126	Aug 10–31; Sep 21–30	Oct 21–Jan 22
RC562	3,821	2,535	1,354	53%	124	Sep 1–Sep 30	Oct 21–Jan 22
Federal	2,915	1,194	306	26%	223	Aug 1–Sep 30	Oct 21–Mar 31

Even as the herd size has been recently reduced to within objectives, harvestable surplus remains above ANS (600–1,000 caribou) for Nelchina caribou in Unit 13.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on the allocation of caribou harvest opportunities in Unit 13. The harvest through state and federal subsistence hunt opportunities exceeds the ANS. Nelchina caribou harvest will continue to be managed under sustained yield principles, using quotas that are developed annually to prevent overharvest, within the context of the hunt structure develop by the BOG.

**COST ANALYSIS:** Adoption of this proposal is not expected to result in additional costs to the department.

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Proposal 218

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Proposal 219

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Proposal 220

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**PROPOSAL 221 – 5 AAC 84.270 (9). Furbearer Trapping.** Extend river otter trapping season in Unit 13 to align with beaver trapping season.

**PROPOSED BY:** Claude Bondy

**WHAT WOULD THE PROPOSAL DO?** The proposal would extend river otter trapping season in Unit 13 from the current season of November 10–March 31 by 106 days to align with beaver trapping season, which is September 25–May 31.

**WHAT ARE THE CURRENT REGULATIONS?** The current river otter trapping regulations can be found in 5 AAC 84.270 and in the *2021-2022 Alaska Trapping Regulations*.

- River otters must be sealed within 30 days after the close of the season.
- When trapping river otters in a unit where the mink or marten seasons are closed, you must use either a snare, a killer-style (body-grip) trap, or a steel trap (foothold) with an inside jaw spread of 5 7/8” or greater.
- Trapping season for river otters in Unit 13 is November 10–March 31 with no limit.

There is a positive customary and traditional use finding for river otters in all units with a harvestable portion, and an ANS of 90% of the harvestable portion.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** An increase in the harvest of river otters can be expected if river otter trapping season is extended by 106 days. An increase in incidental catch of mink may also occur, as well as incidental catch of waterfowl, which could negatively impact the productivity of waterfowl species. Extending the river otter trapping season to overlap the otter breeding season and an additional portion of the pupping season could negatively impact productivity and recruitment of the population. Trapping season dates for river otters in Central/Southwest Alaska would no longer be aligned.

**BACKGROUND:** River otter trapping season is currently aligned between all GMUs in Central/Southwest Alaska (Units 9–11, 13, 14A, 14B, 16, and 17).

River otter pupping season runs from late January to June; extending the season closure from March 31 to May 31 will include an additional portion of the pupping season and may affect recruitment over time. Extending the season to May 31 would also overlap the river otter breeding season.

Anecdotal observations as well as harvest data suggest that beavers are much more abundant in Unit 13 than river otters, as one might expect of herbivore versus carnivore abundance (Table 221-1). As such, an extended season is more appropriate for beavers than for river otters. Additional trapping pressure through May is also likely to result in an increase in incidental catch of other species, such as waterfowl.



**Table 221-1.** Harvest of river otters and beavers in Unit 13, sealing records, RY2016–2020

RY	River Otter Harvest	Beaver Harvest
2016	21	142
2017	31	146
2018	46	104
2019	28	226
2020	32	178

**DEPARTMENT COMMENTS:** The department is **OPPOSED** to extending the river otter season by 106 days to align with beaver trapping season. There is no other area in the state where river otter trapping season runs as late as May 31. Extended seasons may be sustainable for prolific herbivores such as beavers but are not as appropriate for lower density carnivore species such as river otters.

**COST ANALYSIS:** Adoption of this proposal would not result in immediate significant costs to the department.

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**PROPOSAL 222 – 5 AAC 85.065. Hunting seasons and bag limits for small game.** Modify the season and bag limit for ptarmigan in Unit 13.

**PROPOSED BY:** Claude Bondy

**WHAT WOULD THE PROPOSAL DO?** Extend the ptarmigan season closure date from 15 February to 31 March in Unit 13. This proposal also seeks to reduce the daily bag limit from 10 ptarmigan per day to 5 per day in Unit 13.

**WHAT ARE THE CURRENT REGULATIONS?** The current ptarmigan hunting regulations can be found in 5 AAC 85.065 and in the *2020–2021 Alaska Hunting Regulations*.

In Unit 13 the ptarmigan hunting season is open from 10 August to 15 February in units 13B and 13E and 10 August to 31 March in units 13A, 13C and 13D with a bag limit of 10 per day, and 20 in possession.

There is a positive customary and traditional use finding for ptarmigan in Unit 13; the board has not made an ANS finding.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The hunting public would gain an additional 6 weeks of hunting opportunity in Units 13B and 13E with a 31 March season closure date. However, hunters would face reduced daily bag limits from 10 ptarmigan per day to 5 per day. Harvest is likely to increase with the later closure date, despite the change in bag limit. Increased harvest in late February and March will reduce spring breeding abundance and has the potential to negatively affect overall population levels because harvest during this time is removing birds that have survived into the next breeding season.

**BACKGROUND:** In February 2018, the Board of Game (BOG) adopted new regulations aligning Units 13B and 13E ptarmigan hunting season closure dates to 15 February. Prior to this regulation change Unit 13B closed on 30 November and Unit 13E closed on 31 March. This change created an additional 2.5 months of hunting opportunity in Unit 13B and removed 6 weeks of hunting opportunity from Unit 13E. During that meeting the BOG did not change the season start date (10 August) or the bag limit (10 per day, 20 in possession).

Based on harvest composition between the 2011 and 2017–18 seasons, Unit 13 (except Unit 13B) ptarmigan harvest was largely bimodal with the largest harvest (60%) occurring between mid-February and 31 March. The inflection point of mid-February is generally due to good snow conditions and accessibility for snowmachines, increasing day length, and daytime temperatures. Also, based on 2 separate small game hunter surveys, the average daily ptarmigan harvest per hunter in Unit 13 was fewer than 2 ptarmigan per day. Therefore, reducing the daily bag limit from 10 per day to 5 per day may not have the desired conservation action outlined in the proposal.

Through two separate studies on rock and willow ptarmigan in Unit 13 between 2013 and 2017 the department identified that natural mortality rates in the fall are high but those in the winter are very low (for populations that have limited or no human harvest mortality in the winter). Therefore, individuals that survive through the period of high mortality in the fall will very likely survive into the breeding season. Late winter (later than 15 February) harvest mortality is additive (i.e., adds additional mortality beyond what is expected naturally) and directly reduces spring breeding densities. Coupled with harvest composition data from Unit 13E (when winter hunting seasons closed on 31 March), this likely contributed to the low spring breeding densities observed in Unit 13E prior to 2018. These data contributed to the board's decision in February 2018 to close the ptarmigan hunting season on 15 February for both units 13B and 13E.

Since the alignment of season closure dates, willow ptarmigan spring breeding abundance increased in Unit 13E and declined in 13B in 2019; which might be expected from the shifts in season closures. However, in spring 2020, spring breeding densities remained near the long-term average in Unit 13B but declined in Unit 13E. The department continues to closely monitor the rebound of several populations that have recently had late winter harvest curtailed or eliminated. The department would lose the ability to evaluate this new management strategy if this proposal were adopted.

In addition, in fall 2019 the Federal Subsistence Board passed Special Action Request WSA 19-08, proposed by the Denali National Park Subsistence Resource Commission (SRC) aligning federal subsistence seasons with the revised state season dates. The Denali SRC expressed concern about low abundance specifically in Unit 13E.

**DEPARTMENT COMMENTS:** The department is **OPPOSED** to extending the ptarmigan season in Unit 13. Bag limit and possession limit changes are not necessary because harvest data suggest few ptarmigan are taken by individual hunters. Season dates were recently established to end on February 15 to protect the portion of the ptarmigan population that survives annually into the new breeding season. Extending the season to March 31 would negatively affect the reproductive potential of the populations in Unit 13. If the board adopts the reduction in bag limit, the board should consider whether there is still reasonable opportunity for success in harvesting ptarmigan for subsistence uses.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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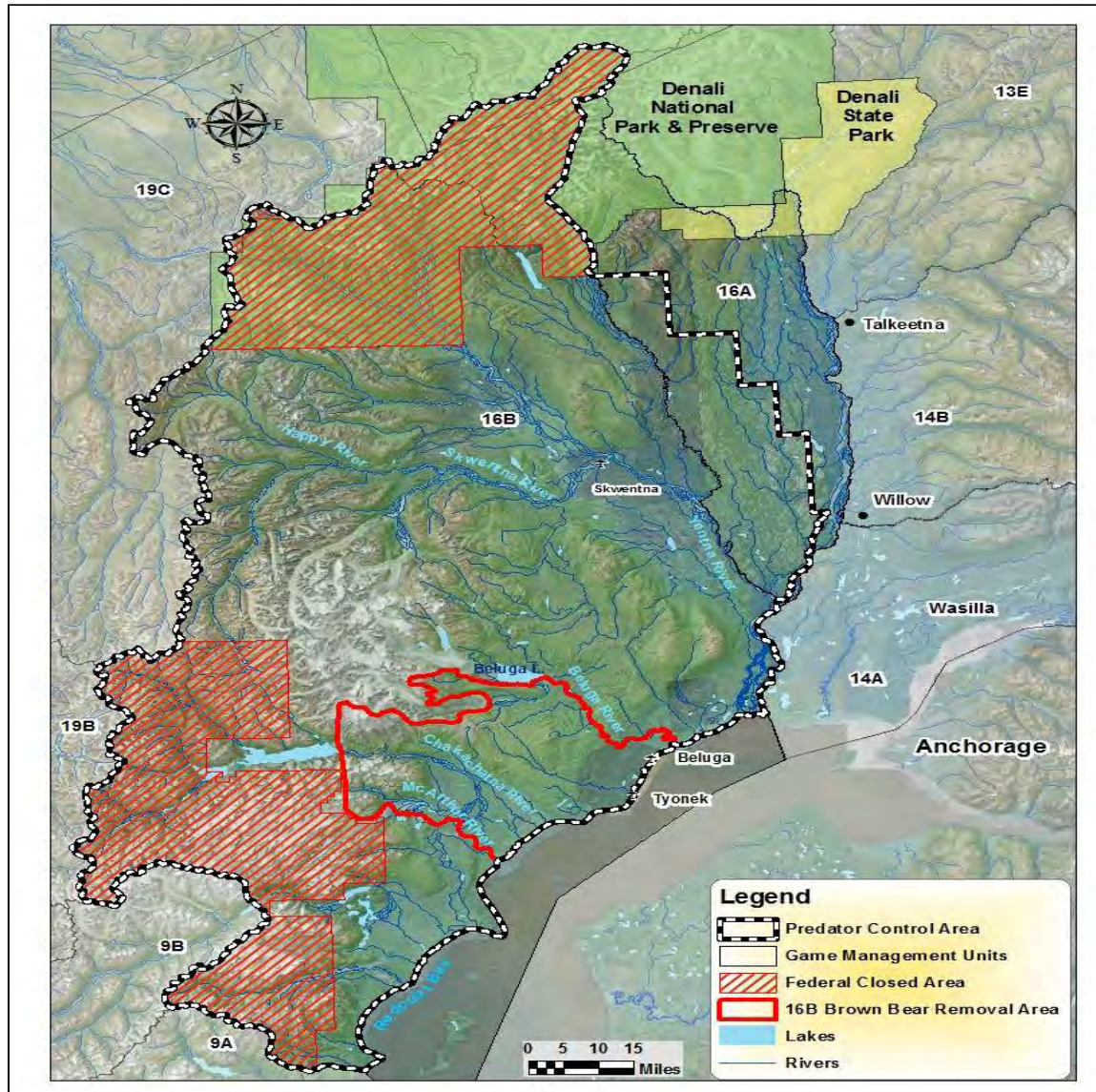
**PROPOSAL 223 – 5 AAC 92.122 Intensive Management Plan V.** Reauthorize the Intensive Management Plan for Unit 16.

**PROPOSED BY:** Alaska Department of Fish & Game

**WHAT WOULD THE PROPOSAL DO?** The Unit 16 IM Plan expired on July 1, 2021. Under this proposal the program would be reauthorized until July 1, 2031. All of the provisions of the previous control program would remain in effect with the exception that helicopters and snares for bears would no longer be authorized.

**WHAT ARE THE CURRENT REGULATIONS?** The Unit 16 Intensive Management (IM) Plan for moose, which is found in 5 AAC 92.122, is designed to increase moose numbers by

reducing predation (Figure 223-1).



**Figure 223-11.** Unit 16 Intensive management area in Unit 16.

Under the plan, the department is authorized to reduce black bears, brown bears, and wolves by changing bag limits, and issuing aerial wolf control permits to the public within the Bear Control Areas (BBCA) and Predator Control Area, respectively. Predation control efforts are designed to benefit moose.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The reinstatement of the Unit 16 IM Plan has the potential to increase predator removal through a variety of opportunities to improve the health of the moose population. In the absence of active IM activities, the reauthorization primarily allows the continued waiving of the nonresident wolf tag fee

**BACKGROUND:** The program was first authorized by the Board of Game in 2003. Wolf control began in 2004. Black bear baiting was liberalized, and control began in 2007. Snaring for brown bears was implemented in 2009 within the control area followed by the establishment of a Brown Bear Control Area in Unit 16B South which also allowed snaring in 2011. The wolf control program was suspended in RY14 when it was determined that the wolf population was reduced to the management objectives. Based upon the reduction in bear control activities and an increase in the moose population, the bear control program was suspended in RY17. The moose population objective is 6,500–7,500 and was within objectives as of RY11. As of 2021 the population was estimated at 8,485 ( $\pm 1,213$  80%CI). The moose harvest objective is 310–600 and was first achieved in RY11. The last 5 years average of harvest was 421 moose.

**DEPARTMENT COMMENTS:** The department submitted and **SUPPORTS** this proposal. While the current plan was suspended in RY17, retaining the ability to use some or all provisions of the plan would give the department latitude to address any substantial increases in predator populations or decreases in the moose population in Unit 16B.

**COST ANALYSIS:** Approval of this proposal is not expected to result in additional costs to the department.

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**PROPOSAL 224 – 5 AAC 85.045 Hunting seasons and bag limits for moose.** Reauthorize the antlerless moose draw permits in Units 14A and 14B.

**PROPOSED BY:** Alaska Department of Fish & Game

**WHAT WOULD THE PROPOSAL DO?** This proposal reauthorizes the antlerless moose hunts in Units 14A and 14B; these hunts must be reauthorized annually by the Board to comply with statutory requirements.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations for Units 14A&B can be found in 5 AAC 85.045 and in the *2020–2021 Alaska Hunting Regulations*.

- The department has the authority to issue up to 2,000 drawing permits to resident hunters in Unit 14A with a bag limit of one antlerless moose. The season is August 20–September 25 for DM400–DM412 and November 1–December 25 for DM413.
- The department may also issue up to 200 permits to resident hunters for the targeted hunt in Unit 14A with a bag limit of one moose during a winter season to be announced by emergency order.
- The department may also issue up to 100 additional permits to resident hunters for a targeted hunt in Unit 14B with a bag limit of one moose during a winter season to be announced by emergency order.

Units 14A and 14B are located entirely within the Anchorage-Matsu-Kenai Nonsubsistence Area.

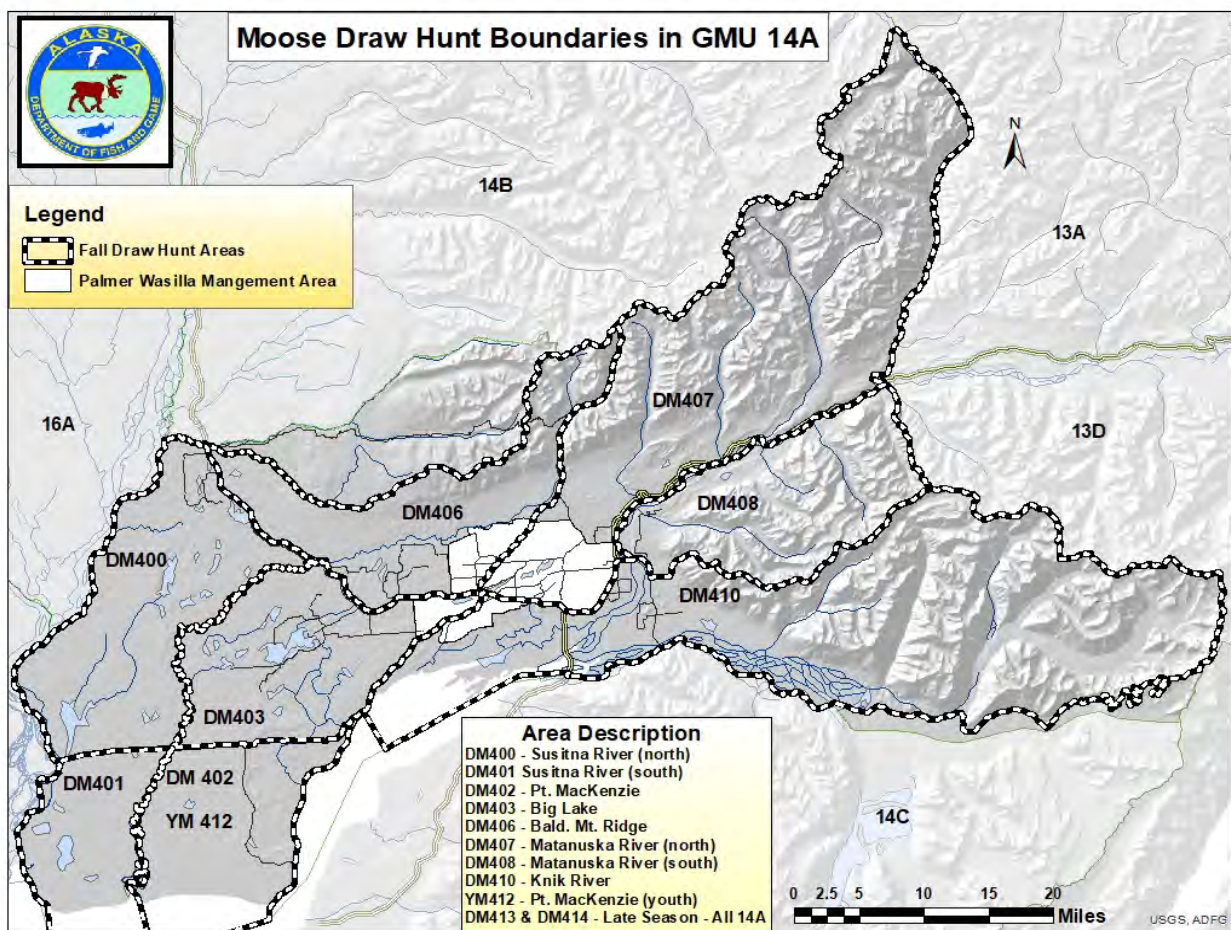
**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** This proposal reauthorizes the antlerless moose hunts in Units 14A and 14B (Figure 224-1); these hunts are needed to keep the moose population within management objectives and provide additional hunting opportunity for residents. The targeted hunt also provides managers with a tool to reduce moose-vehicle collisions and address nuisance moose issues.

**BACKGROUND:** Moose surveys conducted in December of 2020 provided an estimate of 7,112 ( $\pm 711$ ; 80% CI) moose in Unit 14A. This is less than the 2019 population estimate of 7,900 and within the population objective of 6,000–6,500 moose (Table 224-1).

Twinning surveys conducted in the spring of 2021 showed a twinning rate of 15%. The twinning rate has been decreasing since 2017 from a high of 27%, which suggests that the population has reached carrying capacity.

The number of antlerless permits available was raised in spring of 2011 from 400 to 1,000. Due to the heavy snows that same winter, there were no antlerless permits issued in 2012. Subsequent surveys indicated that the moose population was not adversely affected by the winter of 2011 and was continuing to grow. The number of permits available has been increasing and was raised to the limit of 1,000 permits for the fall of 2017. In spring of 2018 the board increased the permit levels to 2,000 permits and 1,302 permits were issued for RY18, 1,310 in RY19, and 1,239 in RY20.





**Figure 224-1.** Unit 14A Antlerless draw hunt boundaries.

**Table 224-1.** Survey results for Unit 14A, 2007–2020

	2007	2008	2009	2011	2012	2013	2017	2018	2019	2020
Dates	1 Dec	13–17 Nov	18 Nov	14–19 Nov	26–27 Nov	15–18 Nov	1–4 Feb	30 Oct	9–13	29 Nov –4 Dec
Survey Type	Comp	GSPE	Comp	GSPE	Comp	GSPE	GSPE	Comp	GSPE	GSPE
Total moose obs.	665	2,158	761	1,863	1,474	1,750	1,420	1,809	1,845	1,704
Calves obs.	128	540	215	479	284	458	243	342	293	358
Pop. Est.	N/A	6,613 <sup>a</sup>	N/A	7,993 <sup>a</sup>	N/A	8,500 <sup>a</sup>	8,756 <sup>a</sup>	N/A	7,896 <sup>a</sup>	7,112 <sup>a</sup>
Bull:100 cows	33	23	24.7	18.6	26–29	20.9	N/A	34	N/A	30
Calf: 100 cows	32	42	48.9	39.9	28–31	44.5	N/A	31	N/A	36

<sup>a</sup>Includes sightability correction factor developed from sightability trials.

The success rate for hunters under the antlerless permits has remained steady at about 46% over the past 3 years.

The targeted moose hunt in Units 14A&14B provide an additional tool to address public safety concerns related to moose-vehicle collision and nuisance management issues. Up to 200 permits may be offered in Unit 14A and 100 permits in Unit 14B. The targeted hunt (AM415) has been in place since 2012. Under this permit, hunters are either designated a specific nuisance moose to take or are assigned one of four areas where a high number of moose–vehicle collisions are known to occur. In this scenario permits are issued as snow increases and moose become more prevalent along roadways. The winter of 2014 was very mild with almost no snow. As a result, only 20 permits were issued that year. No permits were issued in the winters of 2017–2020. For the years that permits were issued, on average 143 permits were issued and 110 moose were taken, providing an average success rate of 77%.

The Unit 14A moose population has exceeded population objectives for the past 12 years and has the potential for large increases in a relatively short amount of time. These increases in density may increase in the number of moose-human conflicts, and moose may experience nutritional stress, particularly during severe winters. The number of antlerless moose harvested in recent years and the severity of the winter of last couple of years has arrested the growth of the herd and



has led to a population reduction. Fewer antlerless permits were offered for RY21 and future permit levels will be adjusted as more current population information is obtained.

Browse surveys completed in the spring of 2016 demonstrated a removal rate of 37.13% ( $\pm 6.9\%$  at the 95% CI). This offtake indicated a relatively high proportion of commonly browsed plants in the unit are being consumed annually, suggesting the moose population in Unit 14A may be approaching their carrying capacity. Browse surveys were conducted at the end of a winter which had little snowfall and browsing appeared to be more evenly distributed than in what would be found in a typical year.

Moose-vehicle collisions result in property damage and may result in human injury or death. An average of 316 moose per year were killed by vehicles in the Mat-Su Valley area during the last 5 years of average snowfall. The department also receives periodic complaints from the public about crop depredation and aggressive behavior that can be mitigated by this hunt structure.

**DEPARTMENT COMMENTS:** The department **SUPPORTS** this proposal. Antlerless moose harvests are necessary to achieve and maintain the population within objectives and reduce moose-human conflicts in the Mat-Su Valley by providing significant additional moose hunting opportunity.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 225 – 5 AAC 85.045 Hunting seasons and bag limits for moose.** Eliminate antlerless moose hunts in Units 14A and 14B. Only nuisance moose would be harvested via the targeted hunt program (AM415).

**PROPOSED BY:** Somerset Jones

**WHAT WOULD THE PROPOSAL DO?** This proposal would remove all antlerless moose draw hunts (DM400, DM401, DM402, DM403, DM406, DM407, DM408, DM410, DM413, DM414, and YM412) from Unit 14A. The only antlerless hunt in 14B is AM415.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations for Units 14A&B can be found in 5 AAC 85.045 and in the *2021–2022 Alaska Hunting Regulations*.

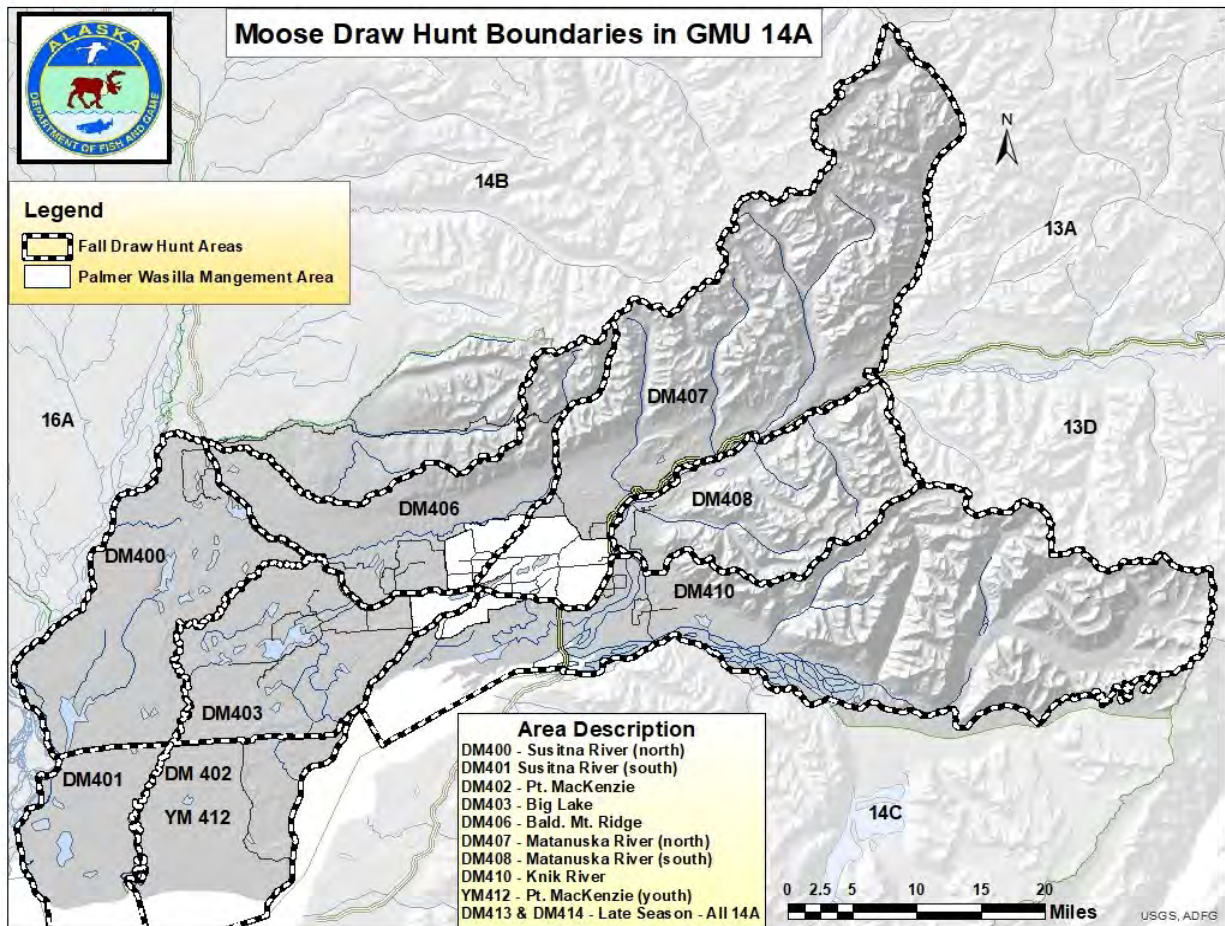
- The department has the authority to issue up to 2,000 drawing permits to resident hunters in Unit 14A with a bag limit of one antlerless moose. The season is August 20–September 25 for DM400–DM410 and YM412, November 1–30 for DM413, and December 1–25 for DM414.

- The department may also issue up to 200 permits to resident hunters for the targeted hunt in Unit 14A with a bag limit of one moose during a winter season to be announced by emergency order.
- The department may also issue up to 100 additional permits to resident hunters for a targeted hunt in Unit 14B with a bag limit of one moose during a winter season to be announced by emergency order.

Units 14A and 14B are located entirely within the Anchorage-Matsu-Kenai Nonsubsistence Area.

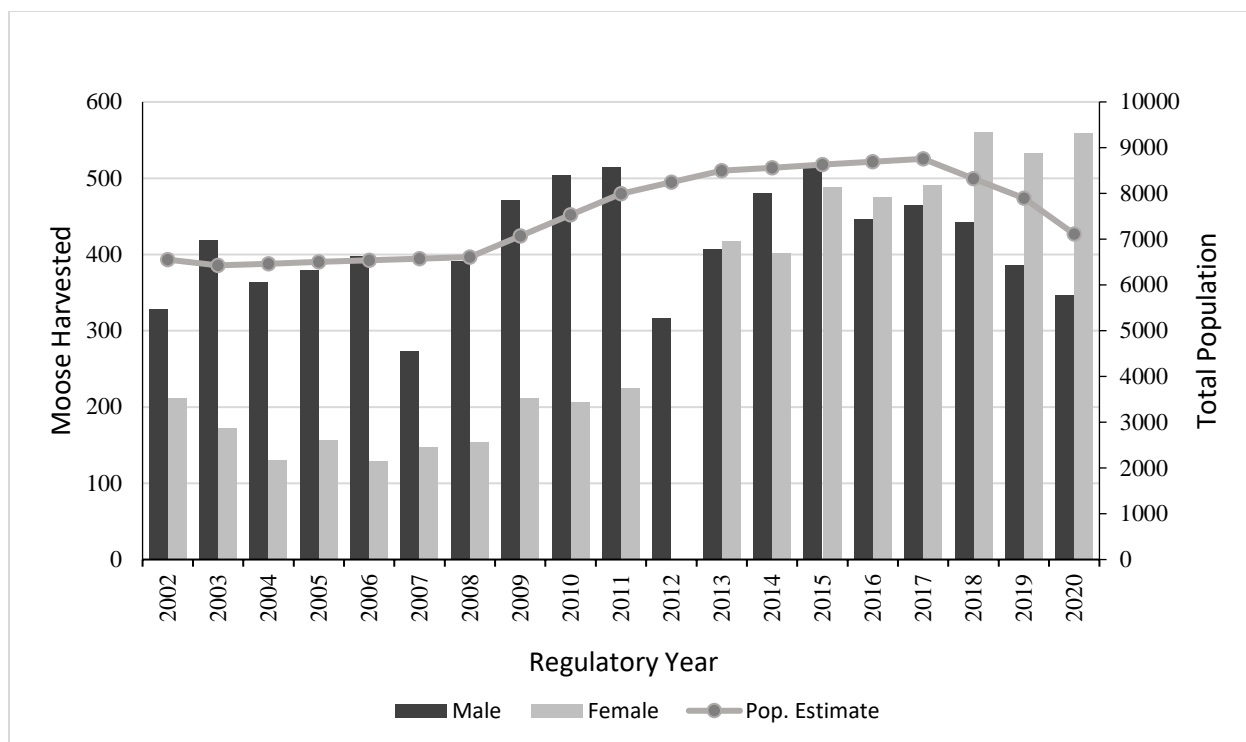
**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Antlerless moose draw hunts in Unit 14A have been used to reduce the population by 23%, to near objectives and to provide extra hunting opportunity for resident hunters. If this management tool were to be removed in the Mat-Su Valley, the moose population would most likely climb to unhealthy levels resulting in a population that is in poor nutritional condition and subject to a population crash in the likelihood of an extreme winter event. In addition, moose vehicle collisions and nuisance issues are likely to increase as the population increases.

**BACKGROUND:** The moose population has been above the objective of 6,000–6,500 since 2001. In response, antlerless draw hunts for residents have been authorized to arrest population growth and reduce the population to within the objectives. The board has increased the number of permits available from 400 in 2001 to 500 in 2003, to 1,000 in 2012, to 2,000 in 2018. Unit 14A is subdivided into smaller hunt areas (Figure 225-1). A late season antlerless hunt was authorized by the board in the spring of 2011 and adjusted in 2012. This hunt encompassed all of Unit 14A.



**Figure 225-12.** Unit 14A antlerless moose draw hunt boundaries DM400–410, including the youth hunt, YM412.

The department has increased the number of permits available over time to determine the appropriate level of harvest to reduce the population. Decreases in the population were first noted in 2018. (Figure 225-2). Predation is not a concern for this population; therefore, reducing the population would most likely be achieved either through hunting or stochastic events, such as heavy snow winters.



**Figure 225-13.** Unit 14A moose harvest by sex and population estimate, 2002–2020.

Moose surveys conducted in December of 2020 provided an estimate of 7,112 ( $\pm 711$ ; 80% CI) moose in Unit 14A. This is less than the 2019 population estimate of 7,900; however, it is greater than the population objective of 6,000–6,500 moose. (Table 225-1)

**Table 225-1.** Survey results for Unit 14A, 2007 – 2020

	2007	2008	2009	2011	2012	2013	2017	2018	2019	2020
Dates	1 Dec	13–17 Nov	18 Nov	14–19 Nov	26–27 Nov	15–18 Nov	1–4 Feb	30 Oct	9–13	29 Nov – 4 Dec
Survey Type	Comp	GSPE	Comp	GSPE	Comp	GSPE	GSPE	Comp	GSPE	GSPE
Total moose obs.	665	2,158	761	1,863	1,474	1,750	1,420	1,809	1,845	1,704
Calves obs.	128	540	215	479	284	458	243	342	293	358
Pop. Est.	N/A	6,613 <sup>a</sup>	N/A	7,993 <sup>a</sup>	N/A	8,500 <sup>a</sup>	8,756 <sup>a</sup>	N/A	7,896 <sup>a</sup>	7,112 <sup>a</sup>
Bull:100 cows	33	23	24.7	18.6	26–29	20.9	N/A	34	N/A	30
Calf: 100 cows	32	42	48.9	39.9	28–31	44.5	N/A	31	N/A	36

<sup>a</sup> Includes sightability correction factor developed from sightability trials.

Twinning surveys conducted in the spring of 2021 showed a twinning rate of 15%. The twinning rate has been decreasing from a high of 27% in 2017 which suggests that the population has reached carrying capacity.

The number of antlerless permits available was increased in 2011 from 400 to 1,000. Due to the heavy snows that same winter, there were no antlerless permits issued in 2012. Subsequent surveys indicated that the moose population was not adversely affected by the winter of 2011 and was continuing to grow. The number of permits available has been increasing and was raised to the limit of 1,000 permits for the fall of 2017. In spring of 2018 the board increased the permit levels to 2,000 permits and 1,302 permits were issued for RY18, 1,310 in RY19, and 1,239 in RY20. The success rate for hunters under the antlerless permits has remained steady at about 46% over the past 3 years. The success rate for DM403 area, which includes Big Lake, has consistently been higher than the average rate, indicating that there are plenty of antlerless moose available in this area. Changes in the number of permits available in any area have been based on the total population size and the success rates for the individual hunt areas.

The targeted moose hunt in Units 14A&14B provide an additional tool to address public safety concerns related to moose-vehicle collisions and nuisance management issues. Up to 200 permits may be offered in Unit 14A and 100 permits in Unit 14B. The targeted hunt (AM415) has been in place since 2012. Under this permit, hunters are either designated a specific nuisance moose to take or are assigned one of four areas where a high number of moose-vehicle collisions are known to occur. In this scenario permits are issued as snow increases and moose become more prevalent along roadways. The winter of 2014 was very mild with almost no snow. As a result, only 20 permits were issued that year. No permits were issued in the winters of 2017–2020. For the years that permits were issued, on average 143 permits were issued and 110 moose were taken, providing an average success rate of 77%.

The Unit 14A moose population has exceeded population objectives for the past 12 years and has the potential for large increases in a relatively short amount of time. These increases in density may increase in the number of moose-human conflicts, and moose may experience nutritional stress, particularly during severe winters. The number of antlerless moose harvested in recent years and the severity of the winter of last couple of years has arrested the growth of the herd and may have led to a population reduction. Eight hundred antlerless permits were issued for RY21 and future permit levels will be adjusted as more current population information is obtained.

Browse surveys completed in the spring of 2016 demonstrated a removal rate of 37.13% ( $\pm 6.9\%$  at the 95% CI). This offtake indicated a relatively high proportion of commonly browsed plants in the unit are being consumed annually, suggesting the moose population in Unit 14A may be approaching their carrying capacity. Browse surveys were conducted at the end of a winter which had little snowfall and browsing appeared to be more evenly distributed than in what would be found in a typical year.

Moose-vehicle collisions result in property damage and may result in human injury or death. An average of 316 moose per year were killed by vehicles in the Mat-Su Valley area during the last

5 years of average snowfall. The department also receives periodic complaints from the public about crop depredation and aggressive behavior that can be mitigated by this hunt structure.

**DEPARTMENT COMMENTS:** The department **OPPOSES** this proposal. Antlerless moose harvests are necessary for moose management to achieve and maintain the population within objectives and reduce moose-human conflicts in the Mat-Su Valley by providing significant additional moose hunting opportunity. Using the targeted hunt program to achieve population objectives would be problematic. It is unknown whether removing moose near roads results in fewer moose-vehicle collisions. If 200 permits were issued for the targeted hunt and the success rate remained consistent at 77%, approximately 154 moose would be removed with just this method, which would not be enough to stem the potential increase in the population.

**COST ANALYSIS:** The administration of the targeted hunt requires a significant amount of staff time because each person on the list must be called to ensure availability at the time of the hunt, and each person selected receives an orientation to specify the area they can hunt in, the sex of moose they should take, and to reiterate concerns about trespassing on private property. Each application for the draw hunt is \$5.00 to cover hunt administration. There is no charge to apply for the targeted hunt.

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**PROPOSAL 226 – 5 AAC 85.045 Hunting seasons and bag limits for moose.** Establish an any-bull draw hunt in Unit 14A.

**PROPOSED BY:** Andy Couch

**WHAT WOULD THE PROPOSAL DO?** This proposal would establish a resident-only draw hunt for one bull moose with up to 10 permits in each of the 9 moose draw hunt areas (DM400, DM401, DM402, DM403, DM406, DM407, DM408, DM410, YM412) in Unit 14A. The season dates would be August 25–September 25.

**WHAT ARE THE CURRENT REGULATIONS?** The current moose hunting regulations for Units 14A&B can be found in 5 AAC 85.045 and in the *2021–2022 Alaska Hunting Regulations*.

- One moose per regulatory year with spike-fork antlers or 50-inch antlers or antlers with 3 or more brow tines on one side for residents and non-residents; from August 10–August 17 (archery only) and August 25–September 25 (general hunt only).
- The department has the authority to issue up to 2,000 drawing permits to resident hunters in Unit 14A with a bag limit of one antlerless moose. The season is August 20–September 25 for DM400–DM410 and YM412, November 1–30 for DM413, and December 1–25 for DM414.

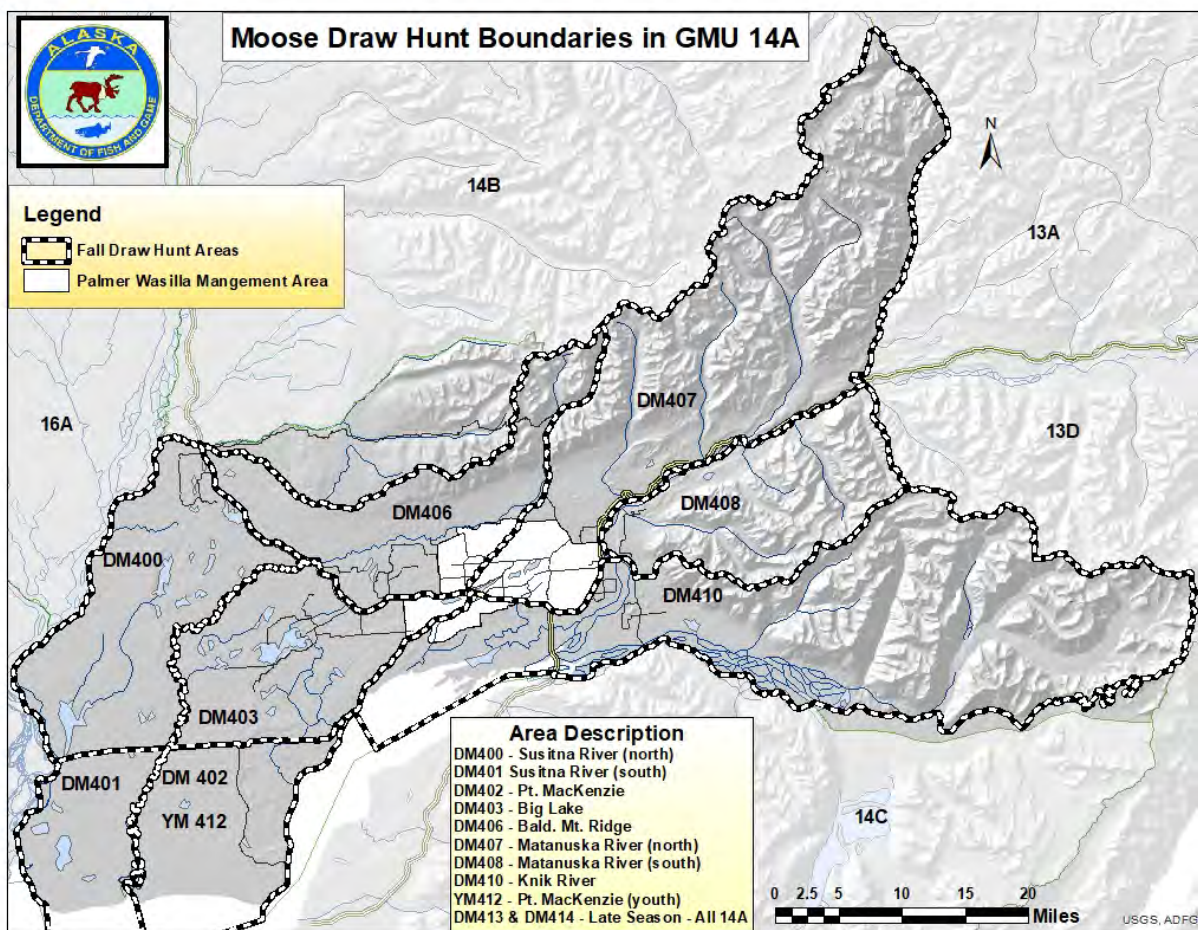
- The department may also issue up to 200 permits to resident hunters for the targeted hunt in Unit 14A with a bag limit of one moose during a winter season to be announced by emergency order.
- The department may also issue up to 100 additional permits to resident hunters for a targeted hunt in Unit 14B with a bag limit of one moose during a winter season to be announced by emergency order.

Unit 14A is located entirely within the Anchorage-Matsu-Kenai Nonsubsistence Area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** It would increase opportunity and potentially the harvest of bull moose. This may reduce the total number of bull moose in the population and change the bull-to-100 cow ratio to closer to the management objective of 20–25 bulls per 100 cows. It may also decrease the number of bulls available in the future under the general season bag limit of spike-fork, or 50” antler regulation since these bulls would not reach the larger sizes required under the 50 inch or 3 brow tine requirements.

**BACKGROUND:** The current population estimate of Unit 14A is 7,112 ( $\pm 711$  80% CI) from a Geospatial Population Estimator survey conducted in December of 2020. During that survey the bull-to-100 cow ratio was 30. Management objectives call for a population of 6,000–6,500 and the bull to cow ratio of 20–25 bulls:100 cows. Based upon the bull to cow ratio and the total population estimate there were between 214 and 427 bulls in excess of that needed for breeding. Previous sex and age composition surveys in 2018 and 2019 documented 34 bulls:100 cows. Antlerless draw hunts that run concurrent with the general season in Unit 14A are split up between 8 different areas (Figure 226-1) In addition, a youth hunt occurs in the same area as the DM402 hunt area near Pt. MacKenzie.





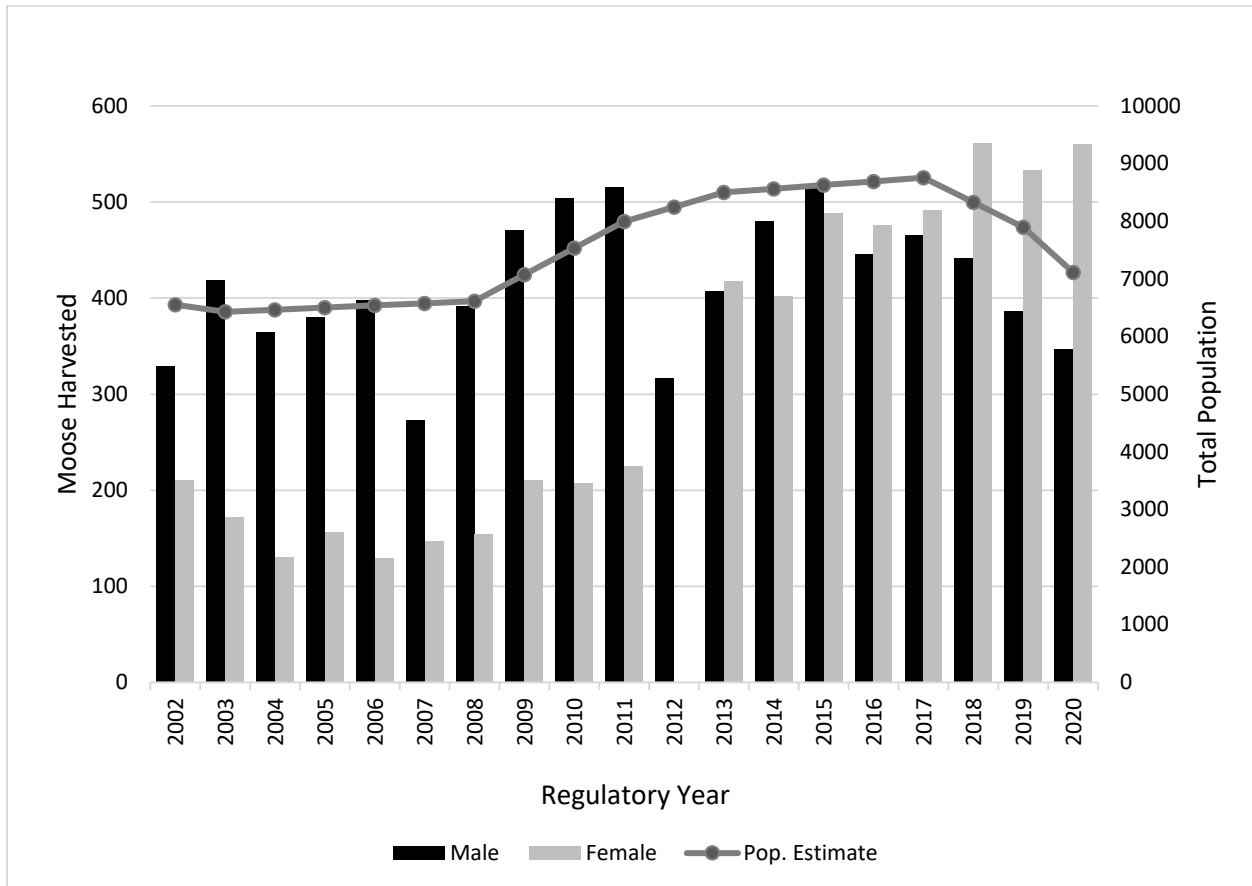
**Figure 226-14.** Unit 14A Antlerless draw hunt boundaries.

Under this proposal each of the 8 draw hunt areas would have up to 10 permits with a bag limit of 1 bull. In addition, there would be up to 10 permits for youth in the same area as the YM412 area. In all, up to 90 any-bull draw permits would be available in Unit 14A. In the last 5 years, on average, 85% of hunters receiving an antlerless permit in Unit 14A hunted, and 58% were successful. Assuming similar participation and success rates for this hunt, 90 permits would result in 77 additional hunters and 44 additional bulls harvested.

The last any-bull draw hunt in Unit 14A was conducted in RY98. Low bull-to-cow ratios precluded further hunting for any-bulls after that time. Bull-to-cow ratios recovered after that period and were within management objectives in 2003. Bull-to-cow ratios have been increasing in the last few years, but that may be the result of increased pressure on the cow segment of the population from the increase in antlerless permit levels. Harvest of cows have exceeded the harvest of bulls in the past 5 years and the population has been decreasing (Figure 226-2). In addition, the bull harvest has been decreasing over the past 4 seasons. As the population comes into the management objectives the number of antlerless permits has been reduced and the



number of permits offered under this proposal would likely be reduced as well once the bull to cow ratio is brought to within management objectives.



**Figure 226-15** Annual moose harvest by sex and total population estimate in Unit 14A, RY02–20.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal. This proposal may provide additional opportunity for hunters in Unit 14A. However, the unit has a history of having low bull to cow ratios and permit levels would need to be closely monitored to ensure that management objectives were met.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 227 – 5 AAC 85.065. Hunting seasons and bag limits for small game.** Modify the season and bag limit for grouse in Unit 14A.

**PROPOSED BY:** Andrew Couch

**WHAT WOULD THE PROPOSAL DO?** Reduce the daily bag limit for grouse from 15 per day to 5 per day in Unit 14A. This proposal also seeks to reduce the possession limit from 30 to 10. This proposal would remove the special restriction for ruffed grouse which would increase the bag and possession limit for this species.

**WHAT ARE THE CURRENT REGULATIONS?** The current grouse hunting regulations can be found in 5 AAC 85.065 and in the *2021–2022 Alaska Hunting Regulations*.

In Unit 14A the grouse hunting season is open from 10 August to 31 March with a limit of 15 per day, 30 in possession of which not more than 2 per day and 4 in possession may be ruffed grouse.

Unit 14A is entirely within the Anchorage-MatSu-Kenai Nonsubsistence Area.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** The hunting public would experience a reduction in spruce grouse harvest opportunity but gain ruffed grouse harvest opportunity in Unit 14A.

**BACKGROUND:** With rare exception, grouse season dates and bag limits have remained liberal throughout Unit 14A since the 1962-63 season. However, the communities of Wasilla and Palmer have been the fastest growing communities in Alaska over the past 15–20 years. This has put additional pressure on grouse habitat and subsequent ruffed and spruce grouse populations in Unit 14A.

Ruffed grouse were introduced to the Matanuska-Susitna (Mat-Su) valley beginning in 1988. Since 1992, the department has monitored these populations throughout Unit 14A through spring breeding (“drumming”) surveys. Surveys suggest that the Unit 14A ruffed grouse populations have fluctuated since 1992 yet have never exhibited the typical population cycle observed throughout other areas of their primary range (Interior Alaska and Midwest states). Ruffed grouse have expanded their range to include much of GMUs 16A, 16B, 14A and 14B. During spring breeding surveys in 2019, 2020, and 2021 spring breeding abundance was near all-time lows throughout long-term monitoring locations. Similarly, closely monitored ruffed grouse populations throughout Interior Alaska were also near long-term populations lows.

Beginning in 2017 and accelerating through 2020 a large-scale spruce bark beetle outbreak has significantly affected mature white and Lutz spruce, the primary habitat component selected by spruce grouse in the Mat-Su Valley. As a result of this large-scale outbreak, spruce grouse habitat availability has diminished significantly, and population monitoring efforts were initiated in fall 2019 throughout Units 14 and 16 and will continue into the future. Early results suggest declining abundance of spruce grouse in monitored areas.

Based on conversations with grouse hunters in units 14 and 16, spruce grouse are by far the most historically abundant species, popular to hunt, as well as harvest. Ruffed grouse populations

remain widespread across both units but in many locations are less abundant. Limited household survey data exist for grouse in Units 14 and 16. For example, in 2003, Tyonek residents reported an estimated harvest of 40 grouse (spruce or “unknown” grouse) in 2013. In 2012, Cantwell residents reported an estimated 83 grouse harvested (ruffed and spruce), Chase residents an estimated 206 grouse (ruffed and spruce), Skwentna residents an estimated 209 grouse (ruffed and spruce), Susitna residents an estimated 18 grouse (ruffed and spruce), Talkeetna residents an estimated 297 grouse (ruffed and spruce), and Trapper Creek residents an estimated 624 grouse (ruffed and spruce). Hunters also voluntarily provide wings from harvested grouse. Overall, ruffed grouse wing contributions remain low and spruce grouse wing donations declined during the 2020-21 season.

**DEPARTMENT COMMENTS:** The department is **OPPOSED** to this proposal to reduce harvest opportunity for spruce grouse, and to increase opportunity for ruffed grouse. The paucity of data available for harvest and population levels for each of the species makes it difficult to assess grouse population changes, or the impacts the proposed changes would have.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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**PROPOSAL 228 – 5 AAC 92.095. Unlawful methods of taking furbearers; exceptions.**  
Require trap identification tags in Units 14A, 14B, and 16.

**PROPOSED BY:** Kneeland Taylor

**WHAT WOULD THE PROPOSAL DO?** This proposal would require traps set for furbearers in Units 14A, 14B, and 16 be marked with permanently affixed tags identifying the individual by displaying the individual’s trapping license number, or other information sufficient to provide law enforcement with the individual’s name and address.

**WHAT ARE THE CURRENT REGULATIONS?** The current trapping regulations for Unit 16 can be found in 5 AAC 85.020 and in the *2021–2022 Alaska Trapping Regulations*. Currently there are no trap identification requirements in these units.

**WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?** Traps set on non-federally managed lands would be marked with the trapper’s individual identification number or information which would allow law enforcement to easily identify ownership.

**BACKGROUND:** Currently the only area with a trap identification requirement is in the Chugach State Park in Unit 14C. Under that regulation “the portion of Chugach State Park outside of Eagle River, Anchorage, and Eklutna management areas is open to trapping under 14C seasons and bag limits, except that trapping of wolf, wolverine, land otter, and beaver is not

allowed; killer style steel traps with an inside jaw spread seven inches or greater are prohibited; a person using traps or snares in the area must register with the Department of Natural Resources Chugach State Park area office and provide trapper identification; all traps and snares in the area must be marked with the selected identification.”

The Palmer Area office does not maintain a record of the number of dogs caught in traps and reporting is inconsistent. Some reports in Units 14A&B indicate that incidents occurred on or near multi-use trails or trailheads along with some on private land.

**DEPARTMENT COMMENTS:** The department is **NEUTRAL** on this proposal because there is no biological concern.

**COST ANALYSIS:** Adoption of this proposal would not result in significant costs to the department.

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Proposal 229

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