PROPOSAL 1

5 AAC 92.126 (b) Non-Intensive Management Predator Control Plans, Unit 26(B) Musk Oxen Recovery Area.

Reauthorize a non-intensive management predator control plan for muskox in Unit 26B, as follows:

5 AAC 92.126. Non-Intensive Management Predator Control Plans.

(a) Non-intensive management plans are established under this section in areas described in this section.

(b) Unit 26(B) Musk Oxen Recovery Area: Notwithstanding any other provisions in this title, and based on the following information contained in this subsection, the commissioner or the commissioner's designee may conduct selective, lethal, brown bear removal to allow recovery of the musk oxen population in Unit 26(B):

(1) the Unit 26(B) Musk Oxen Recovery Area is established and consists of all lands within Unit 26(B); this recovery program does not apply to any National Park Service or National Wildlife Refuge lands unless approved by the federal agencies;

(2) musk oxen and brown bear objectives are as follows:

(A) Unit 26(B) musk oxen are not managed intensively for high levels of human harvest, but are managed to provide hunting opportunities; the population objective is a minimum of 300 musk oxen that are one year old or older during April surveys; achieving this objective will allow re-establishment of a hunting season and also enhance and maintain viewing opportunity; the harvest objective is 3 - 9 musk oxen annually, once the population reaches 300 musk oxen and a harvestable surplus is available;

(B) the brown bear population objective for Unit 26(B) is to maintain the current estimated population of 200 - 320 bears, while annually removing up to 20 brown bears identified as threatening or killing musk oxen; limiting the number of bears that can be removed will assure that brown bears persist as part of the natural ecosystem and will assure continued brown bear hunting and viewing opportunities;

(3) findings of the Board of Game (board) concerning populations and human use are as follows:

(A) the Unit 26(B) musk oxen population and harvest objectives have not been achieved, based on the following:

(i) the musk oxen population size was estimated at 190 musk oxen in April 2011; musk oxen numbers in Unit 26(B) increased during 1990 - 1995 from 122 to 330 musk oxen; some of this increase in population was the result of immigration from Unit 26(C); during the mid-to-late 1990s, numbers stabilized at around 265 - 300 musk oxen through 2003; subsequently, the population declined to 216 musk oxen by 2006, and during 2007 - 2011, the population in Unit 26(B) slightly declined and stabilized at its current, reduced population size;

(ii) the hunting season for musk oxen in Unit 26(B) has been closed since regulatory year 2006 - 2007; the first hunting season in Unit 26(B) was in 1990; during 1990 - 1997, all

hunting was by Tier II permit; in regulatory year 1998 - 1999, the board determined that the amount necessary for subsistence was 20 musk oxen in Unit 26(A) and Unit 26(B), west of the Dalton Highway Management Corridor and established a Tier II hunt; the board also determined that the amount necessary for subsistence was four musk oxen in Unit 26(B), east of the Dalton Highway Management Corridor and established a Tier I registration hunt for residents only; a drawing permit hunt was also established for residents only; three permits were issued annually for bull musk oxen in Unit 26(B), east of the Dalton Highway, and the harvest of up to five musk oxen were authorized by the board; beginning in regulatory year 2005 - 2006, permits were not issued for the drawing and Tier I registration hunts, east of the Dalton Highway in Unit 26(B); this was in response to the sharp decline in musk oxen numbers following 2003; however, the Tier II subsistence hunt west of the Dalton Highway remained open until regulatory year 2006 - 2007, when no permits to hunt musk oxen were issued for any of the hunts;

(B) predation by brown bears was identified as a primary source of mortality on musk oxen and is an important cause of the failure to achieve the population and harvest objectives, based on the following:

(i) during 2007 - 2011, brown bear predation was identified as the primary source of mortality; 62 percent of the documented total adult musk oxen mortality (n=73) was attributed to brown bear predation, which accounted for an average of nine adult musk oxen deaths annually; during the same time period, 58 percent of documented calf mortality (n=45) was caused by brown bear predation; this resulted in an annual average of five calves known to be preyed on by brown bears; over the five years, a total of 74 calves were classified as "missing"; their fates were unknown and not included in the above calculations;

(ii) during 2007 - 2011, the habitat appeared capable of supporting a larger musk oxen population; captured musk oxen were generally in good condition, and birth rates were sufficient to provide for population growth, but growth was not realized because of poor survival; concentrations of some trace nutrients in musk oxen body tissues were believed to be suboptimal for survival; an imbalance of trace minerals, particularly low copper and selenium with elevated concentrations of zinc and iron, can negatively affect immune systems and make musk oxen more susceptible to diseases and potentially more vulnerable to predation; thus, it is possible that habitat limitations may have been obscured by high mortality due to predation; controlling predation will help answer this question;

(C) reducing predation can reasonably be expected to aid in achieving the objectives, based on the following:

(i) during 2004 - 2011, the population remained relatively stable at around 200 musk oxen; evidence indicates that the number of yearlings being recruited annually approximately equaled the number of adult musk oxen dying annually; if survival rates of either adult musk oxen or calves increase, then the musk oxen population would be expected to increase; reducing predation on adults and calves should change survival rates of one or both; during 1987 - 1995, the annual rate of increase for the entire population was seven percent; this time period should be representative of what population growth rate Unit 26(B) musk oxen could experience

if bear predation is reduced and habitat is not limiting; therefore, in a best case scenario, it would take approximately seven years for the musk oxen population to reach 300 musk oxen;

(ii) when the musk oxen population increases to 300 musk oxen one year old or older during April surveys, a hunt will be established if a harvestable surplus is available;

(D) reducing predation is likely to be effective and feasible using recognized and prudent active management techniques and based on scientific information; selectively removing brown bears to reduce predation is an experimental approach, based on the hypothesis that relatively few individual bears commonly kill musk oxen; brown bear radiotracking data collected during 1991 - 2007 indicated that several radiocollared adult males were responsible for multiple musk oxen predation events in early spring in a given year or over several years; this suggests that targeting individual bears should be effective, especially for reducing the incidence of multiple kills in spring; most of the predation was caused by male bears before the time when females emerge from dens;

(E) reducing predation is likely to be effective given land ownership patterns, based on the following:

(i) most of Unit 26(B) is state land; the land ownership pattern is 69 percent state land, 29 percent federal land, and 2 percent private land; of the 29 percent federal lands, 12 percent is Bureau of Land Management, and these lands are available for bear control; total land available for bear control is 72 - 74 percent of the unit;

(ii) only two of the 8 - 15 total musk oxen groups in Unit 26(B) occasionally occur on federal lands within the Arctic National Wildlife Refuge;

(F) reducing predation is in the best interests of subsistence users because no harvest is currently taking place; an increase in the population that results in sustainable harvest will benefit all residents;

(4) permissible methods and means are as follows:

(A) hunting of brown bears by the public in Unit 26(B) during the term of the program may occur as provided in the hunting regulations set out elsewhere in this title; however, hunting will be restricted as necessary to maintain the current estimated population of 200 - 320 bears;

(B) notwithstanding any other provisions in this title, the commissioner may allow agents of the state accompanied by department employees, or department employees, to conduct aerial, land and shoot, or ground-based lethal removal of any sex and age of brown bear using state-owned, privately-owned, or chartered equipment, including helicopters, under AS 16.05.783;

(5) the anticipated time frame for update and reevaluation are as follows:

(A) through June 30, **2034** [2018], the commissioner may authorize removal of bears in the Unit 26(B) Musk Oxen Recovery 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 the musk oxen and brown bear populations, and recommendations for changes, if necessary to achieve the objectives of the plan;

(C) the program will be reviewed and modified or suspended if there is no evidence of improved survival or a detectable increase in the Unit 26(B) musk oxen population after three years of bear removal.

What is the issue you would like the board to address and why?

In 2004, the Unit 26(B) muskox population declined from around 300 muskoxen to 200 muskoxen and the hunting season was closed. In addition, the department was concerned that the population may continue to decline with some risk of extirpation or near extirpation as was observed in the muskox population in neighboring Unit 26(C). The department conducted a series of studies to help determine the cause of the decline, including habitat, nutrition, mineral deficiencies, disease, and predation. The results of those studies indicated that most muskoxen mortalities were caused by relatively few brown bears that specialized on killing muskoxen and that the time period this occurred was relatively short during the calving season.

In March 2012, the Alaska Board of Game adopted a non-intensive management predator control program for the Unit 26(B) muskox population. The program authorized selective lethal removal of brown bears by the Department.

During 2012–2016, the department removed seven total bears that were either predating on muskox or displaying predatory behaviors in proximity to muskox groups. Three bears were removed in 2012, three in 2013, and one in 2016. All removed bears were males. The department subsequently observed a reduction in both adult and calf mortality caused by bear predation. However, the population did not grow through 2016; a major drowning event led to the loss of approximately 11% of the population, and the population-wide annual recruitment of calves to the short-yearling age class did not appear to improve. Therefore, the program was suspended for re-evaluation.

Following program suspension, in 2018 the muskox population began to increase, surpassing the management objective of ≥300 muskoxen by 2020, and a hunt was re-established. The hunt structure includes Tier II and Tier I registration hunts, as well as a limited drawing permit hunt.

During the period of population growth, few brown bear predation events were detected when compared to the period prior to the control program and it is plausible that the impact of removing relatively few bears that specialize on killing muskoxen had a positive effect on population growth that was not immediately detectable when the program was active. This may be in part because the drowning event masked our ability to detect improvements in survival at the population level as a result of decreased bear predation and/or because this population is small, improvements to survival and population growth are difficult to detect.

Since 2023, the population has declined significantly and has dropped below the management objective. The most recent population estimate in April 2026 indicated a total of 220 muskoxen. Mortality of radiocollared muskox due to bear predation increased to levels similar to those

observed prior to and during bear removal. Given the current rate of decline there is risk that this population may decline to very low levels which will result in hunt closures.

The department and the board are required to consider all the important, relevant, and material factors relating to the sustainability of a replenishable, public, wildlife resource prior to adoption of a regulatory proposal. The proposed non-intensive management predator control plan is designed to grow the Unit 26B muskox population to maintain harvestable surplus to offer hunting opportunity by reducing predation from brown bears. The proposed reinstatement of the non-intensive management program for brown bears is designed to be sustainable because only those bears identified as preying or exhibiting predatory behavior on muskox will be removed. Annual removals under the program, in addition to hunting mortality, are expected to be below or near the annual estimated harvestable surplus. Therefore, all open seasons for the harvest of brown bears will remain open in Unit 26(B).

The department is committed to the conscious application insofar as practicable of principles of management intended to sustain the yield of muskoxen and brown bears. The department has considered the role of predators in the ecosystem, as well as their distribution within the range of the Unit 26B muskox population. Brown bear removal in this area under the proposed plan will occur in a small geographic area for a limited duration during the calving and post calving season (April–June).

PROPOSED BY: Alaska Department of Fish & Game (HQ-F26-039)

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PROPOSAL 2

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

Allow the use of verifiers, clarifiers, and non-electronic scopes in hunts for big game restricted to archery only, as follows:

5 AAC 92.085(10) with the following archery equipment or devices in a restricted weapons hunt that authorizes taking by bow and arrow:

(A) any type of electronic device, or light attached to the bow, arrow, or arrowhead, except a non-illuminating camera or a lighted nock on the end of an arrow, or a scope or electronic sight that does not project light externally;

[(B) SCOPES OR OTHER DEVICES ATTACHED TO THE BOW OR ARROW FOR OPTICAL ENHANCEMENT;]

What is the issue you would like the board to address and why?

Hunters with poor eyesight may have difficulty participating in big game hunts restricted to archery only, since the use of certain optical enhancement equipment is not legal in big game hunts restricted to archery only. Verifiers are an optical enhancement that allow archers who have trouble seeing things at close distances to see the sight pins on their bows more clearly, and are the equivalent of reading glasses for peep sites. Scopes on bows are an optical enhancement that magnifies the target, the same way scopes are used on rifles. Clarifiers used in conjunction with a lense can also be used on a scope to make the image of the target clearer, the same way the focus of binoculars and scopes are adjusted to see a clearer image. Both forms of technology, verifiers, clarifiers, and scopes, are allowed on archery equipment for big game when used in hunts without a weapons restriction. Neither are legal in hunts restricted to archery only. Battery-powered sight lights enhance the visibility of sight pins in low-light conditions and are allowed on archery equipment for big game when used in hunts restricted to archery only.

PROPOSED BY: Alaska Department of Fish & Game (HQ-F26-038)

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PROPOSAL 3

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

Allow the use of verifiers, clarifiers, and electronic scopes in hunts for big game restricted to archery only, as follows:

5 AAC 92.085(10) with the following archery equipment or devices in a restricted weapons hunt that authorizes taking by bow and arrow:

(A) any type of [ELECTRONIC DEVICE, OR] light attached to the bow, arrow, or arrowhead, except a non-illuminating camera or a lighted nock on the end of an arrow, or a scope or electronic sight that does not project light externally;

[(B) SCOPES OR OTHER DEVICES ATTACHED TO THE BOW OR ARROW FOR OPTICAL ENHANCEMENT;]

What is the issue you would like the board to address and why?

Hunters with poor eyesight may have difficulty participating in big game hunts restricted to archery only, since the use of certain optical enhancement equipment is not legal in big game hunts restricted to archery only. Verifiers are an optical enhancement that allow archers who have trouble seeing things at close distances to see the sight pins on their bows more clearly, and are the equivalent of reading glasses for peep sites. Scopes on bows are an optical enhancement that magnifies the target, the same way scopes are used on rifles. Clarifiers used in conjunction with a lens can also be used on a scope to make the image of the target clearer, the same way the focus of binoculars and scopes are adjusted to see a clearer image. Both forms of technology, verifiers, clarifiers, and scopes, are allowed on archery equipment for big game when used in hunts without a weapons restriction. Neither are legal in hunts restricted to archery only. Battery-powered sight lights enhance the visibility of sight pins in low-light conditions and are allowed on archery equipment for big game when used in hunts restricted to archery only.

PROPOSED BY: Alaska Department of Fish & Game (HQ-F26-041)

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PROPOSAL 4

5 AAC 92.510. Areas closed to hunting; and 5 AAC 92.550. Areas closed to trapping.

Close a 2-mile-wide corridor along the Ambler Road - as follows:

5 AAC 92.510. Areas closed to hunting. (a) The following areas are closed to hunting as specified:

(21) Units 23 and 24:

(A) the area within 1 mile from each side of the Ambler Road, including the driveable surface of the road is closed to hunting.

5 AAC 92.550. Areas closed to trapping. The following areas are closed to the trapping of furbearers as indicated:

(11) Units 23 and 24:

(A) the area within 1 mile from each side of the Ambler Road, including the driveable surface of the road is closed to trapping.

What is the issue you would like the board to address and why?

The access road for the Ambler Mining District is a proposed 211-mile-long road that will originate from the Dalton Highway in Unit 24A and will extend west through Unit 24 and terminate in the Ambler Mining District in Unit 23. The proposed road is for commercial purposes only, is private, and access to it will be controlled by a locked gate that is staffed 24 hours a day, 7 days a week, 365 days a year. While the area within 1 mile on either side of the road will be closed, hunters and trappers will not be prevented from crossing the corridor or the road. Access across the closed area will be provided to areas open to hunting and trapping.

PROPOSED BY: Alaska Department of Fish & Game (HQ-F26-042)

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