

**ALASKA DEPARTMENT OF FISH AND GAME
STAFF COMMENTS
INTERIOR & EASTERN ARCTIC REGION PROPOSALS: 76-92,
108, 109, 117, 118, 127, 130, 131, 158-162, 166 and 181**

**ALASKA BOARD OF GAME MEETING
FAIRBANKS, ALASKA
MARCH 15-22, 2024**



The following staff comments were prepared by the Alaska Department of Fish and Game for use at the Alaska Board of Game meeting, March 15-22, 2024 in Fairbanks, 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 76 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Reopen the resident winter hunt and the nonresident sheep hunt in Unit 19C.

PROPOSED BY: Anthony Marchini

WHAT WOULD THE PROPOSAL DO? This proposal would reopen the Unit 19C winter resident hunt and reopen nonresident sheep hunting with season dates from August 15 – September 10.

WHAT ARE THE CURRENT REGULATIONS? The Unit 19C winter hunt was not closed by the board and is currently open from Oct 1 – Apr 30. There currently is no nonresident sheep hunting in Unit 19C.

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Unit 19(C)		
RESIDENT HUNTERS:		
1 ram with full-curl horn or larger, by youth hunt only; or	No open season	
1 ram with full-curl horn or larger; or	Aug. 10 - Sept. 20	
1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only	Oct. 1 - April 30 (Subsistence hunt only)	
NONRESIDENT HUNTERS:		
1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or		No open season
1 ram with full-curl horn or larger, every 4 regulatory years		No open season

There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1-5 sheep (5 AAC 99.025 (10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted there would be no change to the winter hunt because it was not closed by the board. Nonresidents however would be able to harvest one full curl ram every four years with season dates of Aug 15 – Sept 10. Currently there is no nonresident sheep hunting opportunity in Unit 19C and, if adopted, this proposal will provide some nonresident opportunity.

BACKGROUND: In March 2023, the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a five-year period. The youth hunt and nonresident hunting season will reopen in regulatory year (RY) 28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from August 10–September 20; and a winter registration permit hunt (RS380) for residents only, with a bag limit of one ram with $\frac{3}{4}$ curl horn or smaller, excluding rams with both tips broken, during October 1 – April 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

The first consistent sheep surveys conducted in portions of Unit 19C began in 2010. From 2010 through 2019, sheep abundance has been variable, but relatively stable. During the most recent survey in 2023 the department observed 62% fewer sheep than the average of all surveys from 2010 – 2019. The most significant declines were in the eastern portion of the unit where there were 90% fewer sheep than the average from 2010 – 2019. These declines were most likely the result of difficult winter conditions associated with heavy snow fall, winter rain events creating ice on snow, and late springs.

Most sheep hunting takes place during the fall general season. During RY13–RY22, residents composed 49% of all sheep hunters in Unit 19C with an average of 84 resident hunters per year. Nonresidents in that same time period composed 51% of sheep hunters with an average of 85 hunters per year. In RY22, the last year open to nonresidents, there were 45 nonresident hunters compared to a high of 107 nonresident hunters in 2018. In RY22 there were 27 resident hunters compared to a high of 107 resident hunters in 2018. Preliminary data from RY23 suggests there were 31 resident hunters.

Over the same 10-year period (RY13–RY22), an average of 85 sheep were harvested per year with nonresidents accounting for 68% of all sheep harvested compared to 32% for residents. Success rates averaged 33% for residents and 68% for nonresidents with an overall average success rate of 50%. In RY22 nonresidents harvested 26 sheep compared to a high of 79 harvested by nonresidents in 2018. In RY22 there were three sheep harvested by residents compared to a high of 46 harvested by residents in RY17. Preliminary data from RY23 suggests that residents harvested five sheep.

Total annual sheep harvest in Unit 19C has varied significantly since the 1980s. Total harvest increased from the 1980s through 1990s and peaked at 127 sheep in 1995. Harvest then decreased during the late 1990s and averaged about 65 sheep annually from 2000-2010. Beginning in 2011 harvest steadily increased until RY18, when 118 sheep were harvested. Since RY18, harvest has subsequently decreased, to a low of 29 sheep in RY22. This represents a 40-

year low and a 75% decrease in harvest over a four-year period. Although sheep survey data are not available for much of the above period, the cyclical nature of peaks and valleys observed in the harvest data likely reflects similar trends in sheep abundance.

Since the 1980s, residents accounted for about 33% of annual harvest while nonresidents took 67% of the harvest, similar to the most recent 10-year average. The proportion of sheep harvested by residents and nonresidents has remained relatively similar across years despite the fluctuations in total harvest described above.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as it addresses allocation. If the board chooses to reopen nonresident hunting, they may wish to consider whether this affects their ability to provide reasonable opportunity for subsistence uses. The board is currently in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time.

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

PROPOSAL 77 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Reopen the Unit 19C youth sheep hunt and the nonresident sheep hunt.

PROPOSED BY: Karen Gordon

WHAT WOULD THE PROPOSAL DO? This proposal would reopen the Unit 19C youth hunt from Aug 1 – 5 and the nonresident hunt from August 10 – September 20.

WHAT ARE THE CURRENT REGULATIONS? There is currently no youth hunt or nonresident sheep hunting in Unit 19C.

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
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Unit 19(C)

RESIDENT HUNTERS:

1 ram with full-curl horn or larger, by youth hunt only; or	No open season	
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1 ram with full-curl horn or larger; or	Aug. 10 - Sept. 20	
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1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only	Oct. 1 - April 30 (Subsistence hunt only)	
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NONRESIDENT HUNTERS:

1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or		No open season
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1 ram with full-curl horn or larger, every 4 regulatory years		No open season
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There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1-5 sheep (5 AAC 99.025 (10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted youth hunting and nonresident hunting for sheep would be allowed in Unit 19C as it was prior to the passage of Proposal 204 in March 2023. Currently there is no nonresident sheep hunting opportunity in Unit 19C and, if adopted, this proposal will provide some nonresident opportunity.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a five-year period. The youth hunt and nonresident hunting season will reopen in regulatory year (RY)28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from August 10–September 20; and a winter registration permit hunt (RS380) for

residents only, with a bag limit of one ram with $\frac{3}{4}$ curl horn or smaller, excluding rams with both tips broken, during October 1 – April 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

The first consistent sheep surveys conducted in portions of Unit 19C began in 2010. From 2010 through 2019, sheep abundance has been variable, but relatively stable. During the most recent survey in 2023 the department observed 62% fewer sheep than the average of all surveys from 2010 – 2019. The most significant declines were in the eastern portion of the unit where there were 90% fewer sheep than the average from 2010 – 2019. These declines were most likely the result of difficult winter conditions associated with heavy snow fall, winter rain events creating ice on snow, and late springs.

Most sheep hunting takes place during the fall general season. During RY13–RY22, residents composed 49% of all sheep hunters in Unit 19C with an average of 84 resident hunters per year. Nonresidents in that same time period composed 51% of sheep hunters with an average of 85 hunters per year. In RY22, the last year open to nonresidents, there were 45 nonresident hunters compared to a high of 107 nonresident hunters in 2018. In RY22 there were 27 resident hunters compared to a high of 107 resident hunters in 2018. Preliminary data from RY23 suggests there were 31 resident hunters.

Over the same 10-year period (RY13–RY22), an average of 85 sheep were harvested per year with nonresidents accounting for 68% of all sheep harvested compared to 32% for residents. Success rates averaged 33% for residents and 68% for nonresidents with an overall average success rate of 50%. In RY22 nonresidents harvested 26 sheep compared to a high of 79 harvested by nonresidents in 2018. In RY22 there were three sheep harvested by residents compared to a high of 46 harvested by residents in RY17. Preliminary data from RY23 suggests that residents harvested five sheep.

Total annual sheep harvest in Unit 19C has varied significantly since the 1980s. Total harvest increased from the 1980s through 1990s and peaked at 127 sheep in 1995. Harvest then decreased during the late 1990s and averaged about 65 sheep annually from 2000–2010. Beginning in 2011 harvest steadily increased until RY18, when 118 sheep were harvested. Since RY18, harvest has subsequently decreased, to a low of 29 sheep in RY22. This represents a 40-year low and a 75% decrease in harvest over a four-year period. Although sheep survey data are not available for much of the above period, the cyclical nature of peaks and valleys observed in the harvest data likely reflects similar trends in sheep abundance.

Since the 1980s, residents accounted for about 33% of annual harvest while nonresidents took 67% of the harvest, similar to the most recent 10-year average. The proportion of sheep harvested by residents and nonresidents has remained relatively similar across years despite the fluctuations in total harvest described above.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as it addresses allocation. If the board chooses to reintroduce nonresident hunting, they may wish to consider whether this affects their ability to provide reasonable opportunity for subsistence uses. The board is currently in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time.

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

PROPOSAL 78 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Reopen the regular fall nonresident sheep hunt in Unit 19C.

PROPOSED BY: Spencer Pope, Seth Kroenke, Jeff Rost, Jon Burrows

WHAT WOULD THE PROPOSAL DO? This proposal would reopen the Unit 19C nonresident sheep hunt from August 10 – September 20 with a bag limit of one full curl ram every four years.

WHAT ARE THE CURRENT REGULATIONS? There is currently no nonresident sheep hunting in Unit 19C.

**Resident
Open Season
(Subsistence and Nonresident**

Units and Bag Limits	General Hunts)	Open Season
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Unit 19(C)

RESIDENT HUNTERS:

1 ram with full-curl horn or larger, by youth hunt only; or

No open season

1 ram with full-curl horn or larger; or

Aug. 10 – Sept. 20

1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only

Oct. 1 – April 30
(Subsistence hunt only)

NONRESIDENT HUNTERS:

1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or

No open season

1 ram with full-curl horn or larger, every 4 regulatory years

No open season

There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1–5 sheep (5 AAC 99.025 (10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted nonresident hunting for sheep would be allowed in Unit 19C as it was prior to the passage of Proposal 204 in March 2023. Currently there is no nonresident sheep hunting opportunity in Unit 19C and, if adopted, this proposal will provide some nonresident opportunity.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a five-year period. The youth hunt and nonresident hunting season will reopen in regulatory year (RY)28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from August 10–September 20; and a winter registration permit hunt (RS380) for residents only, with a bag limit of one ram with ¾ curl horn or smaller, excluding rams with both tips broken, during October 1 – April 30. While the fall sheep season can provide for subsistence

opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

The first consistent sheep surveys conducted in portions of Unit 19C began in 2010. From 2010 through 2019, sheep abundance has been variable, but relatively stable. During the most recent survey in 2023 the department observed 62% fewer sheep than the average of all surveys from 2010 – 2019. The most significant declines were in the eastern portion of the unit where there were 90% fewer sheep than the average from 2010 – 2019. These declines were most likely the result of difficult winter conditions associated with heavy snow fall, winter rain events creating ice on snow, and late springs.

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Over the same 10-year period (RY13–RY22), an average of 85 sheep were harvested per year with nonresidents accounting for 68% of all sheep harvested compared to 32% for residents. Success rates averaged 33% for residents and 68% for nonresidents with an overall average success rate of 50%. In RY22 nonresidents harvested 26 sheep compared to a high of 79 harvested by nonresidents in 2018. In RY22 there were three sheep harvested by residents compared to a high of 46 harvested by residents in RY17. Preliminary data from RY23 suggests residents harvested five sheep.

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Since the 1980s, residents accounted for about 33% of annual harvest while nonresidents took 67% of the harvest, similar to the most recent 10-year average. The proportion of sheep harvested by residents and nonresidents has remained relatively similar across years despite the fluctuations in total harvest described above.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-

aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as it addresses allocation. If the board chooses to reintroduce nonresident hunting, they may wish to consider whether this affects their ability to provide reasonable opportunity for subsistence uses. The board is currently in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time.

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

PROPOSAL 79 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Reopen the regular fall nonresident sheep hunt in Unit 19C.

PROPOSED BY: Taiga Resources Conservation

WHAT WOULD THE PROPOSAL DO? This proposal would reopen the Unit 19C nonresident sheep hunt from August 10 – September 20 with a bag limit of 1 full curl ram every 4 years.

WHAT ARE THE CURRENT REGULATIONS? There is currently no nonresident sheep hunting in Unit 19C.

	Resident	
	Open Season	
	(Subsistence and	Nonresident
Units and Bag Limits	General Hunts)	Open Season

Unit 19(C)

RESIDENT HUNTERS:

1 ram with full-curl horn or larger, by youth hunt only; or No open season

1 ram with full-curl horn or larger; or Aug. 10 – Sept. 20

1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only Oct. 1 – April 30 (Subsistence hunt only)

NONRESIDENT HUNTERS:

1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or No open season

1 ram with full-curl horn or larger, every 4 regulatory years No open season

There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1-5 sheep (5 AAC 99.025 (10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted nonresident hunting for sheep would be allowed in Unit 19C as it was prior to the passage of Proposal 204 in March 2023. Currently there is no nonresident sheep hunting opportunity in Unit 19C and, if adopted, this proposal will provide some nonresident opportunity.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a five-year period. The youth hunt and nonresident hunting season will reopen in regulatory year (RY) 28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from August 10–September 20; and a winter registration permit hunt (RS380) for residents only, with a bag limit of one ram with ¾ curl horn or smaller, excluding rams with both tips broken, during October 1 – April 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

The first consistent sheep surveys conducted in portions of Unit 19C began in 2010. From 2010 through 2019, sheep abundance has been variable, but relatively stable. During the most recent survey in 2023 the department observed 62% fewer sheep than the average of all surveys from 2010 – 2019. The most significant declines were in the eastern portion of the unit where there were 90% fewer sheep than the average from 2010 – 2019. These declines were most likely the result of difficult winter conditions associated with heavy snow fall, winter rain events creating ice on snow, and late springs.

Most sheep hunting takes place during the fall general season. During RY13–RY22, residents composed 49% of all sheep hunters in Unit 19C with an average of 84 resident hunters per year. Nonresidents in that same time period composed 51% of sheep hunters with an average of 85 hunters per year. In RY22, the last year open to nonresidents, there were 45 nonresident hunters compared to a high of 107 nonresident hunters in 2018. In RY22 there were 27 resident hunters compared to a high of 107 resident hunters in 2018. Preliminary data from RY23 suggests there were 31 resident hunters.

Over the same 10-year period (RY13–RY22), an average of 85 sheep were harvested per year with nonresidents accounting for 68% of all sheep harvested compared to 32% for residents. Success rates averaged 33% for residents and 68% for nonresidents with an overall average success rate of 50%. In RY22 nonresidents harvested 26 sheep compared to a high of 79 harvested by nonresidents in 2018. In RY22 there were three sheep harvested by residents compared to a high of 46 harvested by residents in RY17. Preliminary data from RY23 suggests residents harvested five sheep.

Total annual sheep harvest in Unit 19C has varied significantly since the 1980s. Total harvest increased from the 1980s through 1990s and peaked at 127 sheep in 1995. Harvest then decreased during the late 1990s and averaged about 65 sheep annually from 2000–2010. Beginning in 2011 harvest steadily increased until RY18, when 118 sheep were harvested. Since RY18, harvest has subsequently decreased, to a low of 29 sheep in RY22. This represents a 40-year low and a 75% decrease in harvest over a 4-year period. Although sheep survey data are not available for much of the above period, the cyclical nature of peaks and valleys observed in the harvest data likely reflects similar trends in sheep abundance.

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older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as it addresses allocation. If the board chooses to reintroduce nonresident hunting, they may wish to consider whether this affects their ability to provide reasonable opportunity for subsistence uses. The board is currently in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time.

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

PROPOSAL 80 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Reopen the regular fall nonresident sheep hunt in Unit 19C.

PROPOSED BY: Jeff Pralle

WHAT WOULD THE PROPOSAL DO? This proposal would reopen the Unit 19C nonresident sheep hunt from August 10 – September 20 with a bag limit of 1 full curl ram every 4 years.

WHAT ARE THE CURRENT REGULATIONS? There is currently no nonresident sheep hunting in Unit 19C.

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Unit 19(C)		

RESIDENT HUNTERS:

1 ram with full-curl horn or larger, by youth hunt only; or

No open season

1 ram with full-curl horn or larger; or

Aug. 10 – Sept. 20

1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only

Oct. 1 – April 30
(Subsistence hunt only)

NONRESIDENT HUNTERS:

1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or

No open season

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Since the 1980s, residents accounted for about 33% of annual harvest while nonresidents took 67% of the harvest, similar to the most recent 10-year average. The proportion of sheep harvested by residents and nonresidents has remained relatively similar across years despite the fluctuations in total harvest described above.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these

older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as it addresses allocation. If the board chooses to reintroduce nonresident hunting, they may wish to consider whether this affects their ability to provide reasonable opportunity for subsistence uses. The board is currently in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time.

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

PROPOSAL 81 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Reopen the youth sheep hunt and the fall nonresident sheep hunt in Unit 19C.

PROPOSED BY: Wayne Heimer

WHAT WOULD THE PROPOSAL DO? This proposal would reopen the Unit 19C youth hunt from August 1 – 5 and the nonresident hunt from August 10 – September 20.

WHAT ARE THE CURRENT REGULATIONS? There is currently no youth hunt or nonresident sheep hunting in Unit 19C.

	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Units and Bag Limits		
Unit 19(C)		

RESIDENT HUNTERS:

1 ram with full-curl horn or larger, by youth hunt only; or

No open season

1 ram with full-curl horn or larger; or

Aug. 10 – Sept. 20

1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only

Oct. 1 – April 30
(Subsistence hunt only)

NONRESIDENT HUNTERS:

1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or

No open season

1 ram with full-curl horn or larger, every 4 regulatory years

No open season

There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1-5 sheep (5 AAC 99.025 (10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted youth hunting and nonresident hunting for sheep would be allowed in Unit 19C as it was prior to the passage of Proposal 204 in March 2023. Currently there is no nonresident sheep hunting opportunity in Unit 19C and, if adopted, this proposal will provide some nonresident opportunity.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a five-year period. The youth hunt and nonresident hunting season will reopen in regulatory year (RY) 28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from August 10–September 20; and a winter registration permit hunt (RS380) for residents only, with a bag limit of one ram with ¾ curl horn or smaller, excluding rams with both tips broken, during October 1 – April 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

The first consistent sheep surveys conducted in portions of Unit 19C began in 2010. From 2010 through 2019, sheep abundance has been variable, but relatively stable. During the most recent

survey in 2023 the department observed 62% fewer sheep than the average of all surveys from 2010 – 2019. The most significant declines were in the eastern portion of the unit where there were 90% fewer sheep than the average from 2010 – 2019. These declines were most likely the result of difficult winter conditions associated with heavy snow fall, winter rain events creating ice on snow, and late springs.

Most sheep hunting takes place during the fall general season. During RY13–RY22, residents composed 49% of all sheep hunters in Unit 19C with an average of 84 resident hunters per year. Nonresidents in that same time period composed 51% of sheep hunters with an average of 85 hunters per year. In RY22, the last year open to nonresidents, there were 45 nonresident hunters compared to a high of 107 nonresident hunters in 2018. In RY22 there were 27 resident hunters compared to a high of 107 resident hunters in 2018. Preliminary data from RY23 suggests there were 31 resident hunters.

Over the same 10-year period (RY13–RY22), an average of 85 sheep were harvested per year with nonresidents accounting for 68% of all sheep harvested compared to 32% for residents. Success rates averaged 33% for residents and 68% for nonresidents with an overall average success rate of 50%. In RY22 nonresidents harvested 26 sheep compared to a high of 79 harvested by nonresidents in 2018. In RY22 there were three sheep harvested by residents compared to a high of 46 harvested by residents in RY17. Preliminary data from RY23 suggests residents harvested five sheep.

Total annual sheep harvest in Unit 19C has varied significantly since the 1980s. Total harvest increased from the 1980s through 1990s and peaked at 127 sheep in 1995. Harvest then decreased during the late 1990s and averaged about 65 sheep annually from 2000–2010. Beginning in 2011 harvest steadily increased until RY18, when 118 sheep were harvested. Since RY18, harvest has subsequently decreased, to a low of 29 sheep in RY22. This represents a 40-year low and a 75% decrease in harvest over a four-year period. Although sheep survey data are not available for much of the above period, the cyclical nature of peaks and valleys observed in the harvest data likely reflects similar trends in sheep abundance.

Since the 1980s, residents accounted for about 33% of annual harvest while nonresidents took 67% of the harvest, similar to the most recent 10-year average. The proportion of sheep harvested by residents and nonresidents has remained relatively similar across years despite the fluctuations in total harvest described above.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting

a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as it addresses allocation. If the board chooses to reintroduce nonresident hunting, they may wish to consider whether this affects their ability to provide reasonable opportunity for subsistence uses. The board is currently in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time.

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

PROPOSAL 82 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Create a drawing hunt for nonresidents in Unit 19C, and allocate a percentage of the harvest to nonresidents.

PROPOSED BY: Resident Hunters of Alaska

WHAT WOULD THE PROPOSAL DO? This proposal would create a draw hunt for nonresidents in Unit 19C with up to 10 permits issued, or up to 25% of the harvestable surplus. The bag limit would be one full curl ram every four years with season dates from Aug 10 – Sept 20.

WHAT ARE THE CURRENT REGULATIONS? There is currently no nonresident sheep hunting in Unit 19C.

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Unit 19(C)		

RESIDENT HUNTERS:

1 ram with full-curl horn or larger, by youth hunt only; or No open season

1 ram with full-curl horn or larger; or Aug. 10 – Sept. 20

1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only Oct. 1 – April 30 (Subsistence hunt only)

NONRESIDENT HUNTERS:

1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or No open season

1 ram with full-curl horn or larger, every 4 regulatory years No open season

There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1-5 sheep (5 AAC 99.025 (10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted a drawing hunt would be created for nonresident sheep hunters in Unit 19C. Currently there is no nonresident sheep hunting opportunity in Unit 19C and, if adopted, this proposal will provide some nonresident opportunity.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a five-year period. The youth hunt and nonresident hunting season will reopen in regulatory year (RY) 28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from August 10–September 20; and a winter registration permit hunt (RS380) for residents only, with a bag limit of one ram with ¾ curl horn or smaller, excluding rams with both tips broken, during October 1 – April 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

The first consistent sheep surveys conducted in portions of Unit 19C began in 2010. From 2010 through 2019, sheep abundance has been variable, but relatively stable. During the most recent survey in 2023 the department observed 62% fewer sheep than the average of all surveys from 2010 – 2019. The most significant declines were in the eastern portion of the unit where there

were 90% fewer sheep than the average from 2010 – 2019. These declines were most likely the result of difficult winter conditions associated with heavy snow fall, winter rain events creating ice on snow, and late springs.

Most sheep hunting takes place during the fall general season. During RY13–RY22, residents composed 49% of all sheep hunters in Unit 19C with an average of 84 resident hunters per year. Nonresidents in that same time period composed 51% of sheep hunters with an average of 85 hunters per year. In RY22, the last year open to nonresidents, there were 45 nonresident hunters compared to a high of 107 nonresident hunters in 2018. In RY22 there were 27 resident hunters compared to a high of 107 resident hunters in 2018. Preliminary data from RY23 suggests there were 31 resident hunters.

Over the same 10-year period (RY13–RY22), an average of 85 sheep were harvested per year with nonresidents accounting for 68% of all sheep harvested compared to 32% for residents. Success rates averaged 33% for residents and 68% for nonresidents with an overall average success rate of 50%. In RY22 nonresidents harvested 26 sheep compared to a high of 79 harvested by nonresidents in 2018. In RY22 there were three sheep harvested by residents compared to a high of 46 harvested by residents in RY17. Preliminary data from RY23 suggests residents harvested five sheep.

Total annual sheep harvest in Unit 19C has varied significantly since the 1980s. Total harvest increased from the 1980s through 1990s and peaked at 127 sheep in 1995. Harvest then decreased during the late 1990s and averaged about 65 sheep annually from 2000–2010. Beginning in 2011 harvest steadily increased until RY18, when 118 sheep were harvested. Since RY18, harvest has subsequently decreased, to a low of 29 sheep in RY22. This represents a 40-year low and a 75% decrease in harvest over a four-year period. Although sheep survey data are not available for much of the above period, the cyclical nature of peaks and valleys observed in the harvest data likely reflects similar trends in sheep abundance.

Since the 1980s, residents accounted for about 33% of annual harvest while nonresidents took 67% of the harvest, similar to the most recent 10-year average. The proportion of sheep harvested by residents and nonresidents has remained relatively similar across years despite the fluctuations in total harvest described above.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall

population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as it addresses allocation. If the board chooses to reintroduce nonresident hunting, they may wish to consider whether this affects their ability to provide reasonable opportunity for subsistence uses. The board is currently in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time. Adoption of the first option, to have a limited number of permits available, is easily implemented and preferred by the department if the board intends to adopt the proposal. Adoption of the second option, to provide for permits up to 25% of the harvestable surplus of sheep is quite difficult to implement for multiple reasons including weather precluding the department from completing surveys and the timing of the drawing application period. If the second option is adopted the department may be forced to use outdated survey data which could either negatively impact ram abundance or result in extremely conservative harvest.

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

PROPOSAL 83 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Open an archery only fall sheep hunt for nonresidents in Unit 19C.

PROPOSED BY: Mike Harris

WHAT WOULD THE PROPOSAL DO? This proposal would reopen nonresident sheep hunting in Unit 19C by archery only with a bag limit of one full curl ram every four years and season dates of August 10 – September 20.

WHAT ARE THE CURRENT REGULATIONS? There is currently no nonresident sheep hunting in Unit 19C.

	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Units and Bag Limits		

Unit 19(C)

RESIDENT HUNTERS:

1 ram with full-curl horn or larger, by youth hunt only; or No open season

1 ram with full-curl horn or larger; or Aug. 10 – Sept. 20

1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only Oct. 1 – April 30 (Subsistence hunt only)

NONRESIDENT HUNTERS:

1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or No open season

1 ram with full-curl horn or larger, every 4 regulatory years No open season

There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1-5 sheep (5 AAC 99.025 (10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted an archery only hunt would be created for nonresident sheep hunters in Unit 19C. Currently there is no nonresident sheep hunting opportunity in Unit 19C and, if adopted, this proposal will provide some nonresident opportunity.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a five-year period. The youth hunt and nonresident hunting season will reopen in regulatory year (RY) 28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from August 10–September 20; and a winter registration permit hunt (RS380) for residents only, with a bag limit of one ram with ¾ curl horn or smaller, excluding rams with both tips broken, during October 1 – April 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

The first consistent sheep surveys conducted in portions of Unit 19C began in 2010. From 2010 through 2019, sheep abundance has been variable, but relatively stable. During the most recent survey in 2023 the department observed 62% fewer sheep than the average of all surveys from 2010 – 2019. The most significant declines were in the eastern portion of the unit where there were 90% fewer sheep than the average from 2010 – 2019. These declines were most likely the result of difficult winter conditions associated with heavy snow fall, winter rain events creating ice on snow, and late springs.

Most sheep hunting takes place during the fall general season. During RY13–RY22, residents composed 49% of all sheep hunters in Unit 19C with an average of 84 resident hunters per year. Nonresidents in that same time period composed 51% of sheep hunters with an average of 85 hunters per year. In RY22, the last year open to nonresidents, there were 45 nonresident hunters compared to a high of 107 nonresident hunters in 2018. In RY22 there were 27 resident hunters compared to a high of 107 resident hunters in 2018. Preliminary data from RY23 suggests there were 31 resident hunters.

Over the same 10-year period (RY13–RY22), an average of 85 sheep were harvested per year with nonresidents accounting for 68% of all sheep harvested compared to 32% for residents. Success rates averaged 33% for residents and 68% for nonresidents with an overall average success rate of 50%. In RY22 nonresidents harvested 26 sheep compared to a high of 79 harvested by nonresidents in 2018. In RY22 there were three sheep harvested by residents compared to a high of 46 harvested by residents in RY17. Preliminary data from RY23 suggests residents harvested five sheep.

Total annual sheep harvest in Unit 19C has varied significantly since the 1980s. Total harvest increased from the 1980s through 1990s and peaked at 127 sheep in 1995. Harvest then decreased during the late 1990s and averaged about 65 sheep annually from 2000–2010. Beginning in 2011 harvest steadily increased until RY18, when 118 sheep were harvested. Since RY18, harvest has subsequently decreased, to a low of 29 sheep in RY22. This represents a 40-year low and a 75% decrease in harvest over a four-year period. Although sheep survey data are not available for much of the above period, the cyclical nature of peaks and valleys observed in the harvest data likely reflects similar trends in sheep abundance.

Since the 1980s, residents accounted for about 33% of annual harvest while nonresidents took 67% of the harvest, similar to the most recent 10-year average. The proportion of sheep harvested by residents and nonresidents has remained relatively similar across years despite the fluctuations in total harvest described above.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these

older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as it addresses allocation. If the board chooses to reintroduce nonresident hunting, they may wish to consider whether this affects their ability to provide reasonable opportunity for subsistence uses. The board is currently in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time.

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

PROPOSAL 84 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Change the sheep bag limit for resident hunters in Unit 19C to one ram every two regulatory years.

PROPOSED BY: Anthony Marchini

WHAT WOULD THE PROPOSAL DO? This proposal would change the Unit 19C resident bag limit for sheep to one full curl ram every two years.

WHAT ARE THE CURRENT REGULATIONS?

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
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Unit 19(C)

RESIDENT HUNTERS:

1 ram with full-curl horn or larger, by youth hunt only; or

No open season

1 ram with full-curl horn or larger; or Aug. 10 – Sept. 20

1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only Oct. 1 – April 30 (Subsistence hunt only)

NONRESIDENT HUNTERS:

1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or No open season

1 ram with full-curl horn or larger, every 4 regulatory years No open season

There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1-5 sheep (5 AAC 99.025 (10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted residents would only be able to harvest a full curl ram in Unit 19C every other year. The proposal is not clear how this new bag limit would affect the bag limit for the winter hunt.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a 5-year period. The youth hunt and nonresident hunting season will reopen in regulator year (RY) 28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from August 10–September 20; and a winter registration permit hunt (RS380) for residents only, with a bag limit of one ram with ¾ curl horn or smaller, excluding rams with both tips broken, during October 1 – April 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

The first consistent sheep surveys conducted in portions of Unit 19C began in 2010. From 2010 through 2019, sheep abundance has been variable, but relatively stable. During the most recent survey in 2023 the department observed 62% fewer sheep than the average of all surveys from 2010 – 2019. The most significant declines were in the eastern portion of the unit where there were 90% fewer sheep than the average from 2010 – 2019. These declines were most likely the

result of difficult winter conditions associated with heavy snow fall, winter rain events creating ice on snow, and late springs.

Most sheep hunting takes place during the fall general season. During RY13–RY22, residents composed 49% of all sheep hunters in Unit 19C with an average of 84 resident hunters per year. Nonresidents in that same time period composed 51% of sheep hunters with an average of 85 hunters per year. In RY22, the last year open to nonresidents, there were 45 nonresident hunters compared to a high of 107 nonresident hunters in 2018. In RY22 there were 27 resident hunters compared to a high of 107 resident hunters in 2018. Preliminary data from RY23 suggests there were 31 resident hunters.

Over the same 10-year period (RY13–RY22), an average of 85 sheep were harvested per year with nonresidents accounting for 68% of all sheep harvested compared to 32% for residents. Success rates averaged 33% for residents and 68% for nonresidents with an overall average success rate of 50%. In RY22 nonresidents harvested 26 sheep compared to a high of 79 harvested by nonresidents in 2018. In RY22 there were three sheep harvested by residents compared to a high of 46 harvested by residents in RY17. Preliminary data from RY23 suggests residents harvested five sheep.

Total annual sheep harvest in Unit 19C has varied significantly since the 1980s. Total harvest increased from the 1980s through 1990s and peaked at 127 sheep in 1995. Harvest then decreased during the late 1990s and averaged about 65 sheep annually from 2000–2010. Beginning in 2011 harvest steadily increased until RY18, when 118 sheep were harvested. Since RY18, harvest has subsequently decreased, to a low of 29 sheep in RY22. This represents a 40-year low and a 75% decrease in harvest over a four-year period. Although sheep survey data are not available for much of the above period, the cyclical nature of peaks and valleys observed in the harvest data likely reflects similar trends in sheep abundance.

Since the 1980s, residents accounted for about 33% of annual harvest while nonresidents took 67% of the harvest, similar to the most recent 10-year average. The proportion of sheep harvested by residents and nonresidents has remained relatively similar across years despite the fluctuations in total harvest described above.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to

female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as it addresses allocation. If the board adopts this proposal, it will need to determine if the new regulations will continue to provide a reasonable opportunity for subsistence. The board is currently in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time.

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

PROPOSAL 85 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Create a variable bag limit for resident sheep hunters based on the age of the sheep harvested.

PROPOSED BY: Paul Forward

WHAT WOULD THE PROPOSAL DO? This proposal would create a variable bag limit for resident sheep hunters based on the age of the sheep harvested. It also suggests this same or similar bag limit for nonresidents when the current five-year closure ends.

WHAT ARE THE CURRENT REGULATIONS?

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Unit 19(C)		
RESIDENT HUNTERS: 1 ram with full-curl horn or larger, by youth hunt only; or	No open season	
1 ram with full-curl horn or larger; or	Aug. 10 – Sept. 20	

1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only

Oct. 1 – April 30
(Subsistence hunt only)

NONRESIDENT HUNTERS:

1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or

No open season

1 ram with full-curl horn or larger, every 4 regulatory years

No open season

There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1-5 sheep (5 AAC 99.025 (10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted residents would have the following bag limits:

Harvest an 8-year old or older ram and the hunter will be eligible to hunt sheep the next season.

Harvest a 7-year old ram the hunter will be ineligible to hunt sheep for the next two seasons.

Harvest a 6-year or younger ram and the hunter will be ineligible to hunt sheep for the next three seasons.

The proposal is not clear how this new bag limit would affect the bag limit for the resident winter hunt. Also, if this structure were applied to nonresidents, this would be a more liberal bag limit than the current statewide bag limit of one full curl ram every 4 years.

BACKGROUND: In March 2023, the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a five-year period. The youth hunt and nonresident hunting season will reopen in regulatory year (RY) 28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from August 10–September 20; and a winter registration permit hunt (RS380) for residents only, with a bag limit of one ram with $\frac{3}{4}$ curl horn or smaller, excluding rams with both tips broken, during October 1 – April 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

The first consistent sheep surveys conducted in portions of Unit 19C began in 2010. From 2010 through 2019, sheep abundance has been variable, but relatively stable. During the most recent survey in 2023 the department observed 62% fewer sheep than the average of all surveys from 2010 – 2019. The most significant declines were in the eastern portion of the unit where there were 90% fewer sheep than the average from 2010 – 2019. These declines were most likely the result of difficult winter conditions associated with heavy snow fall, winter rain events creating ice on snow, and late springs.

Most sheep hunting takes place during the fall general season. During RY13–RY22, residents composed 49% of all sheep hunters in Unit 19C with an average of 84 resident hunters per year. Nonresidents in that same time period composed 51% of sheep hunters with an average of 85 hunters per year. In RY22, the last year open to nonresidents, there were 45 nonresident hunters compared to a high of 107 nonresident hunters in 2018. In RY22 there were 27 resident hunters compared to a high of 107 resident hunters in 2018. Preliminary data from RY23 suggests there were 31 resident hunters.

Over the same 10-year period (RY13–RY22), an average of 85 sheep were harvested per year with nonresidents accounting for 68% of all sheep harvested compared to 32% for residents. Success rates averaged 33% for residents and 68% for nonresidents with an overall average success rate of 50%. In RY22 nonresidents harvested 26 sheep compared to a high of 79 harvested by nonresidents in 2018. In RY22 there were three sheep harvested by residents compared to a high of 46 harvested by residents in RY17. Preliminary data from RY23 suggests residents harvested five sheep.

Total annual sheep harvest in Unit 19C has varied significantly since the 1980s. Total harvest increased from the 1980s through 1990s and peaked at 127 sheep in 1995. Harvest then decreased during the late 1990s and averaged about 65 sheep annually from 2000–2010. Beginning in 2011 harvest steadily increased until RY18, when 118 sheep were harvested. Since RY18, harvest has subsequently decreased, to a low of 29 sheep in RY22. This represents a 40-year low and a 75% decrease in harvest over a 4-year period. Although sheep survey data are not available for much of the above period, the cyclical nature of peaks and valleys observed in the harvest data likely reflects similar trends in sheep abundance.

Since the 1980s, residents accounted for about 33% of annual harvest while nonresidents took 67% of the harvest, similar to the most recent 10-year average. The proportion of sheep harvested by residents and nonresidents has remained relatively similar across years despite the fluctuations in total harvest described above.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these

older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Creating a multi-tiered bag limit based on age would be difficult to track and enforce. This would create a challenging situation for enforcement of the new bag limit in situations where sheep are difficult to age. If a change is made to the nonresident bag limit, this would place Unit 19C out of alignment with the statewide nonresident bag limit of one full curl sheep every four years. Creating a multi-tiered bag limit based on the age of sheep harvested is also inconsistent with subsistence harvesting patterns. Subsistence hunters that participate in the winter hunt would be negatively affected by this proposal because by regulation they are required to shoot young rams. Additionally, this tiered bag limit structure potentially penalizes a person who takes a legal ram more than someone who shoots a sublegal ram. There is currently no good mechanism to track hunters from year to year to implement this, and if adopted the department suggests a delayed implementation in order to assess how to successfully implement the new regulations. Finally, the board is in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time.

COST ANALYSIS: Adoption of this proposal would result in additional costs for the department if the department were expected to implement a new bag limit based on the age of the ram harvested and maintain a new database to track those hunters from year to year for enforcement purposes.

PROPOSAL 86 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Create a variable bag limit for resident sheep hunters based on the age of the sheep harvested.

PROPOSED BY: Paul Forward

WHAT WOULD THE PROPOSAL DO? This proposal would create a variable bag limit for resident sheep hunters based on the age of the sheep harvested. It also suggests this same or similar bag limit for nonresidents when the current 5-year closure ends.

WHAT ARE THE CURRENT REGULATIONS?

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
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Unit 19(C)

RESIDENT HUNTERS:

1 ram with full-curl horn or larger, by youth hunt only; or	No open season
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1 ram with full-curl horn or larger; or	Aug. 10 – Sept. 20
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1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only	Oct. 1 – April 30 (Subsistence hunt only)
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NONRESIDENT HUNTERS:

1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or	No open season
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1 ram with full-curl horn or larger, every 4 regulatory years	No open season
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There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1-5 sheep (5 AAC 99.025 (10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted residents would have the following bag limits:

Harvest a ram 10 years old or older and the hunter will be able to hunt sheep in Alaska the next season.

Harvest of a full curl or larger ram 8 or 9 years old, the hunter will be ineligible to hunt sheep in Alaska the next season.

Harvest a full curl or larger 7 year old ram, the hunter will be ineligible to hunt sheep for the next 2 seasons.

Harvest a full curl or larger but 6 year or younger ram, the hunter will be ineligible to hunt sheep for the next 3 seasons.

The proposal is not clear how this new bag limit would affect the bag limit for the resident winter hunt. Also, if this structure were applied to nonresidents this would be a more liberal bag limit than the statewide bag limit of 1 full curl ram every 4 years.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a 5-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a 5-year period. The youth hunt and nonresident hunting season will reopen in regulatory year (RY) 28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from August 10–September 20; and a winter registration permit hunt (RS380) for residents only, with a bag limit of one ram with $\frac{3}{4}$ curl horn or smaller, excluding rams with both tips broken, during October 1 – April 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

The first consistent sheep surveys conducted in portions of Unit 19C began in 2010. From 2010 through 2019, sheep abundance has been variable, but relatively stable. During the most recent survey in 2023 the department observed 62% fewer sheep than the average of all surveys from 2010 – 2019. The most significant declines were in the eastern portion of the unit where there were 90% fewer sheep than the average from 2010 – 2019. These declines were most likely the result of difficult winter conditions associated with heavy snow fall, winter rain events creating ice on snow, and late springs.

Most sheep hunting takes place during the fall general season. During RY13–RY22, residents composed 49% of all sheep hunters in Unit 19C with an average of 84 resident hunters per year. Nonresidents in that same time period composed 51% of sheep hunters with an average of 85 hunters per year. In RY22, the last year open to nonresidents, there were 45 nonresident hunters compared to a high of 107 nonresident hunters in 2018. In RY22 there were 27 resident hunters compared to a high of 107 resident hunters in 2018. Preliminary data from RY23 suggests there were 31 resident hunters.

Over the same 10-year period (RY13–RY22), an average of 85 sheep were harvested per year with nonresidents accounting for 68% of all sheep harvested compared to 32% for residents. Success rates averaged 33% for residents and 68% for nonresidents with an overall average success rate of 50%. In RY22 nonresidents harvested 26 sheep compared to a high of 79 harvested by nonresidents in 2018. In RY22 there were three sheep harvested by residents compared to a high of 46 harvested by residents in RY17. Preliminary data from RY23 suggests residents harvested five sheep.

Total annual sheep harvest in Unit 19C has varied significantly since the 1980s. Total harvest increased from the 1980s through 1990s and peaked at 127 sheep in 1995. Harvest then decreased during the late 1990s and averaged about 65 sheep annually from 2000–2010. Beginning in 2011 harvest steadily increased until RY18, when 118 sheep were harvested. Since RY18, harvest has subsequently decreased, to a low of 29 sheep in RY22. This represents a 40-year low and a 75% decrease in harvest over a four-year period. Although sheep survey data are not available for much of the above period, the cyclical nature of peaks and valleys observed in the harvest data likely reflects similar trends in sheep abundance.

Since the 1980s, residents accounted for about 33% of annual harvest while nonresidents took 67% of the harvest, similar to the most recent 10-year average. The proportion of sheep harvested by residents and nonresidents has remained relatively similar across years despite the fluctuations in total harvest described above.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department **OPPOSES** this proposal. Creating a multi-tiered bag limit based on age would be difficult to track and enforce. This would create a challenging situation for enforcement of the new bag limit in situations where sheep are difficult to age. If a change is made to the nonresident bag limit, this would place Unit 19C out of alignment with the statewide nonresident bag limit of 1 full curl sheep every 4 years. Creating a multi-tiered bag limit based on the age of sheep harvested is inconsistent with subsistence harvesting patterns. Subsistence hunters that participate in the winter hunt would be negatively affected by this proposal because by regulation they are required to shoot young rams. Additionally, this tiered bag limit structure potentially penalizes a person who takes a legal ram more than someone who shoot a sublegal ram. There is currently no good mechanism to track hunters from year to year to implement this, and if adopted the department suggests a delayed

implementation in order to assess how to successfully implement the new regulations. Finally, the board is in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time.

COST ANALYSIS: Adoption of this proposal would result in additional costs for the department if the department were expected to implement a new bag limit based on the age of the ram harvested and maintain a new database to track those hunters from year to year for enforcement purposes.

PROPOSAL 87 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Shorten the resident sheep hunting season and reopen a shorter nonresident sheep hunting season after the resident season opens in Unit 19C.

PROPOSED BY: Wayne Kubat

WHAT WOULD THE PROPOSAL DO? This proposal would shorten the Unit 19C resident sheep hunt with new dates of August 15 – September 10 and reopen a nonresident sheep hunt with season dates of August 21 – September 10.

WHAT ARE THE CURRENT REGULATIONS? The current fall resident season runs from Aug 10 – Sept 20 and there is no nonresident sheep hunting in Unit 19C.

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Unit 19(C)		
RESIDENT HUNTERS:		
1 ram with full-curl horn or larger, by youth hunt only; or	No open season	
1 ram with full-curl horn or larger; or	Aug. 10 – Sept. 20	
1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only	Oct. 1 – April 30 (Subsistence hunt only)	

NONRESIDENT HUNTERS:
1 ram with full-curl horn or

larger, every 4 regulatory years, by youth hunt only; or

No open season

1 ram with full-curl horn or larger, every 4 regulatory years

No open season

There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1-5 sheep (5 AAC 99.025 (10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted resident sheep hunting opportunity would be reduced and a nonresident season would be opened with a start date seven days after the opening for residents. It is anticipated that total harvest would be less than it would if both seasons were open for the typical fall season, from August 10 – September 20. Currently there is no nonresident sheep hunting opportunity in Unit 19C and, if adopted, this proposal will provide some nonresident opportunity.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a five-year period. The youth hunt and nonresident hunting season will reopen in regulatory year (RY) 28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from August 10–September 20; and a winter registration permit hunt (RS380) for residents only, with a bag limit of one ram with $\frac{3}{4}$ curl horn or smaller, excluding rams with both tips broken, during October 1 – April 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

The first consistent sheep surveys conducted in portions of Unit 19C began in 2010. From 2010 through 2019, sheep abundance has been variable, but relatively stable. During the most recent survey in 2023 the department observed 62% fewer sheep than the average of all surveys from 2010 – 2019. The most significant declines were in the eastern portion of the unit where there were 90% fewer sheep than the average from 2010 – 2019. These declines were most likely the result of difficult winter conditions associated with heavy snow fall, winter rain events creating ice on snow, and late springs.

Most sheep hunting takes place during the fall general season. During RY13–RY22, residents composed 49% of all sheep hunters in Unit 19C with an average of 84 resident hunters per year. Nonresidents in that same time period composed 51% of sheep hunters with an average of 85 hunters per year. In RY22, the last year open to nonresidents, there were 45 nonresident hunters compared to a high of 107 nonresident hunters in 2018. In RY22 there were 27 resident hunters

compared to a high of 107 resident hunters in 2018. Preliminary data from RY23 suggests there were 31 resident hunters.

Over the same 10-year period (RY13–RY22), an average of 85 sheep were harvested per year with nonresidents accounting for 68% of all sheep harvested compared to 32% for residents. Success rates averaged 33% for residents and 68% for nonresidents with an overall average success rate of 50%. In RY22 nonresidents harvested 26 sheep compared to a high of 79 harvested by nonresidents in 2018. In RY22 there were three sheep harvested by residents compared to a high of 46 harvested by residents in RY17. Preliminary data from RY23 suggests residents harvested five sheep.

Total annual sheep harvest in Unit 19C has varied significantly since the 1980s. Total harvest increased from the 1980s through 1990s and peaked at 127 sheep in 1995. Harvest then decreased during the late 1990s and averaged about 65 sheep annually from 2000–2010. Beginning in 2011 harvest steadily increased until RY18, when 118 sheep were harvested. Since RY18, harvest has subsequently decreased, to a low of 29 sheep in RY22. This represents a 40-year low and a 75% decrease in harvest over a four-year period. Although sheep survey data are not available for much of the above period, the cyclical nature of peaks and valleys observed in the harvest data likely reflects similar trends in sheep abundance.

Since the 1980s, residents accounted for about 33% of annual harvest while nonresidents took 67% of the harvest, similar to the most recent 10-year average. The proportion of sheep harvested by residents and nonresidents has remained relatively similar across years despite the fluctuations in total harvest described above.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as it addresses allocation. If this proposal is adopted, the board may wish to consider if reasonable opportunity to harvest sheep for subsistence is still being provided. The board is currently in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time.

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

PROPOSAL 88 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Change all resident sheep hunts in Unit 19C to archery only, and require any future nonresident hunts to be archery only as well.

PROPOSED BY: Paul Forward

WHAT WOULD THE PROPOSAL DO? This proposal would change resident sheep hunting in Unit 19C to archery only and when the nonresident season reopens it would do so with archery only.

WHAT ARE THE CURRENT REGULATIONS? The current regulations allow residents in Unit 19C to use a rifle or archery equipment. There is currently no nonresident season for sheep in Unit 19C.

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Unit 19(C)		
RESIDENT HUNTERS:		
1 ram with full-curl horn or larger, by youth hunt only; or	No open season	
1 ram with full-curl horn or larger; or	Aug. 10 – Sept. 20	
1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only	Oct. 1 – April 30 (Subsistence hunt only)	

NONRESIDENT HUNTERS:

1 ram with full-curl horn or

larger, every 4 regulatory years, by youth hunt only; or

No open season

1 ram with full-curl horn or larger, every 4 regulatory years

No open season

There is a positive customary and traditional use finding for Dall Sheep in Unit 19 with an Amount Reasonably Necessary for Subsistence of 1-5 sheep.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted all hunters would be limited to archery only. This proposal appears to address the fall season, but it is unclear if it is intended to be a requirement for the winter hunt as well. Additionally, this proposal may make it more difficult for hunters who traditionally use rifles to harvest sheep and who do not have access to instructive archery classes. Expected harvest from archery only hunts is quite low.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a five-year period. The youth hunt and nonresident hunting season will reopen in regulatory year (RY) 28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from August 10–September 20; and a winter registration permit hunt (RS380) for residents only, with a bag limit of one ram with $\frac{3}{4}$ curl horn or smaller, excluding rams with both tips broken, during October 1 – April 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

The first consistent sheep surveys conducted in portions of Unit 19C began in 2010. From 2010 through 2019, sheep abundance has been variable, but relatively stable. During the most recent survey in 2023 the department observed 62% fewer sheep than the average of all surveys from 2010 – 2019. The most significant declines were in the eastern portion of the unit where there were 90% fewer sheep than the average from 2010 – 2019. These declines were most likely the result of difficult winter conditions associated with heavy snow fall, winter rain events creating ice on snow, and late springs.

Most sheep hunting takes place during the fall general season. During RY13–RY22, residents composed 49% of all sheep hunters in Unit 19C with an average of 84 resident hunters per year. Nonresidents in that same time period composed 51% of sheep hunters with an average of 85 hunters per year. In RY22, the last year open to nonresidents, there were 45 nonresident hunters compared to a high of 107 nonresident hunters in 2018. In RY22 there were 27 resident hunters compared to a high of 107 resident hunters in 2018. Preliminary data from RY23 suggests there were 31 resident hunters.

Over the same 10-year period (RY13–RY22), an average of 85 sheep were harvested per year with nonresidents accounting for 68% of all sheep harvested compared to 32% for residents. Success rates averaged 33% for residents and 68% for nonresidents with an overall average success rate of 50%. In RY22 nonresidents harvested 26 sheep compared to a high of 79 harvested by nonresidents in 2018. In RY22 there were three sheep harvested by residents compared to a high of 46 harvested by residents in RY17. Preliminary data from RY23 suggests residents harvested five sheep.

Total annual sheep harvest in Unit 19C has varied significantly since the 1980s. Total harvest increased from the 1980s through 1990s and peaked at 127 sheep in 1995. Harvest then decreased during the late 1990s and averaged about 65 sheep annually from 2000–2010. Beginning in 2011 harvest steadily increased until RY18, when 118 sheep were harvested. Since RY18, harvest has subsequently decreased, to a low of 29 sheep in RY22. This represents a 40-year low and a 75% decrease in harvest over a four-year period. Although sheep survey data are not available for much of the above period, the cyclical nature of peaks and valleys observed in the harvest data likely reflects similar trends in sheep abundance.

Since the 1980s, residents accounted for about 33% of annual harvest while nonresidents took 67% of the harvest, similar to the most recent 10-year average. The proportion of sheep harvested by residents and nonresidents has remained relatively similar across years despite the fluctuations in total harvest described above.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as it addresses allocation. The change to methods and means would be a reduction in subsistence opportunity; if the board adopts this proposal, it may wish to determine if a reasonable opportunity for

subsistence is still provided . The board is currently in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time.

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

PROPOSAL 89 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Reopen the resident only winter sheep hunt in Unit 19C.

PROPOSED BY: Jeff Pralle

WHAT WOULD THE PROPOSAL DO? This proposal would reopen the Unit 19C winter sheep hunt for residents (RS380).

WHAT ARE THE CURRENT REGULATIONS? The board did not close the Unit 19C winter sheep hunt for residents, and it is currently open.

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Unit 19(C)		
RESIDENT HUNTERS:		
1 ram with full-curl horn or larger, by youth hunt only; or	No open season	
1 ram with full-curl horn or larger; or	Aug. 10 – Sept. 20	
1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only	Oct. 1 – April 30 (Subsistence hunt only)	
NONRESIDENT HUNTERS:		
1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or		No open season
1 ram with full-curl horn or		

larger, every 4 regulatory years

No open season

There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1–5 sheep (5 AAC 99.025 (10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted there would be no change because the winter hunt RS380 was never closed by the board.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a five-year period. The youth hunt and nonresident hunting will reopen in regulatory year (RY) 28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from Aug 10–Sept 20; and a winter registration permit hunt (RS380) for residents only with a bag limit of one ram with ¾ curl horn or smaller, excluding rams with both tips broken during Oct 1 – Apr 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal, however the board may wish to take no action as the RS380 winter hunt was never closed.

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

PROPOSAL 90 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Reopen the resident only winter sheep hunt in Unit 19C.

PROPOSED BY: Spencer Pape

WHAT WOULD THE PROPOSAL DO? This proposal would reopen the Unit 19C winter sheep hunt for residents (RS380).

WHAT ARE THE CURRENT REGULATIONS? The board did not close the Unit 19C winter sheep hunt for residents, and it is currently open.

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
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Unit 19(C)

RESIDENT HUNTERS:

1 ram with full-curl horn or larger, by youth hunt only; or No open season

1 ram with full-curl horn or larger; or Aug. 10 – Sept. 20

1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only Oct. 1 – April 30 (Subsistence hunt only)

NONRESIDENT HUNTERS:

1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or No open season

1 ram with full-curl horn or larger, every 4 regulatory years No open season

There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1–5 sheep (5 AAC 99.025 (10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted there would be no change because the winter hunt RS380 was never closed by the board.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a five-year period. The youth hunt and nonresident hunting will reopen in regulatory year (RY) 28.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from Aug 10–Sept 20; and a winter registration permit hunt (RS380) for residents only with a bag limit of one ram with ¾ curl horn or smaller, excluding rams with both tips broken during Oct 1 – Apr 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal, however the board may wish to take no action as the RS380 winter hunt was never closed.

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

PROPOSAL 91 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Adopt the management plan recommendations created by the Unit 19C Sheep Working Group.

PROPOSED BY: Alaska Professional Hunters Association

WHAT WOULD THE PROPOSAL DO? This proposal would modify sheep hunting regulations in Unit 19C for all user groups according to the recommendations from the Unit 19C sheep working group, which have not yet been formulated.

WHAT ARE THE CURRENT REGULATIONS?

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
Unit 19(C)		
RESIDENT HUNTERS:		
1 ram with full-curl horn or larger, by youth hunt only; or	No open season	
1 ram with full-curl horn or larger; or	Aug. 10 – Sept. 20	
1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only	Oct. 1 – April 30 (Subsistence hunt only)	
NONRESIDENT HUNTERS:		
1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or		No open season
1 ram with full-curl horn or larger, every 4 regulatory years		No open season

There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1-5 sheep 5 AAC 99.025 (10).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted the proponent would like to see the recommendations of the Unit 19C sheep working group adopted by the board into regulation. The working group is still in the early stages of development and has not yet created a management plan or any recommendations for the board or the public to consider.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a 5-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a 5-year period. The youth hunt and nonresident hunting will reopen in RY28. At this meeting the board also expressed their desire to establish a working group charged with developing a management plan to address sheep management and allocation in Unit 19C. The working group is in the early stages of organization, and it is unlikely any recommendations will be in place by the meeting in March.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from Aug 10–Sept 20; and a winter registration permit hunt (RS380) for residents only with a bag limit of one ram with ¾ curl horn or smaller, excluding rams with both tips broken during Oct 1 – Apr 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal, and adoption of it as written would result in no changes to regulation so the board may wish to Take No Action on the proposal or delay action until the working group has completed its work.

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

PROPOSAL 92 – 5 AAC 85.055. Hunting seasons and bag limits for Dall sheep. Close all nonresident sheep hunting in Unit 19.

PROPOSED BY: Chris Bouch

WHAT WOULD THE PROPOSAL DO? This proposal would close all nonresident sheep hunting in Unit 19.

WHAT ARE THE CURRENT REGULATIONS?

Units and Bag Limits	Resident Open Season (Subsistence and General Hunts)	Nonresident Open Season
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Unit 19(A), 19(B) and 19(D)

RESIDENT HUNTERS:

1 ram with full-curl horn or larger, by youth hunt only; or Aug 1 – Aug 5

1 ram with full-curl horn or larger; or Aug 10 – Sept 20

NONRESIDENT HUNTERS:

1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or Aug 1 – Aug 5

1 ram with full-curl horn or larger, every 4 regulatory years Aug 10 – Sept 20

Unit 19(C)

RESIDENT HUNTERS:

1 ram with full-curl horn or larger, by youth hunt only; or No open season

1 ram with full-curl horn or larger; or Aug. 10 –Sept. 20

1 sheep with 3/4-curl horn or less; the take of rams with both horns broken, lambs, or ewes with lambs, is prohibited; by registration permit only Oct. 1 – April 30 (Subsistence hunt only)

NONRESIDENT HUNTERS:

1 ram with full-curl horn or larger, every 4 regulatory years, by youth hunt only; or No open season

1 ram with full-curl horn or larger, every 4 regulatory years No open season

There is a positive customary and traditional use finding in Unit 19 with an Amount Reasonably Necessary for Subsistence (ANS) of 1-5 sheep 5 AAC 99.025 (10).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If this proposal were adopted nonresidents would be unable to hunt sheep in any portion of Unit 19.

BACKGROUND: In March 2023 the board deliberated on Proposal 204 to close all sheep hunting in Unit 19C for a five-year period. The proposal was amended to close only the youth hunt and the nonresident hunt for a five-year period. The youth hunt and nonresident hunting will reopen in regulatory year (RY) 28. The only sheep habitat in Unit 19 is found in Unit 19C, though the rest of Unit 19 is currently open to sheep hunting should a legal sheep end up in the area.

Unit 19C currently has two sheep hunts: a general season for residents with full curl horn restrictions from August 10–September 20; and a winter registration permit hunt (RS380) for residents only, with a bag limit of one ram with $\frac{3}{4}$ curl horn or smaller, excluding rams with both tips broken, during October 1 – April 30. While the fall sheep season can provide for subsistence opportunity, the winter registration hunt was structured specifically to provide subsistence opportunity consistent with the pattern of customary and traditional uses.

The first consistent sheep surveys conducted in portions of Unit 19C began in 2010. From 2010 through 2019, sheep abundance has been variable, but relatively stable. During the most recent survey in 2023 we found 62% fewer sheep than the average of all surveys from 2010 – 2019. The most significant declines were in the eastern portion of the unit where there were 90% fewer sheep than the average from 2010 – 2019. These declines were most likely the result of difficult winter conditions associated with heavy snow fall, winter rain events creating ice on snow, and late springs.

Most sheep hunting takes place during the fall general season. During RY13–RY22, residents composed 49% of all sheep hunters in Unit 19C with an average of 84 resident hunters per year. Nonresidents in that same time period composed 51% of sheep hunters with an average of 85 hunters per year. In RY22, the last year open to nonresidents, there were 45 nonresident hunters compared to a high of 107 nonresident hunters in 2018. In RY22 there were 27 resident hunters compared to a high of 107 resident hunters in 2018. Preliminary data from RY23 suggests there were 31 resident hunters.

Over the same 10-year period (RY13–RY22), an average of 85 sheep were harvested per year with nonresidents accounting for 68% of all sheep harvested compared to 32% for residents. Success rates averaged 33% for residents and 68% for nonresidents with an overall average success rate of 50%. In RY22 nonresidents harvested 26 sheep compared to a high of 79 harvested by nonresidents in 2018. In RY22 there were three sheep harvested by residents compared to a high of 46 harvested by residents in RY17. Preliminary data from RY23 suggests residents harvested five sheep.

Total annual sheep harvest in Unit 19C has varied significantly since the 1980s. Total harvest increased from the 1980s through 1990s and peaked at 127 sheep in 1995. Harvest then decreased during the late 1990s and averaged about 65 sheep annually from 2000–2010. Beginning in 2011 harvest steadily increased until RY18, when 118 sheep were harvested. Since

RY18, harvest has subsequently decreased, to a low of 29 sheep in RY22. This represents a 40-year low and a 75% decrease in harvest over a four-year period. Although sheep survey data are not available for much of the above period, the cyclical nature of peaks and valleys observed in the harvest data likely reflects similar trends in sheep abundance.

Since the 1980s, residents accounted for about 33% of annual harvest while nonresidents took 67% of the harvest, similar to the most recent 10-year average. The proportion of sheep harvested by residents and nonresidents has remained relatively similar across years despite the fluctuations in total harvest described above.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal as it addresses allocation. Unit 19C, the only portion of Unit 19 with a sheep population, is currently closed to nonresidents but will reopen in RY28. If adopted this proposal would permanently close all of Unit 19 to nonresident sheep hunters. The board is currently in the process of organizing a working group to address sheep management and allocation in Unit 19C and therefore may wish to delay action on sheep proposals at this time.

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

Proposals 93-107

PROPOSAL 108 – 5AAC 92.113(1). Intensive Management Plans. Reimplement an intensive management (IM) program for wolves to benefit moose in portions of Unit 12, 20D, and 20E.

PROPOSED BY: Upper Tanana–Fortymile Fish and Game Advisory Committee

WHAT WOULD THE PROPOSAL DO? Implement wolf control under an IM program to benefit moose within portions of Units 12, 20D, and 20E.

WHAT ARE THE CURRENT REGULATIONS? The wolf control area under the current Upper Yukon–Tanana Predator Control Program (UYTPCP; 5 AAC 92.113) overlaps the proposed IM area. However, moose were removed from the UYTPCP in 2014; therefore, no wolf control activities specifically to benefit moose have been conducted within the proposed area since 2014. Wolf control to benefit the Fortymile caribou herd (FCH) did occur within the proposed area through spring 2018 as part of the UYTPCP, but is currently suspended for ongoing program evaluation that began in regulatory year (RY) 18.

The Board of Game (board) has identified the moose populations in Units 12, 20D, and 20E as important for providing high levels of harvest for human consumptive use. The board established IM population objectives of 4,000–6,000 moose in Unit 12 and 8,000–10,000 moose in both Units 20D and 20E. The IM harvest objectives are 150–300, 500–700, and 250–500 for Units 12, 20D, and 20E, respectively.

The board made a positive customary and traditional use finding for moose in Unit 12, Unit 20E, and a portion of Unit 20D. The amount reasonably necessary for subsistence uses (ANS) is 60–70 moose in Unit 12 and 50–75 moose in Unit 20E (5 AAC 99.025(8)). The ANS for the portion of Unit 20D north of the Tanana River and outside of the Fairbanks Nonsubsistence Area is 5–15 moose, while the ANS for the portion of 20D south of the Tanana River and outside of the Fairbanks Nonsubsistence Area is 5 moose.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Along with information in this analysis, the department has prepared a feasibility assessment for this proposed IM plan to present to the board at the Interior and Eastern Arctic board meeting, in March 2024.

The assessment will provide additional information to help the board determine the feasibility of this proposed IM program with wolf control as the primary mechanism to benefit moose within a 4,757 mi² portion of Units 12 (192 mi²; 2% of Unit 12), 20D (543 mi²; 10% of Unit 20D), and 20E (4,022 mi²; 38% of Unit 20E). The assessment will include information about the biology and harvest of moose, wolves and other predator and ungulate species that may be affected, information about predator-prey dynamics, fire history, moose habitat, nutrition, disease and parasite prevalence, and details about how treatment response will be monitored. In addition, the assessment will provide information about non-biological factors that could impact the potential effectiveness of the program, including numbers of potential predator control (under permit) and predator hunting and trapping participants, landownership patterns, topography and vegetative cover in the area, access for permitted control participants, hunters and trappers to take predators and harvest moose, social factors (i.e. public expectations and acceptance of predator control and

increased ungulate harvest), economic factors for participants (e.g., fuel and equipment prices), and program administration and implementation e.g., department helicopter control).

If the board wants to pursue this, the department will provide the board with draft regulations that will need to be considered and adopted by the board in 5AAC 92.113 to implement the program. The proposal includes options for aerial wolf control conducted by public permittees (with a control permit) and the department, and the option for the public retrieval of wolves using private rotorcraft with a control permit.

BACKGROUND: The board adopted an IM program to benefit moose using wolf (6,600 mi²) and brown bear (2,700 mi²) control in a portion of southern Unit 20E in spring 2004, and control permits were issued beginning in regulatory year 2004 (RY04; i.e. RY04 is 1 July 2004 through 30 June 2005.) In RY06, the wolf control portion of the program was expanded to 18,750 mi² to benefit the FCH, while the brown bear control portion was expanded to 4,050 mi². The bear control portion of the program was removed in RY09 because the bear removal objectives were not being met. Moose were removed from the program in RY14 because no focused wolf control specifically intended to benefit moose had been conducted nor was any planned at that time. However, wolf control to benefit the FCH continued through RY17, and it was assumed that moose within the active wolf control portions of the UYTPCP would continue to benefit to some degree from wolf control. Public aerial wolf control permits were issued annually during RY04–RY17, and department wolf control using helicopters was conducted during RY08, RY09, and RY11–RY17. The department wolf control was concentrated within the FCH calving and post-calving range during RY11–RY17, only a small portion of which overlaps the proposed area. With most of the proposed wolf control area outside the focused efforts in the core calving area for caribou, the degree of wolf reduction (Boertje et al. 2017) was likely too low by itself to increase moose survival. Because only 15% of the proposed area is within northwestern Units 12 and eastern 20D, the remainder of this analysis will focus on Unit 20E.

The most recent unit-wide moose population estimate in Unit 20E was at or near the lower end of the IM objective, but reported harvest is below the IM harvest objective. The current Unit 20E observable moose population estimate, which incorporated post-harvest survey data from 2013–2019, was 6,741 moose (likely range 5,747–7,735). This estimate increases to 7,281 moose (likely range 6,206–8,354) when a sightability correction factor (SCF) of 1.08 is applied. The SCF of 1.08 was the average SCF measured during sightability trials in southern Unit 20E moose surveys during 2017–2019. The Unit 20E estimate includes an extrapolation to 36% of the unit that has not been surveyed.

Total reported moose harvest during RY18–RY22 averaged 199 (range 155–245) in Unit 20E, which is below the IM harvest objective for the unit. Achieving the IM harvest objectives is limited to some degree by factors including land ownership (e.g. federal and private lands) and associated access restrictions, limited motorized access within the Ladue and Glacier Mountain Controlled Use Areas, and difficult access to the remote portions of the unit. All areas included within the proposed wolf control area currently have an Alaska resident any-bull bag limit for moose.

Observable moose densities within a 1,821 mi² area along the Taylor Highway in southern Unit 20E, with 1,660 mi² (91%) within the proposed predator control area, increased from 0.68 moose/mi² (90% confidence interval [CI] \pm 0.10 moose/mi²) in 2005 to 1.41 moose/mi² (90% CI

± 0.27 moose/mi²) in 2018, with an estimated annual growth rate of 5% (95% CI $\pm 1.6\%$). This increase was likely due to a combination of large wildfires during 2004 and 2005 and wolf control during 2005–2018. Since 2018, the moose density has stabilized or possibly experienced a slight decline, with density estimates of 1.11 moose/mi² (90% confidence interval [CI] ± 0.16 moose/mi²) in 2021 and 1.19 moose/mi² (90% CI ± 0.19 moose/mi²) in 2022. This stabilization occurred during a period with 2 consecutive severe winters (2021–2022 and 2022–2023) and increased wolf numbers following suspension of wolf control under the UYTPCP in RY18.

During this period, Unit 20E moose harvest increased from an average of 160 (range 130–187) annually during 2005–2013, to 224 annually (range 195–245) during 2014–2021, but has decrease since, with 155 harvested in 2022 and preliminary 2023 reported harvest similar to 2022 levels. Similarly, Unit 20E moose hunter success rate increased from an average of 22% (range 16%–26%) annually during 2005–2013, to 26% annually (range 22%–29%) during 2014–2019, but decreased to an average of 19% (17%–22%) during 2020–2022, with preliminary 2023 harvest reporting indicating 2023 success rate will be close to success rates during the last 3 years.

Estimated bull-to-cow and calf-to-cow ratios have decreased in recent years. Early winter bull-to-cow ratio estimates decreased from an average of 46 bulls per 100 cows (range 38–67) during 2005–2015 to an average of 31 bulls per 100 cows (range 26–38) during 2017–2022. No moose surveys were conducted in 2013 and 2016. The midpoint bull-to-cow ratio estimate was below the minimum bull-to-cow ratio management objective of 30 bulls per 100 cows during 2018 (26 bulls per 100 cows). The bull-to-cow management objective was reduced to 25 in 2020 to allow for the increased rate of harvest in recent years and the bull-to-cow ratio has remained above the new management objective since 2020. Early winter calf-to-cow ratios averaged 26 calves per 100 cows during 2005–2012, 2014, 2015 and 2017–2019 surveys, but declined to an average of 14 calves per 100 cows during 2020–2022 surveys. The decline may be a combined effect of predation and severe winters.

The lower estimated bull-to-cow ratio during recent surveys appears to be the result of a relatively stable to slowly increasing bull portion of the population concurrent with a period of more rapid increase in the cow portion of the population. During 2005–2018 in southern Unit 20E, the bull numbers grew at an average annual rate of 3% (95% CI $\pm 1.9\%$) while cow numbers grew an estimated 6% (95% CI $\pm 1.9\%$). Since 2019, both bull and cow portions of the population have remained relatively stable, thus a stable bull-to-cow ratio.

Habitat presently does not appear to be a limiting factor for the southern Unit 20E moose population. Twinning rates in southern Unit 20E and northern Unit 12 during 2004–2023 averaged 31%, while the 2021–2023 3-year weighted average twinning rate was 34% (90% CI $\pm 7\%$). Twinning rates greater than 20% generally indicate that the habitat can likely support a larger population. During 1989–2022, fire occurred in 1,865 mi² (39%) of the proposed wolf control area, with most of the area burned during 2004 (1,592 mi²). Burns in these 2 years likely were an important factor, along with wolf reductions, in creating and maintaining a modest increase in moose density that has allowed higher yields during the last 2 decades. The department is currently developing several prescribed fire burn plans for portions of southern Unit 20E with the goal of maintaining early seral stage forests particularly as the large area that burned in 2004 matures. Mechanical crushing of willows and maturing hardwood trees in

portions of these burns near the Taylor Highway and forest roads can also maintain early seral conditions beneficial to moose in areas accessible to hunters.

Past research suggests that grizzly bears and wolves are the primary predators of moose in Unit 20E. Research in Unit 20E in the 1980s estimated that grizzly bears killed 22% and wolves killed 8% of the total post-calving moose population annually (Gasaway et al. 1992). This study also found that grizzly bears were the primary predator of moose calves (killed 52% of radio-collared calves) followed by wolves (12–15%) and black bears (3%). However, this study was conducted when wolf numbers were estimated to be at reduced levels due to 1 year of wolf control. Nevertheless, research conducted in southwestern Yukon Territory during the same period found similar results and concluded that grizzly bears and wolves killed an estimated 26% and 14%, respectively, of the post-calving moose population annually.

To evaluate recovery of the wolf population within the UYTPCP area, following the suspension of the program in the spring of 2018, the department conducted a wolf survey in a ~17,150 mi² portion of the 18,750 mi² Upper Yukon Tanana Predator Control Area (UYTPCA) in spring of 2020. Results indicated the wolf population had recovered to pre-control levels.

In spring of 2023, the department conducted a wolf survey within a 5,125 mi² portion of the UYTPCA surveyed in 2020. The focus was on southern Unit 20E because of concerns raised by the public of the potential negative effects of increased wolf numbers on the moose population. The estimated number of wolves in packs within the 5,125 mi² survey area in southern Unit 20E, with 4,282 mi² (84%) within the proposed predator control area, was 109–110 wolves (excluding singles), which equates to an estimated density of 21.3–21.5 wolves/1,000 mi². The estimated number of wolves from the 2023 survey was similar to the estimate within the same 5,125 mi² area surveyed in 2020, which resulted in an estimate of 99–102 wolves (excluding singles) and a density of 19.3–19.9 wolves/1,000 mi².

Annual wolf removal within the proposed area during years of active wolf control under the UYTPCP (RY04–RY17) averaged 42 (range = 25–84). Hunters/trappers took an average of 19 (range = 8–34) wolves annually, while public aerial wolf control permittees took an average of 15 (range = 5–51). During years of department-conducted wolf control (2008, 2009 and 2011–2017), department staff took an average of 8 wolves (range = 1–35). In the years after wolf control under the UYTPCP was suspended (RY18–RY22), annual wolf harvest within the proposed area by hunters/trappers averaged 23 (range = 14–41).

The proposed area minimizes potential impacts of the proposed wolf control on the ongoing FCH calf mortality and wolf studies. Although the annual range of the FCH overlaps with the proposed area, most of the FCH calving and post-calving range is outside of the proposed area, and wolf control would likely have minimum impacts on the FCH.

DEPARTMENT COMMENTS: The department is **NEUTRAL** regarding this proposal because no conservation concerns were identified. This analysis represents an initial review of the proposal; other issues affecting the potential to achieve IM objectives may be discussed in the feasibility assessment.

The primary goals for the proposed wolf control are to maintain the bull-to-cow ratio at or above the management objective and the population at current levels (1.0–1.4 moose/mi²) near the

lower end of the IM objective. These goals would maintain progress of recent decades and avoid the potential need for more restrictive moose harvest regulations (e.g. antler restrictions or shorter seasons) within portions of the proposed area. The other goals of the proposal are to maintain moose harvest and success rates near current levels. Increasing the harvest would require greater opportunity (e.g. antlerless permits to manage density and bull-to-cow ratio). Antlerless harvest is currently authorized under Unit 20E antlerless moose regulations adopted by the Board of Game in spring of 2022. These regulations include a youth drawing permit hunt during August 5–September 5 and October 15–November 15 and a general drawing permit hunt during October 15–November 30. The bag limit for all hunts is 1 antlerless moose, excluding cows accompanied by a calf.

Focusing public wolf control efforts on the proposed area, compared to when wolf control was spread out over the larger UYTPCA under the Fortymile caribou program, may be sufficiently effective in reducing wolves to improve moose calf, yearling, and adult survival. Thus, department control may not be necessary in the proposed program.

The proposed IM plan incorporates the use of fire and mechanical treatments to maintain moose habitat and antlerless harvest to help maintain the moose density within the desired 1.0–1.4 moose/mi².

COST ANALYSIS: Adoption of this proposal would result in additional costs to the department if department wolf control and habitat improvement projects were conducted.

PROPOSAL 109 – 5 AAC 92.085. Unlawful methods of taking big game; exceptions; 5 AAC 92.095. Unlawful methods of taking furbearers; exceptions; and 5 AAC 92.039. Permit for taking wolves using aircraft. Allow the take of wolves using an aircraft the same day a person has been airborne in Unit 12, provided that person is at least 300 feet from the aircraft.

PROPOSED BY: Jeff Burwell

WHAT WOULD THE PROPOSAL DO? This proposal would allow the use of aircraft to take wolves same day airborne (SDA) in Unit 12 from the aircraft contingent upon the adoption of an Intensive Management (IM) program in a portion of Unit 12. Same day airborne could include airborne and/or land-and-shoot take.

WHAT ARE THE CURRENT REGULATIONS?

Sec. 16.05.783. Same day airborne hunting. (a) a person may not shoot or assist in shooting a free-ranging wolf or wolverine the same day that a person has been airborne. However, the Board of Game may authorize a predator control program that allows airborne or same day airborne shooting...

5 AAC 92.039. Permit for taking wolves using aircraft. (a) a person may not use an aircraft to land and shoot a wolf without first obtaining a permit from the department. (b) a person may not use an aircraft to take a wolf by aerial shooting without first obtaining a permit from the department. (c) a person may not use a helicopter for helicopter trapping of wolves without first obtaining a permit from the department. ...

5 AAC 92.085. Unlawful methods of taking big game. ... (8) a person who has been airborne may not use a firearm to take or assist in taking a big game animal and a person may not be assisted in taking a big game animal by a person who has been airborne until after 3:00 a.m. on the day following the day in which the flying occurred, ...

5 AAC 92.095. Unlawful methods of taking furbearers. ... (8) a person who has been airborne may not use a firearm to take or assist in taking a wolf or wolverine until after 3:00 a.m. on the day following the day in which the flying occurred; ...

5 AAC 92.990. Definitions. ... (9) “big game” means black bear, brown bear, bison, caribou, Sitka black-tailed deer, elk, mountain goat, moose, muskox, Dall sheep, wolf and wolverine; ...

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Adoption of this proposal will allow same day airborne (SDA) take of wolves, which falls under the definition of the use of aircraft for taking wolves (5 AAC 92.039). Taking wolves the same day a person has been airborne is only allowed under the conditions of a permit as part of a control program.

BACKGROUND: By Statute, [AS 16.05.783 (a)] allowing take of wolves using an aircraft SDA, can only be authorized where a predator control program/Intensive Management (IM) is adopted. Therefore, this proposal is contingent upon the adoption of an IM program for Unit 12.

This proposal identifies moose and sheep as the prey species of concern. Sheep are not an IM species (5 AAC 92.106), and the unit-wide moose population in Unit 12 (6,542, range 5,427 – 7,657) is currently above the Unit 12 IM moose population objective (4,000–6,000).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal. The board does not have the authority to allow what the proponent is asking for, because statute prohibits the take of wolves the same day a person has been airborne unless under the conditions of a permit issued as part of an intensive management program. Sheep are not an IM species so the board would need to create a non-intensive management program to benefit sheep, and the department would need to conduct a feasibility assessment to determine if wolf control would result in an increase in sheep abundance.

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

Proposals 110-116

PROPOSAL 117 – 5 AAC 92.057. Special provisions for Dall sheep and mountain goat drawing permit hunts: Allocate Tok Management Area sheep drawing permits.

PROPOSED BY: Dan Montgomery

WHAT WOULD THE PROPOSAL DO? Reduce the proportion of nonresident Tok Management Area (TMA) sheep draw permits awarded to nonresidents hunting with relatives within second-degree of kindred (SDK) from a maximum of 50% to a maximum of 20% of the total permits allocated to nonresidents.

WHAT ARE THE CURRENT REGULATIONS? Of the total TMA draw permits awarded, 10% are allocated to nonresidents. Of the 10% of permits that are allocated to nonresidents, a maximum of 50% per hunt can be issued to nonresidents hunting with relatives within SDK, while the remainder are issued to guided nonresidents. There is a negative customary and traditional use finding for sheep in the TMA.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The number of TMA permits awarded to nonresidents hunting with a guide will increase while the number of TMA permits awarded to nonresidents hunting with SDK family members will decrease. Guided nonresident hunters have higher success rates than nonresidents hunting with SDK, so annual harvest will likely increase slightly.

BACKGROUND: Beginning in 2007, the Board of Game (board) limited nonresidents to a maximum of 10% of the TMA permits. In 2008, the board set the nonresident allocation for those hunting with SDK to a maximum of 50% of the total allocation for nonresident permits. This change was made due to concerns by some members of the guiding industry who felt that too many permits were awarded to nonresidents hunting with SDK. In 2014, the board changed the nonresident allocation to 10% of the total permits. The maximum number that may be issued to nonresidents hunting with SDK is less than or equal to 50% of the total nonresident permits due to allocation guidelines for the two separate TMA draw hunts (DS102, August 10–24; DS103 August 25–September 20). Typically, the number of TMA permits are split equally between the early and late season, and the allocation of permits for nonresidents hunting with SDK is calculated separately for each draw hunt. The maximum number that may be issued to nonresidents hunting with SDK can be lower than 50% of the total nonresident permits depending on how many permits are issued each year. For example, when a total of 80 TMA permits are issued, 40 permits (of which four can be nonresident permits) are issued for both the early and late draw hunts. Of the four nonresident permits for each hunt, a maximum of two can be issued to nonresidents hunting with SDK. Conversely, during years when 100 TMA permits are issued, 50 permits (of which five are nonresident permits) are issued for both the early and

late draw hunts. Of the five nonresident permits for each hunt, a maximum of two can be issued to nonresidents hunting with SDK, or a total of 4 out of the 10 nonresident permits.

Following a ~59% decline in sheep counted during surveys and a corresponding ~71% decline in legal rams from 2019 to 2022 (surveys were not conducted during 2020 or 2021), only 10 permits were issued during RY22 and RY23 and only one hunt period (August 10–September 20) was offered. Given allocation parameters, no SDK permits were made available for RY22 or RY23.

From RY19–RY21, a total of 26 out of 260 permits were awarded to nonresidents (6–10 permits per year), with 24 hunters reporting hunted. Of the 26 permits issued to nonresidents, six were issued to hunters hunting with SDK out of a possible 10 that may have been allocated to hunters with SDK. Nonresident harvest accounted for 17 out of 77 legal rams harvested, or 22% of total harvest. Guided nonresident TMA hunters had higher success rates than nonresidents hunting with SDK. During RY2019–RY2021, guided nonresident TMA hunters had an average success rate of 84% while nonresidents hunting with SDK had an average success rate of ~13%. The average nonresident success rate was ~71%, versus an average resident success rate of ~33%.

DEPARTMENT COMMENTS: The department is **NEUTRAL** regarding this proposal because it seeks to address the allocation of nonresident permits, and the department has no biological concerns. Although harvest might increase slightly if this proposal is adopted because guided nonresidents historically have had higher success rates than nonresidents hunting with SDK, the increase in harvest will be minimal and will not result in any biological concerns, particularly given the full curl harvest strategy. The board may wish to consider the ramifications associated with this proposal during years when low numbers of permits are issued. Since SDK allocation applies to each hunt period independently, it is applied to 50% of the total number of allocated permits when there are two hunts, reducing total SDK allocation to less than or equal to 1% of total permit allocation. During years with a single hunt period, SDK allocation would be less than or equal to 2% of total allocation. During years when less than 100 permits are issued, and the permits are divided into 2 hunt periods, or when fewer than 50 permits are offered during a single hunt period, no permits would be available to nonresidents hunting with SDK. Current allocation of 10 permits and a single hunt period is likely to remain until the population has increased, which would not provide for any SDK allocation if the proposal was adopted.

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

PROPOSAL 118 – 5 AAC 85.055. Tok Management Area Archery Hunt, 5 AAC 92.057. Special Provisions for Dall sheep and mountain goat drawing permit hunts.

Allocate a portion of the Tok Management Area (TMA) sheep drawing permits to archery only, or create a new archery only hunt in the area.

PROPOSED BY: Paul Forward

WHAT WOULD THE PROPOSAL DO? This proposal would allocate 20% of TMA sheep drawing permits to an archery only hunt during the current TMA season dates (August 10 – September 20), or allocate the permits to a new season during August 1–10.

WHAT ARE THE CURRENT REGULATIONS? The board has made a negative customary and traditional use finding for sheep in the TMA (5 AAC 99.025(10)). Within the TMA, sheep hunting is by draw permit only. At present, no methods and means restrictions exist for this hunt. Season dates are August 10 through September 20, generally split into two draw hunts DS102, August 10–24 and DS103, August 25–September 20. Nonresidents are issued 10 percent of available permits, with a maximum of 50% awarded to nonresidents hunting with relatives within second-degree of kindred (SDK).

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

(8) a person who has been airborne may not take or assist in taking a big game animal and a person may not be assisted in taking a big game animal by a person who has been airborne until after 3:00 a.m. following the day in which the flying occurred, and from August 10 through September 20 aircraft may not be used by or for any person to locate Dall sheep for hunting or direct hunters to Dall sheep during the open sheep hunting season, however, aircraft other than helicopters may be used by and for sheep hunters to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep. The Board of Game finding 2016-213-BOG, dated March 17, 2016, is adopted by reference. This prohibition does not prohibit any flight maneuvers that are necessary to make an informed and safe landing in the field.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? Allocating 20% of TMA sheep draw permits to archery hunters would reduce the number of eligible hunters able to apply for TMA sheep draw permits due to archery certification requirements. The probability of being drawn for TMA hunts without methods restrictions would be reduced. The TMA season length may be increased depending on which proposal alternative is adopted. Success rates of archery hunters will likely be lower, which could result in reduced overall harvest if 20% of permits are allocated to archery hunters. This proposal is not expected to affect the sheep population in the TMA, because the number of permits issued would remain the same and the current full-curl bag limits harvest to old age rams. Considering the existing allocation of TMA sheep drawing permits it is possible nonresidents hunting with resident relatives would not receive any archery permits.

BACKGROUND: From RY19–RY21, a total of 260 TMA permits were awarded, with 217 (83%) hunters reported hunting, and 81 rams harvested. No successful harvests with archery equipment were reported. Overall success rate averaged 37%, with an average nonresident success rate of 71%, and an average resident success rate of 33%. The higher success of nonresident (guided) hunters is similar to previous years. Yearly success rates dropped across this period even as permit numbers were reduced, from 53% in 2019, to 31% in 2020, and 18% in 2021. During 2022 surveys, 457 sheep (including 22 legal rams) were observed, down from 1,112 total sheep (including 75 legal rams) in 2019. This 59% population decline resulted in a 71% decline in available legal rams from 2019 to 2022 (surveys were not conducted during 2020 or 2021) and reduced trophy quality. Due to the decline, only 10 permits were issued under a

single permit (DS102) for a single hunt period (August 10 – September 30) during RY23–RY24. The current allocation of 10 permits and a single hunt period is likely to remain until the population increases.

Dall sheep in the TMA are partially managed using the full-curl ram harvest management strategy and through the number of drawing permits issued. The full-curl strategy is a conservative strategy because it delays harvest of rams until they are among the older age classes. Because rams aged 8 years old or older have higher mortality rates than younger rams (Deevey 1947), the full-curl strategy is a mostly compensatory harvest strategy. It is deliberately conservative but simultaneously diminishes the need for annual survey counts and subsequent harvest rate assessments from annual population estimates. This strategy is suited to the practical limitations of obtaining annual aerial survey data consistently. Additionally, harvest demonstrably fluctuates proportional to the number of full curl rams in the population with the full-curl strategy, and harvest of each cohort is proportional to the recruitment of each respective cohort. Harvest is accordingly dependent on cohort abundance.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth. Additionally, permit allocation within the TMA is governed by a trophy quality matrix, which adjusts permit availability based on the previous year's trophy quality. Consequently, permit allocation has little bearing on the availability of legal animals to hunters during the season dates established by 5 AAC 85.055(a)(2), aside from mechanisms of competition.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on the allocation of sheep hunting opportunity between archers and hunters who use other methods of taking sheep. The department has no biological concerns with this proposal because permit numbers will remain the same and the requirement to harvest full-curl rams should prevent overharvest from affecting sustainability of sheep populations. If adopted, it is likely no archery permits will be issued to nonresidents hunting with resident relatives within the second degree of kindred considering the low number of permits available. If the board adopts the earlier season, hunters will be able to

utilize aircraft to locate sheep from the air, and the archery season and the existing drawing hunting season will both overlap on August 10.

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

Proposals 119-126

PROPOSAL 127 – 5 AAC 85.045 Hunting seasons and bag limits for moose. Expand the hunt area and change the bag limit for the Unit 20D youth moose hunt YM792, and eliminate the drawing hunt for DM791.

PROPOSED BY: Delta Junction Fish and Game Advisory Committee

WHAT WOULD THE PROPOSAL DO? This proposal would expand the youth YM792 moose hunt to the entirety of southwestern Unit 20D including the Delta Junction Management Area (DJMA), change the hunt dates, change the bag limit to one moose based on the order drawn, and eliminate DM791 from regulation.

WHAT ARE THE CURRENT REGULATIONS?

Unit 20(D), that portion lying west of the west bank of the Johnson River and south of the north bank of the Tanana River, except the Delta Junction Management Area and the Bison Range Youth Hunt Management Area (General hunt only).

RESIDENT HUNTERS:

1 bull with spike-fork or 50-inch antlers or antlers with 4 or more brow tines on one side; September 1–15, or

1 bull by drawing permit; September 1–15, or

1 antlerless moose by drawing permit only (DM791); up to 1,000 permits may be issued in combination with that portion in the Delta Junction Management Area; a person may not take a calf or a cow accompanied by a calf; October 10–November 25, or

1 antlerless moose by registration permit only; a person may not take a calf or a cow accompanied by a calf; October 10–November 25

NONRESIDENT HUNTERS:

1 bull with 50-inch antlers or antlers with 4 or more brow tines on one side; September 5–15

Unit 20(D), that portion within the Bison Range Controlled Use Area (YM792)

RESIDENT AND NONRESIDENT HUNTERS:

1 bull with spike-fork or 50-inch antlers or antlers with 4 or more brow tines on one side; or 1 antlerless moose, per lifetime of a hunter, by youth hunt drawing permit only; up to 10 permits may be issued; a person may not take a calf or a cow accompanied by a calf; September 1–30;

- Each permittee must be accompanied in the field by a licensed Alaska resident adult at least 21 years old. The nonresident youth's accompanying resident adult must be a parent, stepparent, or legal guardian. Bag limit counts against the bag limit of BOTH

the youth permittee and the accompanying adult.

- The area is open to moose hunting by permit only and is closed to motorized vehicles for hunting July 1–September 30, including the transportation of hunters, their hunting gear, and/or parts of game in the controlled use area.

Unit 20(D), that portion within the Delta Junction Management Area (DM790/795)

RESIDENT HUNTERS:

1 moose every four regulatory years by drawing permit; a person may not take a calf or a cow accompanied by a calf; or

1 bull with spike-fork or 50-inch antlers or antlers with 4 or more brow tines on one side by drawing permit only; up to 30 permits may be issued; September 1–15, or

1 antlerless moose by drawing permit only; up to 1,000 permits may be issued in combination with that portion lying west of the west bank of the Johnson River and south of the north bank of the Tanana River; a person may not take a calf or a cow accompanied by a calf; October 10–November 25, or

1 antlerless moose by registration permit only; a person may not take a calf or a cow accompanied by a calf; October 10–November 25

NONRESIDENT HUNTERS:

1 moose every four regulatory years by drawing permit only, a person may not take a calf or a cow accompanied by a calf; September 1–15, or

1 bull with 50-inch antlers or antlers with 4 or more brow tines on one side by drawing permit only; up to 30 permits may be issued; September 1–15

There is a positive customary and traditional use determination for moose in Unit 20D outside of the Fairbanks Nonsubsistence Area. The Amount Necessary for Subsistence Uses (ANS) is 15 moose for that portion north of the Tanana River and 5 moose for that portion south of the Tanana River. However, the area this proposal would make changes to is all within the Fairbanks Nonsubsistence area (5AAC 99.025 (8)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The youth moose hunt (YM792) would be expanded from the Bison Range Controlled Use Area to the entirety of southwestern Unit 20D including the Delta Junction Management Area (DJMA). The hunt dates would be changed from a 4-day hunt period between September 1–30 based on the order drawn to September 16–25. The bag limit would be changed from 1 bull with spike-fork or 50-inch antlers or antlers with 4 or more brow tines on one side; or 1 antlerless moose per lifetime to 1 moose per lifetime (except calves or cows accompanied by a calf) for a portion of the successful applicants and antlerless for the remaining successful applicants based on the order drawn. The number of permits the department issues under YM792 would be changed from 10 up to 100. DM791 would also be eliminated from regulation.

BACKGROUND: The Delta Junction area (Unit 20D), particularly southwestern Unit 20D is highly accessible and has one of the highest moose densities in the state. It also has some of the highest hunter effort and harvest for its size in the state. Unit 20D is managed under an intensive management (IM) program with a population objective of 8,000–10,000 moose and a harvest objective of 500–700 moose. During 2018–2022 an average of 832 hunters hunted annually and had a cumulative harvest of 984 moose averaging 196 annually in general season hunts within unit 20D. The draw tags that this proposal affects had the following average number of permits issued and harvest from 2018–2022: Youth hunt (YM792) averaged 10 permits annually and an average harvest of 1.2 bulls and 6.5 cows (antlerless moose were not part of the bag limit in RY 2022); antlerless (DM791) averaged 19 permits and 14.5 average harvest (hunt not held in 2022). This proposal could also affect the two hunts that take place in the Delta Junction Management Area (DJMA), DM790 and DM795 (disabled veteran’s hunt). With the exception of the DM795 hunt, the Delta Junction Management Area is managed as a trophy bull hunt in the highly developed and accessible residential areas of Fort Greely/Donnelly Training Area, the Delta Junction Agricultural Project, and the greater Deltana area.

The YM792 hunt and associated motorized restrictions were created in 2002 to keep traffic to a minimum on the Delta Junction Bison Range to reduce the impact of moose hunting on bison management. The bag limit has changed over time from any bull to bull with antler restrictions, and since 2006 has been a bull with spike/fork, or 50-inch antlers, or antlers with at least 4 brow tines on one side or cow (not accompanied by calf). Since 2006 at least 70% of the harvest for this hunt has been antlerless moose. From 2006–2009, the YM792 hunt was only one hunt of

several antlerless hunts that took place to intentionally bring the southwestern Unit 20D moose population down from over 5 moose per square mile to around 3.5 moose per square mile. From 2010 to 2016, the only antlerless harvest in southwestern Unit 20D was from the YM792 hunt (average of 6) and only 1 antlerless moose has been harvested during those years from the DM795 hunt.

The DM791 hunt was created in 2016 to harvest a limited number of antlerless moose if moose began to show signs of nutritional stress. The most antlerless moose harvested since the hunt was established was in 2021, when 28 antlerless moose were taken. No antlerless permits were issued for DM791 in 2022 because of severe weather events in 2021 that resulted in an approximate 40% reduction of the moose population in southwestern Unit 20D, in part due to moose in poor nutritional condition. The department responded by cancelling all planned antlerless hunts and they have remained closed since. However, a very limited number of antlerless permits are planned for 2024. Following cancelation of the antlerless hunts and antlerless components of other hunts such as YM792, the success rate dropped from 83% (RY's 16–21) to just 30% in RY22 for the YM792 hunt, resulting in complaints about the restrictive nature of the YM792 hunt.

DEPARTMENT COMMENTS: The department **SUPPORTS** this proposal with **AMMENDMENTS**. The department supports the antlerless portion of this proposal as antlerless hunts are needed to maintain appropriate moose densities, but limiting the antlerless hunts to just youth hunters is allocative, and the department is **NEUTRAL** on this allocative portion of the proposal. The department also has no biological concern with amending the bag limit, changing the season dates, and changing the hunt boundaries for the various hunts this proposal impacts. This proposal as written is administratively difficult to implement with the existing Alaska drawing hunt permit system, and asks that if the board decides to make changes to these hunts that it be done by creating two separate drawing permits, one for antlerless and one for the bull component. This would alleviate concerns regarding the drastic differences in bag limit which would otherwise be determined by order drawn. The department also seeks clarification from the board on the allocation priority for the various antlerless hunts in regulation for Unit 20D in the event there is not enough harvestable surplus to conduct all 3 hunts in a single year.

The departments requests that with any changes made to the YM792 hunt, that the Bison Range Controlled Use Area remains closed to general season moose hunting and the use of motorized vehicles continues to be prohibited through September 30. This will ensure less competitive walk-in hunting opportunity continues for all species of wildlife in this area and disturbances to the Delta Bison Herd are kept to a minimum, so that the herd isn't prematurely displaced off the range onto the neighboring Delta Agricultural project.

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

Proposals 128-129

PROPOSAL 130 – 5 AAC 92.057. Special provisions for Dall sheep and mountain goat drawing permit hunts.

PROPOSED BY: Delta Junction Fish and Game Advisory Committee

WHAT WOULD THE PROPOSAL DO? This proposal would award up to 10% of permits for DS203 and DS204 to nonresidents, and remove the allocation between guided and nonguided nonresidents.

WHAT ARE THE CURRENT REGULATIONS?

5 AAC 92.057

...

(b) The department shall issue Dall sheep permits as follows:

(5) Units 13(B), 20(A) and 20(D), those portions within the Delta Controlled Use Area: the department shall issue a maximum of 10 percent of the drawing permits to nonresidents and a minimum of 90 percent of the drawing permits to residents; in the Delta Controlled Use Area a nonresident does not have to meet the requirements in (a) of the section.

(6) The department shall issue a maximum of 20 percent of the drawing permits allocated to nonresidents in (2), (3), (4), and (5), of this subsection to nonresidents accompanied by a resident over 19 years of age who is the spouse or other relative of the applicant within the second degree of kindred, as described in AS 16.05.407(a).

There are negative customary and traditional use findings for Dall sheep in 1) the Delta Junction Management Area, and 2) Unit 13B, portions of which are contained within the Delta Controlled Use Area (DCUA; 5 AAC 99.025(10)). Portions of the DCUA in 20(A) and 20(D) are also within the Fairbanks Nonsubsistence Area.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If adopted this proposal would follow section (5) under 92.057 by allowing “up to” 10% of the Delta Controlled Use Area sheep permits to be issued to nonresidents. It would also remove subsection (5) within section 6 of 92.057 by removing the Delta Controlled Use Area from the outcome of proposal 149 at the 2022 statewide meeting which allowed up to 20% of the nonresident permits to be issued to second degree of kindred (2DK) hunters. With adoption, the system used prior to the 2023–2024 drawing would be used where screening is conducted for the winners of the DS203 and DS204 hunts to make sure not more than 10% of the permits awarded went to nonresidents. There would also be no set allocation amongst nonresident winners who are either

2DK or guided hunters. Adoption of this proposal would clarify the discrepancies presented by sections (5) and (6) under 92.057 with the allocation being up to 10% to nonresidents under (5), but exactly 10% must be used under (6) when the draw is conducted.

BACKGROUND: At the Statewide Board of Game meeting in March of 2022 the Board passed Proposal 149, which created a separate drawing for second degree kindred hunters for sheep in instances where there was an allocation for nonresidents. With the adoption of Proposal 149 the department’s current system of including both residents and nonresidents in the same drawing pool and then screening to ensure not more than 10% nonresidents were drawn was not possible to be used because the proposal specifically asked to create a separate draw permit for second degree kindred. After multiple discussions with the Dept. of Law, the department followed both the newest regulation in 5 AAC 92.057(b)(6) and the older one in 5 AAC 92.057(b)(5). For the implementation to comply with the new regulation, the department created two new drawing hunts for regulatory year 2023-2024, one of which was for guided nonresidents, and one that was for second degree of kindred nonresident hunters. 80 permits total were available with 10% awarded to nonresidents (eight permits). Since the department could only issue up to 20% of the awarded nonresident permits for hunting with resident relatives, that meant one permit was available for that hunt.

The 13-year average (2009–2022) number of permits allocated to nonresidents for the DCUA preceding the changes that took place in 2023 with the adoption of Proposal 149 was 5.1%. In 2023 there were 73 applicants for the single 2DK nonresident permit, and only one qualified guided nonresident application for seven available, thus making 98.7% of the nonresident applications awarded to 2DK hunters. The remaining six permits allocated to nonresidents who must hunt with a licensed guide became undersubscribed. From 2009–2022, the percentage of 2DK applicants among all nonresidents applicants ranged from 29.3% to a high of 97.1% and averaged 72.8% annually.

The number of licensed guides also increased in this area after the adoption of Proposal 149 from two (one of which does not offer sheep hunts) to four.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal because it is allocative, however, the department **SUPPORTS** clarifying the discrepancies under 92.057(b) (5) and (6).

COST ANALYSIS: Approval of this proposal is not expected to result in any additional costs for the department.

PROPOSAL 131 – 5 AAC 92.057. Special provisions for Dall sheep and mountain goat drawing permit hunts.

PROPOSED BY: Dan Montgomery

WHAT WOULD THE PROPOSAL DO? This proposal would guarantee nonresidents 10% of all available sheep permits in the Delta Controlled Use Area.

WHAT ARE THE CURRENT REGULATIONS?

5 AAC 92.057

...

(b) The department shall issue Dall sheep permits as follows:

(5) Units 13(B), 20(A) and 20(D), those portions within the Delta Controlled Use Area: the department shall issue a maximum of 10 percent of the drawing permits to nonresidents and a minimum of 90 percent of the drawing permits to residents; in the Delta Controlled Use Area a nonresident does not have to meet the requirements in (a) of the section.

(6) The department shall issue a maximum of 20 percent of the drawing permits allocated to nonresidents in (2), (3), (4), and (5), of this subsection to nonresidents accompanied by a resident over 19 years of age who is the spouse or other relative of the applicant within the second degree of kindred, as described in AS 16.05.407(a).

There is a negative customary and traditional use finding for Dall sheep in the Delta Junction Management Area, a portion of which is contained within the Delta Controlled Use Area (5 AAC 99.025(10)).

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If adopted this proposal would guarantee 10% of the available Delta Controlled Use Area sheep permits to nonresidents, of which 20% of that allocation would be awarded to second degree of kindred applicants second degree of kindred (2DK). Changing the regulation from a maximum of 10% to a guaranteed 10% could re-allocated from resident opportunity in some years as the current format (with the exception of the 2023 draw) is conducted using a random draw process. Therefore, the nonresident allocation could range between 0 and 10% of the available permits. Under this new formula, nonresidents would be guaranteed 10% of the total available permits.

BACKGROUND: At the Statewide Board of Game meeting in March of 2022 the Board passed Proposal 149, which created a separate drawing for second degree kindred hunters for sheep in instances where there was an allocation for nonresidents. With the adoption of Proposal 149 the department's current system of including both residents and nonresidents in the same drawing pool and then screening to ensure not more than 10% nonresidents were drawn was not possible to be used because the proposal specifically asked to create a separate draw permit for second degree kindred. After multiple discussions with the Dept. of Law, the department followed both the newest regulation in 5 AAC 92.057(b)(6) and the older one in 5 AAC 92.057(b)(5). For the implementation to comply with the new regulation, the department created two new drawing hunts for regulatory year 2023-2024, one of which was for guided nonresidents, and one that was for second degree of kindred nonresident hunters. 80 permits total were available, 10% were awarded to nonresidents (8 permits), and because the department could only issue up to 20% of the 10% to nonresidents hunting with resident relatives, that meant one permit was available for that hunt.

The 13-year average (2009–2022) number of permits allocated to nonresidents for the DCUA preceding the changes that took place in 2023 with the adoption of proposal 149 was 5.1%. In 2023 there were 73 applicants for the single 2DK nonresident permit, and only one qualified guided nonresident application for seven available, thus making 98.7% of the nonresident applications from 2DK hunters. The remaining 6 permits allocated nonresidents who must hunt with a licensed guide became undersubscribed permits, which were the first ever undersubscribed sheep permits in Alaska. The 13 years from 2009–2022, the percentage of 2DK applicants from all nonresidents ranged from 29.3% to a high of 97.1% and averaged 72.8% annually.

The number of licensed guides also increased in this area after the adoption of Proposal 149 from two (one of which does not offer sheep hunts) to four.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this because it is allocative, however, the department **SUPPORTS** clarifying the discrepancies under 92.057(b) (5) and (6).

COST ANALYSIS: Approval of this proposal is not expected to result in any additional direct costs for the department.

Proposals 132-157

PROPOSAL 158 – 5 AAC 85.055 Hunting seasons and bag limits for Dall sheep.

Nonresident sheep hunting by drawing permit only in portions of 25A, 26B, and 26C.

PROPOSED BY: Resident Hunters of Alaska

WHAT WOULD THE PROPOSAL DO? This proposal seeks to change nonresident hunting within the portions of Unit 25A, 26B and 26C that fall within the Arctic National Wildlife Refuge (ANWR) from general season harvest ticket to a drawing only hunt.

WHAT ARE THE CURRENT REGULATIONS? The current regulations for nonresident hunters in Units 25A, 26B, and 26C are:

- 5 AAC 85.055
 - One full curl ram every four regulatory years, Youth hunt only, 1–5 August
 - One full curl ram every four regulatory years, Harvest ticket, 10 August – 20 September

- AS 16.05.407

- All nonresident sheep hunters are required to be accompanied in the field by an Alaska-licensed guide or an Alaskan resident relative 19 years or older within second-degree of kindred.
- 5 AAC 92.085. Unlawful methods of taking big game, exceptions.
 - (8) a person who has been airborne may not take or assist in taking a big game animal and a person may not be assisted in taking a big game animal by a person who has been airborne until after 3:00 a.m. following the day in which the flying occurred, and from August 10 through September 20 aircraft may not be used by or for any person to locate Dall sheep for hunting or direct hunters to Dall sheep during the open sheep hunting season, however, aircraft other than helicopters may be used by and for sheep hunters to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep. The Board of Game finding 2016-213-BOG, dated March 17, 2016, is adopted by reference. This prohibition does not prohibit any flight maneuvers that are necessary to make an informed and safe landing in the field.

There is a positive customary and traditional use finding for Dall sheep in Units 23, 24, 25(A) and 26 (5 AAC 99.025(a)(10)). The amount reasonably necessary for subsistence for Dall sheep in these units combined is 75 to 125 sheep.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED?

Nonresidents would be restricted to a drawing permit hunt in the portions of Unit 25A, 26B and 26C that fall within federal Guide Concession areas 1-16 in ANWR. The department will need to create a new drawing hunt for each of the 16 federal guide concession areas, and will be able to issue up to seven permits for each area. If adopted, this proposal will reduce nonresident hunting opportunity.

BACKGROUND: Sheep surveys to estimate abundance or trends for the units comprising ANWR have never been conducted and sheep abundance in the eastern Brooks Range is unknown. A population survey is intended to estimate how many sheep are in a large area while a trend count survey focuses on a smaller area that is surveyed every year to identify trends in abundance. A trend count survey in a portion of eastern Unit 24A and western Unit 25A has been conducted in most years since 2002. Results of those surveys indicate sheep abundance has decreased in recent years but appears otherwise stable the past two years. This trend of decreased sheep abundance is consistent with other areas across interior Alaska including in National Parks where hunting is not allowed.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these

older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

Analyzing harvest data specific to ANWR is somewhat difficult given how harvest data is reported and stored especially when the harvest location given is somewhat ambiguous. However, harvest data from 2013 through 2022 that includes all harvest locations most likely to be within ANWR shows that 898 sheep were harvested during that 10-year period by both resident and nonresident hunters.

- 2013–2022 Average number of hunters
 - 58 nonresidents (53 in 2022)
 - 157 residents (98 in 2022)
- 2013–2022 Average number of sheep harvested
 - 38 by nonresident hunters (36 in 2022)
 - 52 by resident hunters (33 in 2022)

Overall, the number of nonresident hunters and nonresident harvest rates have all remained stable. The number of resident hunters and resident harvest rate has declined over the past 10 years.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal because of the allocative nature of requiring nonresidents to draw a permit as opposed to hunting sheep with a general season harvest ticket. The full curl strategy is deliberately conservative and there is no biological concern with hunting sheep in the eastern Brooks Range even given the recent declines in the population. The full-curl strategy allows for maximum opportunity that may result in user conflicts of an allocative nature which this proposal addresses. In addition, this proposal seeks to modify regulations by using federal guide concession areas which do not align with existing state boundaries. If adopted, the department will need to create a new drawing hunt area for each of the 16 federal guide concession areas within ANWR.

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

PROPOSAL 159 – 5 AAC 92.530 (31) Management areas. Modify the Eastern Brooks Range Management Area to allow Dall sheep hunting by bow and arrow only and to prohibit access to the area via airplane except for the Arctic Village airstrip.

PROPOSED BY: Paul Forward

WHAT WOULD THE PROPOSAL DO? This proposal would modify the Eastern Brooks Range Management Area (EBRMA) to allow sheep hunting by bow and arrow only for a portion of the year and to prohibit accessing the hunt by airplane except for the Arctic Village runway.

WHAT ARE THE CURRENT REGULATIONS? The current state regulations for the EBRMA are:

- August 1–5
 - Youth Only hunt
 - One ram with full-curl horn or larger
 - Harvest ticket
- August 10–September 20
 - One ram with full-curl horn or larger every 4 regulatory years
 - Drawing permit only
- October 1–April 30
 - One ram with $\frac{3}{4}$ curl horn or less every 4 regulatory years
 - Registration permit only (RS595)
 - Hunt area includes all of Unit 26C and that portion of Unit 25A east of the Middle Fork Chandalar River
 - The use of aircraft for access to hunt sheep and to transport harvested sheep is prohibited in this hunt except into and out of the Arctic Village and Kaktovik airports.

State regulation 5AAC 92.003(i) states that before a person hunts sheep within the Red Sheep and Cane Creek drainages within the AVSMA of Unit 25A, that person must possess proof of completion of a department approved hunter ethics course, including land status and trespass information.

The current federal regulations define this area as the Arctic Village Sheep Management Area (AVSMA) which is the same geographic area that the state defines as the EBRMA. The federal regulations that are currently in place include a year-around closure to all sheep hunters unless they are federally qualified and reside in Arctic Village, Chalkytsik, Fort Yukon, Kaktovik, or Venetie. The current federal sheep regulations are:

- August 10–April 30
 - Two rams
 - Federal permit only (FS2502)

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

(8) a person who has been airborne may not take or assist in taking a big game animal and a person may not be assisted in taking a big game animal by a person who has been airborne until after 3:00 a.m. following the day in which the flying occurred, and from August 10 through September 20 aircraft may not be used by or for any person to locate Dall sheep for hunting or direct hunters to Dall sheep during the open sheep hunting season, however, aircraft other than helicopters may be used by and for sheep hunters to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep. The Board of Game finding 2016-213-BOG, dated March 17, 2016, is adopted by reference. This prohibition does not prohibit any flight maneuvers that are necessary to make an informed and safe landing in the field.

There is a positive customary and traditional use finding for Dall sheep in Units 23, 24, 25(A) and 26 (5 AAC 99.025(a)(10)). The amount reasonably necessary for subsistence for Dall sheep in these units combined is 75 to 125 sheep.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? The state regulations for the EBRMA would change to (changes added are in bold and underlined, deletions are in strike-through):

- August 1–5
 - Youth Only hunt
 - One ram with full-curl horn or larger
 - Harvest ticket
 - **No hunter may access or exit the hunt by landing aircraft inside the Eastern Brooks Range Management Area except for the Arctic Village airstrip itself**
- August 10–September 20
 - One ram with full-curl horn or larger every 4 regulatory years
 - Drawing permit only
- August 10–September 20
 - **One ram with full-curl horn or larger every 4 regulatory years by bow and arrow only**
 - **Harvest ticket or registration hunt**
 - **No hunter may access or exit the hunt by landing aircraft inside the Eastern Brooks Range Management Area except for the Arctic Village airstrip itself**
- October 1–April 30

- One ram with $\frac{3}{4}$ curl horn or less every 4 regulatory years
- Registration permit only (RS595)
- Hunt area includes all of Unit 26C and that portion of Unit 25A east of the Middle Fork Chandalar River
- The use of aircraft for access to hunt sheep and to transport harvested sheep is prohibited in this hunt except into and out of the Arctic Village and Kaktovik airports.

State regulation 5AAC 92.003(i) would remain unchanged.

Currently, under federal regulations, the EBRMA is closed to all users except those federally qualified subsistence users who reside in Arctic Village, Chalkyitsik, Fort Yukon, Kaktovik, or Venetie and unless this federal regulation changed then this proposal will have no practical effect.

BACKGROUND: The AVSMA was first created in 1991 by the Federal Subsistence Board (FSB) which closed the area to sheep hunting except by federally qualified subsistence hunters. The FSB expanded the AVSMA to include the drainages of Cane Creek and Red Sheep Creek in 1995. The Federal closure was rescinded for Cane Creek and Red Sheep Creek during 2006–2011 and then reenacted in 2012 and has remained that way since.

The USFWS Office of Subsistence Management reports that a total of 33 federal permits were issued to local subsistence hunters for the AVSMA during 1995–2017 (average = 1.4 per year). A total of 8 sheep were harvested (< 1 per year) by 14 hunters (< 1 per year) during this period.

During 2006–2011, the Cane Creek and Red Sheep Creek portion of the AVSMA was open to a state managed full-curl general season. During that period, a total of 40 hunters (average = 7 per year) harvested 27 sheep (average = 5 per year) from the harvest reporting area that includes Cane Creek and Red Sheep Creek. Some of this harvest likely occurred outside Cane Creek and Red Sheep Creek as this area also includes an area northeast of those drainages. None of the 27 harvested sheep were taken with archery equipment, they were all taken with rifles.

The last surveys of the EBRMA/AVSMA were conducted by the USFWS in 2012 and 2020. Results of those surveys were a minimum count of sheep of 309 and 279 sheep, respectively. A trend count survey in a portion of eastern Unit 24A and western Unit 25A has been conducted in most years since 2002. Results of those surveys indicate sheep abundance has decreased in recent years. This trend of decreased sheep abundance is consistent with other areas across interior Alaska including in national parks where hunting is not allowed.

Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on

average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth.

In 1992 when the board made a positive customary and traditional (C&T) use finding for sheep, it recognized that sheep are taken in Unit 26 with “small or medium caliber rifle[s].” Archery equipment is only mentioned as a method for taking sheep in the Dalton Highway Corridor Management Area where it is required. Archery is not described as a method or means for taking sheep on the C&T worksheet for sheep in Unit 25A. This regulation would require all sheep hunters to become proficient, and possess archery certification, in using a bow for sheep hunting. In some areas of Alaska, access to appropriate archery certification courses are limited or not offered locally and thus this regulation change could be prohibitive for some hunters. Additionally, hunters who do not already own a bow would have to purchase new equipment which could be cost-prohibitive for some hunters.

DEPARTMENT COMMENTS: The department **SUPPORTS** the intent of the proposal to increase the opportunity to hunt sheep in an area that is currently under federal closure to non-federally qualified users. The department is **NEUTRAL** on the allocative aspects of methods and means. Because federal lands in the EBRMA are closed to non-federally qualified users, this proposal is likely to have little effect on sheep hunting in the area unless the federal closure is lifted.

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

PROPOSAL 160– 5 AAC 85.055 Hunting seasons and bag limits for Dall sheep. Change sheep hunting in a portion Unit 26B and 26C to bow and arrow only.

PROPOSED BY: Paul Forward

WHAT WOULD THE PROPOSAL DO? This proposal would change sheep hunting to archery only within the federally defined guide use area ARC06 which includes the portion of the Canning River drainage that is inside the Arctic National Wildlife Refuge (ANWR) but outside the Wilderness area in a portion of Units 26B and 26C.

WHAT ARE THE CURRENT REGULATIONS? Currently the sheep hunting regulations for Unit 26B remainder and 26C are:

5 AAC 85.055 – Unit 26B remainder

- August 1-5 – Youth hunt only
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- August 10–September 20
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years

5 AAC85.055 – Unit 26C

- August 1-5 – Youth hunt only
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- August 10–September 20
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- October 1–April 30
 - Residents only
 - One ram, $\frac{3}{4}$ curl horn or less by registration permit only

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

(8) a person who has been airborne may not take or assist in taking a big game animal and a person may not be assisted in taking a big game animal by a person who has been airborne until after 3:00 a.m. following the day in which the flying occurred, and from August 10 through September 20 aircraft may not be used by or for any person to locate Dall sheep for hunting or direct hunters to Dall sheep during the open sheep hunting season, however, aircraft other than helicopters may be used by and for sheep hunters to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep. The Board of Game finding 2016-213-BOG, dated March 17, 2016, is adopted by reference. This prohibition does not prohibit any flight maneuvers that are necessary to make an informed and safe landing in the field.

There is a positive customary and traditional use finding for Dall sheep in Units 23, 24, 25(A) and 26 (5 AAC 99.025(a)(10)). The amount reasonably necessary for subsistence for Dall sheep in these units combined is 75 to 125 sheep. These populations occur outside of all nonsubsistence areas.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If the proposal were adopted the Unit 26B remainder would be broken into the two sections defined below:

Unit 26B and 26C, that portion of the Canning River drainage that is inside the Arctic National Wildlife Refuge (ANWR) but outside the Wilderness area.

- August 1-5 – Youth hunt only
 - **Bow and arrow only**
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- August 10–September 20
 - **Bow and arrow only**
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years

Unit 26C, that portion of the Canning River drainage that is inside the Arctic National Wildlife Refuge (ANWR) but outside the Wilderness area.

- August 1-5 – Youth hunt only
 - **Bow and arrow only**
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- August 10–September 20
 - **Bow and arrow only**
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- October 1–April 30
 - Residents only
 - One ram, $\frac{3}{4}$ curl horn or less by registration permit only
 - It is not clear if the proponent intended for this registration hunt to be archery only, and if the proponent intended to change the bag limit as well, but it appears they were only concerned with the general hunt

Unit 26B remainder

- August 1-5 – Youth hunt only
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- August 10–September 20
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years

Unit 26C **remainder**

- August 1-5 – Youth hunt only
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- August 10–September 20
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- October 1–April 30
 - Residents only
 - One ram, $\frac{3}{4}$ curl horn or less by registration permit only

5 AAC 92.003 (k)

- A person born on or after January 1, 1986 that is using a longbow, recurve bow, or compound bow to hunt big game must have successfully completed a department approved bowhunter education course

BACKGROUND: Sheep surveys to estimate abundance or trends for the Units comprising ANWR have never been conducted and sheep abundance in the eastern Brooks Range is unknown. A trend count survey in a portion of eastern Unit 24A and western Unit 25A has been conducted in most years since 2002. Results of those surveys indicate sheep abundance has decreased in recent years but appears otherwise stable. This trend of decreased sheep abundance is consistent with other areas across interior Alaska including in National Parks where hunting is not allowed and is attributed to winter and spring weather conditions.

With the exception of the resident only winter registration hunt, Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth. There is also a winter registration hunt (RS595) with a bag limit of one ram with $\frac{3}{4}$ curl or less in the same area, with season dates of October 1 – April 30, and the

statements regarding full-curl management are not applicable to the winter hunt, and very little harvest occurs during that hunt.

Analyzing harvest data specific to a small portion of ANWR such as Guide Use Area ARC06 is somewhat difficult because of two main reasons. First, reported harvest locations can be difficult to determine exactly when only general location such as a drainage or part of a mountain range is recorded. Second, harvest is recorded as being a part of a specific uniform coding unit (UCU) and these do not directly overlap with other area boundaries such as ARC06. Therefore, we provide harvest data for ANWR as a whole while recognizing that the number of sheep harvested in ARC06 is at a much lower level but should exhibit similar trends in harvest over time.

Dall sheep harvest data from 2013 through 2022 includes all harvest locations most likely to be within ANWR. During this period 898 sheep were reported harvested by both resident and nonresident hunters.

Residents				Nonresidents		
Year	Hunters	# Sheep harvested	Success rate	Hunters	# Sheep harvested	Success rate
2013	308	101	33%	68	45	66%
2014	252	79	31%	76	43	57%
2015	160	49	31%	57	36	63%
2016	155	49	32%	58	36	62%
2017	120	39	33%	45	24	53%
2018	102	43	42%	51	36	71%
2019	114	45	39%	53	38	72%
2020	127	46	36%	56	40	71%
2021	138	37	27%	67	43	64%
2022	98	33	34%	53	36	68%

Overall, resident hunter numbers have declined substantially while the number of nonresident hunters have remained stable.

In 1992 when the board made a positive customary and traditional (C&T) use finding for sheep, it recognized that sheep are taken in Unit 26 with “small or medium caliber rifle[s].” Archery equipment is only mentioned as a method for taking sheep in the Dalton Highway Corridor Management Area where it is required. Archery is not described as a method or means for taking sheep on the C&T worksheet for sheep in Unit 26. This regulation would require all sheep hunters to become proficient in using a bow for sheep hunting. In some areas of Alaska, access to appropriate archery certification courses are limited or not offered locally and thus this regulation change could be prohibitive for some hunters. Additionally, hunters who do not already own a bow would have to purchase new equipment which could be cost-prohibitive for some hunters.

Under the current hunting regulations in Unit 26 archery hunting is a legal method of take during the general season so long as the appropriate certification course has been completed and proof carried in the field. Over the past 10 years, about 1.5% of all sheep harvested in ANWR were taken with archery equipment and the remaining were taken with firearms.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposed change because this is primarily allocative and addresses methods and means for hunting sheep. The full curl strategy is deliberately conservative and there is no biological concern with hunting sheep in the Brooks Range even given the recent declines in the population. The full-curl strategy allows for maximum opportunity that may result in user conflicts. Currently, the department does not manage or monitor sheep populations at the geographic scale of federal guide use areas. Similarly, uniform coding units (UCU’s) do not align with federal guide use areas which would make evaluating the future effects of this proposal on harvest very difficult if adopted.

The proposal appears to address only the general season harvest ticket hunts in the area in question, however there is also a winter registration hunt (RS595) with a bag limit of one ram with ¾ curl or less in the same area, with season dates of October 1 – April 30. Little to no harvest occurs in the winter, however if the board is interested in changing the existing regulations the department requests clarification regarding exactly which hunts will be impacted.

It is important to note that there are also two other proposals that request a similar change in adjacent areas within Units 26B and 26C. If any or all of these proposals were to be adopted, then the board may need to consider if a reasonable opportunity to harvest sheep for subsistence use in Unit 26 will exist.

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

PROPOSAL 161– 5 AAC 85.055 Hunting seasons and bag limits for Dall sheep. Change sheep hunting in a portion Unit 26C to bow and arrow only.

PROPOSED BY: Paul Forward

WHAT WOULD THE PROPOSAL DO? This proposal would change sheep hunting to archery only within the federally defined guide use area ARC04 which includes the portion of the Canning River drainage upstream from but not including Nanook Creek that is within the Wilderness area in a portion of Units 26C. Generally, this is the portion of the Canning River that flows into the mainstem from the East.

WHAT ARE THE CURRENT REGULATIONS? Currently the sheep hunting regulations for Unit 26C are:

5 AAC85.055 – Unit 26C

- August 1-5 – Youth hunt only
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- August 10–September 20
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- October 1–April 30
 - Residents only
 - One ram, $\frac{3}{4}$ curl horn or less by registration permit only

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

(8) a person who has been airborne may not take or assist in taking a big game animal and a person may not be assisted in taking a big game animal by a person who has been airborne until after 3:00 a.m. following the day in which the flying occurred, and from August 10 through September 20 aircraft may not be used by or for any person to locate Dall sheep for hunting or direct hunters to Dall sheep during the open sheep hunting season, however, aircraft other than helicopters may be used by and for sheep hunters to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep. The Board of Game finding 2016-213-BOG, dated March 17, 2016, is adopted by reference. This prohibition does not prohibit any flight maneuvers that are necessary to make an informed and safe landing in the field.

There is a positive customary and traditional use finding for Dall sheep in Units 23, 24, 25(A) and 26 (5 AAC 99.025(a)(10)). The amount reasonably necessary for subsistence for Dall sheep in these units combined is 75 to 125 sheep.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If the proposal were adopted Unit 26C would be broken into the two sections defined below.

Unit 26C, **that portion of the Canning River drainage upstream from but not including Nanook creek that is within the designated Wilderness area**

- August 1-5 – Youth hunt only
 - **Bow and arrow only**
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- August 10–September 20
 - **Bow and arrow only**
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- October 1–April 30
 - Residents only
 - One ram, $\frac{3}{4}$ curl horn or less by registration permit only
 - It is not clear if the proponent intended for this registration hunt to be archery only, but it appears they were only concerned with the general hunt

Unit 26C **remainder**

- August 1-5 – Youth hunt only
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- August 10–September 20
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- October 1–April 30
 - Residents only
 - One ram, $\frac{3}{4}$ curl horn or less by registration permit only

5 AAC 92.003 (k)

- A person born on or after January 1, 1986 that is using a longbow, recurve bow, or compound bow to hunt big game must have successfully completed a department approved bowhunter education course

BACKGROUND: Sheep surveys to estimate abundance or trends for the Units comprising ANWR have never been conducted and sheep abundance in the eastern Brooks Range is unknown. A trend count survey in a portion of eastern Unit 24A and western Unit 25A has been conducted in most years since 2002. Results of those surveys indicate sheep abundance has decreased in recent years but appears otherwise stable. This trend of decreased sheep abundance is consistent with other areas across interior Alaska including in National Parks where hunting is not allowed and is attributed to winter and spring weather conditions.

With the exception of the resident only winter registration hunt, Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes anyways. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a drastically lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth. There is also a winter registration hunt (RS595) with a bag limit of one ram with $\frac{3}{4}$ curl or less in the same area, with season dates of October 1 – April 30, and the statements regarding full-curl management are not applicable to the winter hunt, and very little harvest occurs during that hunt.

Analyzing harvest data specific to a small portion of ANWR such as Guide Use Area ARC04 is difficult because of two main reasons. First, reported harvest locations can be difficult to determine exactly when only general location such as a drainage or part of a mountain range is recorded. Second, harvest is recorded as being a part of a specific uniform coding unit (UCU) and these do not directly overlap with other area boundaries such as ARC04. Therefore, we provide harvest data for ANWR, as a whole, while recognizing that the number of sheep harvested in ARC04 is at a much lower level but should exhibit similar trends in harvest over time.

Dall sheep harvest data from 2013 through 2022 includes all harvest locations most likely to be within ANWR. During this period, 898 sheep were reported harvested by both resident and nonresident hunters.

Residents			
Year	Hunters	# Sheep harvested	Success rate
2013	308	101	33%
2014	252	79	31%

Nonresidents		
Hunters	# Sheep harvested	Success rate
68	45	66%
76	43	57%

2015	160	49	31%	57	36	63%
2016	155	49	32%	58	36	62%
2017	120	39	33%	45	24	53%
2018	102	43	42%	51	36	71%
2019	114	45	39%	53	38	72%
2020	127	46	36%	56	40	71%
2021	138	37	27%	67	43	64%
2022	98	33	34%	53	36	68%

Overall, resident hunter numbers have declined substantially while the number of nonresident hunters has remained stable.

In 1992 when the board made a positive customary and traditional (C&T) use finding for sheep, it recognized that sheep are taken in Unit 26 with “small or medium caliber rifle[s].” Archery equipment is only mentioned as a method for taking sheep in the Dalton Highway Corridor Management Area where it is required. Archery is not described as a method or means for taking sheep on the C&T worksheet for sheep in Unit 26. This regulation would require all sheep hunters to become proficient in using a bow for sheep hunting. In some areas of Alaska access to appropriate archery certification courses are limited or not offered locally and thus this regulation change could be prohibitive for some hunters. Additionally, hunters who do not already own a bow would have to purchase new equipment which could be cost-prohibitive for some hunters.

Under the current hunting regulations in Unit 26 archery hunting is a legal method of take during the general season so long as the appropriate certification course has been completed and proof carried in the field. Over the past 10 years, about 1.5% of all sheep harvested in ANWR were taken with archery equipment and the remaining were taken with firearms.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposed change because this is primarily allocative and addresses methods and means of hunting sheep. The full curl strategy is deliberately conservative and there is no biological concern with hunting sheep in the Brooks Range even given the recent declines in the population. The full-curl strategy allows for maximum opportunity that may result in user conflicts. Currently, the department does not manage or monitor sheep populations at the geographic scale of federal guide use areas. Similarly, uniform coding units (UCU’s) do not align with federal guide use areas which would

make evaluating the future effects of this proposal on harvest very difficult or impossible, if adopted.

The proposal appears to address only the general season harvest ticket hunts in the area in question, however there is also a winter registration hunt (RS595) with a bag limit of one ram with ¾ curl or less in the same area, with season dates of October 1 – April 30. Little to no harvest occurs in the winter, however if the board is interested in changing the existing regulations the department requests clarification regarding exactly which hunts will be impacted.

It is important to note that there are also two other proposals that request a similar change in adjacent areas within Units 26B and 26C. If any or all of these proposals were to be adopted, then the board may need to consider if the department is able to provide reasonable opportunity to harvest sheep for subsistence use in Unit 26.

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

PROPOSAL 162 – 5 AAC 85.055 Hunting seasons and bag limits for Dall sheep. Change sheep hunting in a portion Unit 26C to bow and arrow only.

PROPOSED BY: Paul Forward

WHAT WOULD THE PROPOSAL DO? This proposal would change sheep hunting to archery only within the federally defined guide use area ARC01 which includes the federally designated Wilderness areas of the following drainages; the west bank of the Canning River below and including Nanook Creek, following the west bank of the Canning River to the coast then east along the coast to the east bank of the Hulahula River upstream to Katak Creek then up Katak Creek to the divide with the Sadlerochit River then back along that divide to the Canning River in Unit 26C. Generally, this is the Area between the Canning River and the Hulahula River and includes the Sadlerochit Mountains.

WHAT ARE THE CURRENT REGULATIONS? Currently the sheep hunting regulations for Unit 26C are:

5 AAC85.055 – Unit 26C

- August 1-5 – Youth hunt only
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- August 10–September 20
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- October 1–April 30

- Residents only
- One ram, ¾ curl horn or less by registration permit only

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

(8) a person who has been airborne may not take or assist in taking a big game animal and a person may not be assisted in taking a big game animal by a person who has been airborne until after 3:00 a.m. following the day in which the flying occurred, and from August 10 through September 20 aircraft may not be used by or for any person to locate Dall sheep for hunting or direct hunters to Dall sheep during the open sheep hunting season, however, aircraft other than helicopters may be used by and for sheep hunters to place and remove hunters and camps, maintain existing camps, and salvage harvested sheep. The Board of Game finding 2016-213-BOG, dated March 17, 2016, is adopted by reference. This prohibition does not prohibit any flight maneuvers that are necessary to make an informed and safe landing in the field.

There is a positive customary and traditional use finding for Dall sheep in Units 23, 24, 25(A) and 26 (5 AAC 99.025(a)(10)). The amount reasonably necessary for subsistence for Dall sheep in these units combined is 75 to 125 sheep.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? If the proposal were adopted Unit 26C would be broken into the two sections defined below (new text is bold and underlined).

Unit 26C, **that portion including the federally designated Wilderness areas of the following drainages: the Canning River below and including Nanook Creek, Tamayariak River, Nularvik River, Marsh Creek, Carter Creek, Itkilyarik Creek, Sadlerochit River, and the western drainage of the Hulahula River from the Wilderness area boundary south to Katak Creek then up Katak Creek to the divide with the Sadlerochit River in Unit 26C**

- August 1-5 – Youth hunt only
 - **Bow and arrow only**
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- August 10–September 20
 - **Bow and arrow only**
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- October 1–April 30
 - Residents only
 - One ram, ¾ curl horn or less by registration permit only
 - It is not clear if the proponent intended for this registration hunt to be archery only, but it appears they were only concerned with the general hunt

Unit 26C **remainder**

- August 1-5 – Youth hunt only

- Residents – One ram, full-curl horn or larger
- Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- August 10–September 20
 - Residents – One ram, full-curl horn or larger
 - Nonresidents – One ram, full curl horn or larger every 4 regulatory years
- October 1–April 30
 - Residents only
 - One ram, $\frac{3}{4}$ curl horn or less by registration permit only

5 AAC 92.003 (k)

- A person born on or after January 1, 1986 that is using a longbow, recurve bow, or compound bow to hunt big game must have successfully completed a department approved bowhunter education course

BACKGROUND: Sheep surveys to estimate abundance or trends for the Units comprising ANWR have never been conducted and sheep abundance in the eastern Brooks Range is unknown. A trend count survey in a portion of eastern Unit 24A and western Unit 25A has been conducted in most years since 2002. Results of those surveys indicate sheep abundance has decreased in recent years but appears otherwise stable. This trend of decreased sheep abundance is consistent with other areas across interior Alaska including in National Parks where hunting is not allowed and is attributed to winter and spring weather conditions.

With the exception of the resident only winter registration hunt, Dall sheep in this area are managed using the conservative full-curl ram harvest management strategy. The full-curl strategy is conservative because it focuses harvest pressure on: 1) older-aged animals, 2) males-only, and 3) a small segment of the population. Dall sheep rams on average become full-curl at 8 years of age or older, and previous research has shown that these older rams have naturally higher mortality rates than younger aged rams. Therefore, when hunters harvest a full-curl ram, this has a lower impact on the population compared to harvesting a younger ram because there is a higher likelihood the older ram would have died of natural causes anyways. Additionally, limiting harvest to males-only reduces the impact of harvest on the overall population because male survival rates have a drastically lower impact on population growth compared to female survival rates. Finally, the full-curl strategy is extremely conservative because full-curl animals compose a very small proportion of most sheep populations. As a result, the number of animals that are legally available to hunters is a small proportion of the population and this imposes a self-limit on overharvest of the population. Taken collectively, the full-curl harvest strategy limits harvest to only older-aged rams and is thus a conservative, self-limiting strategy that allows for maximum hunter opportunity while simultaneously preventing overharvest and has minimum impacts on population growth. There is also a winter registration hunt (RS595) with a bag limit of one ram with $\frac{3}{4}$ curl or less in the same area, with season dates of October 1 – April

30, and the statements regarding full-curl management are not applicable to the winter hunt, and very little harvest occurs during that hunt.

Analyzing harvest data specific to a small portion of ANWR such as Guide Use Area ARC01 is somewhat difficult for two main reasons. First, reported harvest locations can be difficult to determine exactly when only general location such as a drainage or part of a mountain range is recorded. Second, harvest is recorded as being a part of a specific uniform coding unit (UCU) and these do not directly overlap with other area boundaries such as ARC01. Therefore, we provide harvest data for ANWR as a whole while recognizing that the number of sheep harvested in ARC01 is at a much lower level but should exhibit similar trends in harvest over time.

Dall sheep harvest data from 2013 through 2022 includes all harvest locations most likely to be within ANWR. During this period, 898 sheep were reported harvested by both resident and nonresident hunters.

Residents				Nonresidents		
Year	Hunters	# Sheep harvested	Success rate	Hunters	# Sheep harvested	Success rate
2013	308	101	33%	68	45	66%
2014	252	79	31%	76	43	57%
2015	160	49	31%	57	36	63%
2016	155	49	32%	58	36	62%
2017	120	39	33%	45	24	53%
2018	102	43	42%	51	36	71%
2019	114	45	39%	53	38	72%
2020	127	46	36%	56	40	71%
2021	138	37	27%	67	43	64%
2022	98	33	34%	53	36	68%

Overall, resident hunter numbers have declined substantially while the number of nonresident hunters has remained stable.

In 1992 when the board made a positive customary and traditional (C&T) use finding for sheep was made, the Board recognized that sheep are taken in Unit 26 with “small or medium caliber rifle[s].” Archery equipment is only mentioned as a method for taking sheep in the Dalton Highway Corridor Management Area where it is required. Archery is not described as a method or means for taking sheep on the C&T worksheet for sheep in Unit 26. This regulation would require all sheep hunters to become proficient in using a bow for sheep hunting. In some areas of Alaska, access to appropriate archery certification courses are limited or not offered locally and thus this regulation change could be prohibitive for some hunters. Additionally, hunters who do not already own a bow would have to purchase new equipment which could be cost-prohibitive for some hunters.

Under the current hunting regulations in Unit 26 archery hunting is a legal method of take during the general season so long as the appropriate certification course has been completed and proof carried in the field. Over the past 10 years, about 1.5% of all sheep harvested in ANWR were taken with archery equipment and the remaining were taken with firearms.

DEPARTMENT COMMENTS: The department is NEUTRAL on this proposed change because this is primarily allocative and addresses methods and means of hunting sheep. The full curl strategy is deliberately conservative and there is no biological concern with hunting sheep in the Brooks Range even given the recent declines in the population. The full-curl strategy allows for maximum opportunity that may result in user conflicts. Currently, the department does not manage or monitor sheep populations at the geographic scale of federal guide use areas. Similarly, uniform coding units (UCU's) do not align with federal guide use areas which would make evaluating the future effects of this proposal on harvest very difficult if adopted.

The proposal appears to address only the general season harvest ticket hunts in the area in question, however there is also a winter registration hunt (RS595) with a bag limit of one ram with $\frac{3}{4}$ curl or less in the same area, with season dates of October 1 – April 30. Little to no harvest occurs in the winter, however if the board is interested in changing the existing regulations the department requests clarification regarding exactly which hunts will be impacted.

It is important to note that there are also two other proposals that request a similar change in adjacent areas within Units 26B and 26C. If any or all of these proposals were to be adopted, then the board may need to consider if a reasonable opportunity to harvest sheep for subsistence use in Unit 26 exists.

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

Proposals 163-165

PROPOSAL 166 – 5 AAC NEW. Create a trapping season for black and brown/grizzly bears and allow black and brown/grizzly bears to be taken by bucket snares in Unit 25D.

PROPOSED BY: Amanda Pope

WHAT WOULD THE PROPOSAL DO? Create a trapping season for black and brown/grizzly bears and allow black and brown/grizzly bears to be taken by bucket snares in Unit 25D.

WHAT ARE THE CURRENT REGULATIONS?

5 AAC 84.270. Furbearer trapping. Trapping season and bag limits for furbearers are as follows: no current trapping season or bag limits for black bears.

5 AAC 92.990 Definitions. (32) "furbearer" means a beaver, black bear, coyote, arctic fox, red fox, lynx, fisher, marten, mink, least weasel, short-tailed weasel, muskrat, land otter, red squirrel, flying squirrel, ground squirrel, Alaskan marmot, hoary marmot, woodchuck, wolf, or wolverine; "furbearer" is a classification of animals subject to taking with a trapping license;

5 AAC 92.080. Unlawful methods of taking game; exceptions. The following methods and means of taking big game are prohibited: (8) with a snare, except for taking an unclassified game animal, a furbearer, grouse, hare, or ptarmigan.

5 AAC 92.085. Unlawful methods of taking big game; exceptions. The following methods and means of taking big game are prohibited in addition to the prohibitions in 5 AAC 92.080: (6) with the use of a trap or snare.

There is a positive customary and traditional (C&T) use finding for both black and brown bears in Unit 25D. The board established an amounts reasonably necessary for subsistence use (ANS) range of 150 – 250 black bears in all of Unit 25 but has not created an ANS range for brown bears in Unit 25D.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal asks that both black bears and brown bears be legally trapped with bucket snares. This would require brown bears to be redefined as “furbearers” under 5 AAC 92.990 (32) and trapping seasons and bag limits be established under 5 AAC 84.270 for both black and brown bears.

BACKGROUND: The black bear density in Unit 25D is high. In 2010, the department conducted a black bear study as part of an intensive management feasibility and found that black bear density was between 350 and 535 (@ 95% CI) per 1,000 mi² in the western portion of 25D. This estimate was the highest known black bear density documented in interior Alaska. Although the survey only included a portion of Unit 25D the density of black bears throughout the unit is likely similar.

The annual harvest of black bears in Unit 25D is unknown because sealing and harvest tickets are not required. However, estimated annual harvest of black bears from subsistence household harvest surveys of Yukon Flats communities was 26 black bears in regulatory year 2008-2009 and 49 black bears in regulatory year 2009-2010. Estimates of harvest from these surveys included bears taken outside of Unit 25D in the southern portion of Unit 25A and the western portion of Unit 25B.

Snares are listed as a traditional and historical method of taking black bears in the C&T worksheet provided to the Board in 2002. Some additional black bear harvests occur by non-local residents, particularly along the Yukon River during the spring black bear baiting season.

No surveys to estimate brown bear abundance have ever been conducted in Unit 25D. Currently, the department considers a density of 2.2 brown bears per 100 mi² in Unit 25D reasonably appropriate based on extrapolation from prior studies in similar habitat. This results in an estimated population size of 385 brown bears in Unit 25D and an annual harvestable surplus of 31 brown bears based on an 8% harvest rate.

Annual brown bear harvest from sealing records in Unit 25D from 2013–2022 average five brown bears per year (two females and three males; range = 1–12).

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal because there is no biological concern with taking more black or brown bears given the high densities of each species. If this proposal were to be adopted, the Board would need to define brown bears as furbearers which can only occur at a statewide regulations meeting, and set trapping seasons and bag limits for black bears and brown bears. It is important to note that 65% of the land in Unit 25D are federal public lands (USFWS) and current federal regulations prohibit the use of snares to take bears.

It is also important to note that snares are nondiscriminatory in that they may catch bears of either species, sex, or of any age. Snaring cubs or sows with cubs would be inevitable.

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

PROPOSAL 181 – 5 AAC85.055 Hunting seasons and bag limits for Dall sheep.

Nonresident sheep hunting by drawing permit only in Unit 20A. Change nonresident sheep hunting opportunity to drawing permit only and limit the number of permits available to 20.

PROPOSED BY: Resident Hunters of Alaska

WHAT WOULD THE PROPOSAL DO? This proposal would require nonresident sheep hunters to draw a permit to hunt sheep in Unit 20A and would allow up to 20 permits to be issued to nonresidents.

WHAT ARE THE CURRENT REGULATIONS? The current regulations for nonresident sheep hunters in Unit 20A outside the Delta Controlled Use Area are:

One ram with full-curl horns or larger every four regulatory years, Youth hunt only, 1–5 August.

One ram with full-curl horns or larger every four regulatory years, Harvest ticket, August 10 – September 25

WHAT WOULD BE THE EFFECT IF THE PROPOSAL WERE ADOPTED? This proposal would reduce nonresident sheep hunting opportunity in Unit 20A by requiring nonresident hunters to draw a permit and limiting the number of permits to up to 20 permits.

BACKGROUND: Although no unit-wide sheep population estimate is available for Unit 20A, annual harvest data and survey data from a trend count area within Unit 20A indicate the population is low. During 2020-2022 hunters harvested an average of 48 rams each year compared to an average of 100 rams per year during 2007-2019. The Unit 20A sheep survey is conducted in a 201 mi² area in central Unit 20A. Survey results show that an average of 342 sheep were counted annually within this area during 2020-2023. This is down from an average of 673 sheep counted annually during 2007-2019. During 2010-2022 nonresidents harvested 53% of the sheep and residents harvested 47%.

Dall sheep in this area are managed using the full-curl ram harvest management strategy. The full-curl strategy is a conservative strategy because it delays harvest of rams until they are among the older age classes. Because rams aged 8 years old or older, have higher mortality rates than younger rams (Deevey 1947), the full-curl strategy is a mostly compensatory harvest strategy. Advantageously, the full-curl strategy is deliberately conservative but simultaneously diminishes the need for annual survey counts and subsequent harvest rate assessments from annual population estimates. This is suited to the practical limitations of obtaining unit wide annual aerial survey data consistently in the central Alaska Range. Additionally, data shows that harvest fluctuates proportional to the number of full curl rams in the population with the full-curl

strategy, and harvest of each cohort is proportional to the recruitment of each respective cohort. Therefore, the department has high confidence that harvest is dependent on cohort abundance.

Fundamental to the full-curl strategy is the concept that the older ram age classes that are targeted are also numerically few. Numerically few legal animals results in minimal harvest. Practically speaking, full curl rams are also identifiable by hunters, therefore it is a useful observable metric for hunters to identify legal animals, which simultaneously coincides with the small demographic of the population. Because they are a numerically small demographic and because that particular age/sex demographic is known to have higher rates of mortality, it results in a mostly compensatory harvest that is numerically small and fluctuates in proportion to availability. Harvest data reinforces the assessment that few rams are harvested from small cohorts, proportionally more rams are harvested from relatively more abundant cohorts, and rams greater than 8 years old are present among both numerically strong and weak cohorts.

DEPARTMENT COMMENTS: The department is **NEUTRAL** on this proposal because of the allocative nature of requiring nonresidents to draw a permit as opposed to hunting sheep with a harvest ticket. The full curl strategy is deliberately conservative and there is no biological concern with the current sheep hunting regulations in the central Alaska Range, even given the recent declines in the population. The proponent also offers an alternative method of allocating opportunity by allocating a percent of the harvestable surplus to nonresidents. The department does not have a mechanism to allocate harvest of sheep in-season.

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