

## WP26–43/44 Executive Summary

<b>General Description</b>	<p>Wildlife Proposal WP26-43 requests establishing a “may be announced” antlerless moose hunt from Sept. 1 – Oct. 15 with a harvest limit of up to one antlerless moose by Federal registration permit in the Kuskokwim Zone 2 moose hunt area in Unit 18, and delegating authority to determine the permit allocation system set season dates and permit conditions to manage the hunt in response to current population metrics. <i>Submitted by: Yukon Delta National Wildlife Refuge.</i></p> <p>Wildlife Proposal WP26-44 requests to extend the closing date of the Kuskokwim Zone 2 winter moose hunt in Unit 18 to March 31<sup>st</sup>. <i>Submitted by: Yukon Delta National Wildlife Refuge</i></p>
<b>Proposed Regulation</b>	Please see the <b>Proposed Regulations</b> section.
<b>OSM Preliminary Conclusion</b>	<b>Support</b> Proposals WP26-43 and WP26-44 <b>with modification</b> to clarify the regulatory language.
<b>Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation</b>	
<b>Western Interior Alaska Subsistence Regional Advisory Council Recommendation</b>	
<b>Interagency Staff Committee Comments</b>	
<b>ADF&amp;G Comments</b>	
<b>Written Public Comments</b>	<b>None</b>

## **Draft Wildlife Analysis WP26-43/44**

### **ISSUE**

Wildlife Proposal WP26-43, submitted by the Yukon Delta National Wildlife Refuge (NWR), requests establishing a “may be announced” antlerless moose hunt from Sept. 1 – Oct. 15 with a harvest limit of up to one antlerless moose by Federal registration permit in the Kuskokwim Zone 2 moose hunt area in Unit 18, and delegating authority to determine the permit allocation system (to limit the number of permits), set season dates and permit conditions to manage the hunt in response to current population metrics (**Figure 1**).

Wildlife Proposal WP26-44, submitted by Yukon Delta NWR, requests to extend the closing date of the Kuskokwim Zone 2 winter moose hunt in Unit 18 to March 31<sup>st</sup>.

### **Proponent Statement**

#### Wildlife Proposal WP26-43

The proponent states that the lower Kuskokwim River moose population within Zone 2 has continued to increase in numbers to a point that a limited cow harvest may be warranted in anticipation of reaching carrying capacity.

#### Wildlife Proposal WP26-44

The proponent states that extending the season will allow hunters the flexibility to adjust for winters that have little to no snow until late winter. For the last three winters, lack of snow prevented many hunters from being able to travel, which resulted in few moose being harvested during the winter hunt. The proponent confirms that the number of permits has been, and likely will continue to be, limited in order to stay within sustainable harvest levels. Therefore, the proponent does not believe an extension of the season will result in overharvest.

### **Current Federal Regulations**

#### **Unit 18 – Moose**

*Unit 18, that portion east of a line running from the mouth of the Ish-kowik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60°59.41' Latitude; W162°22.14" Longitude), continuing upriver along a line 1/2 mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet at Arhymot Lake, then following the south bank east of the Unit 18 border and then north* Sep. 1-Oct. 15.

*of and including the Eek River drainage<sup>1</sup> - 1 antlered bull by State registration permit during the fall season*

*OR*

*Up to 1 moose by Federal registration permit during a may-be-announced winter season*

*May be announced between Dec. 1-Jan. 31.*

*Federal public lands are closed to the taking of moose except by residents of Akiachak, Akiak, Atmautlauk, Bethel, Eek, Kalskag, Kasigluk, Kipnuk, Kongiganak, Kwethluk, Kwigillingok, Lower Kalskag, Napakiak, Napaskiak, Nunapitchuk, Oscarville, Quinhagak, Tuluksak, and Tuntutuliak.*

<sup>1</sup>Referred to as the Kuskokwim hunt area throughout the analysis.

## **Proposed Federal Regulations**

### **Unit 18 – Moose**

*Unit 18, that portion east of a line running from the mouth of the Ishkowiik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60°59.41' Latitude; W162°22.14" Longitude), continuing upriver along a line 1/2 mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet at Arhymot Lake, then following the south bank east of the Unit 18 border and then north of and including the Eek River drainage<sup>1</sup> - 1 antlered bull by State registration permit during the fall season*

*Sep. 1-Oct. 15.*

*OR*

*Up to 1 antlerless moose by Federal registration permit during a may-be-announced fall season.*

*May be announced between Sept. 1 - Oct. 15*

*OR*

*Up to one moose by Federal permit during a may-be-announced winter season*

*May be announced between Dec. 1-~~Jan. 31~~ Mar. 31*

*Federal public lands are closed to the taking of moose except by residents of Akiachak, Akiak, Atmautlauk, Bethel, Eek, Kalskag, Kasigluk,*

## Unit 18 – Moose

*Kipnuk, Kongiganak, Kwethluk, Kwigillingok, Lower Kalskag, Napakiak, Napaskiak, Nunapitchuk, Oscarville, Quinhagak, Tuluksak, and Tuntutuliak.*

***The Yukon Delta NWR manager after coordination with ADF&G, the BLM Anchorage Field Office, OSM, and the Chair of the affected Council(s) is authorized within the regulatory parameters set by the Board, to determine the permit allocation system on an annual basis, including the number of permits issued through a limited registration or random drawing hunt, set season dates and permit conditions for the fall antlerless hunt.***

<sup>1</sup>Referred to as the Kuskokwim hunt area throughout the analysis.

## Current State Regulations

### Unit 18 – Moose

*Residents: Zone 1<sup>1</sup> – One bull excluding male calves, by permit, available in person in Bethel and villages within the hunt area Aug 1-26 and online at [http:// hunt.alaska.gov](http://hunt.alaska.gov) Aug 1-Oct 15* RM615 Sep. 1-Sep. 8<sup>2</sup>

*Residents: Zone 1<sup>1</sup> – One antlerless moose by permit* DM612 Sep. 1-Sep 9

*Non-residents: Zone 1<sup>1</sup>* no open season

*Residents: Zone 2<sup>3</sup>— One bull excluding male calves, by permit, available in person in Bethel and villages within the hunt area Aug 1-26 and online at [http:// hunt.alaska.gov](http://hunt.alaska.gov) Aug 1-Oct 15* RM615 Sep. 1-Oct. 15

*Non-residents: Zone 2<sup>3</sup>* no open season

<sup>1</sup> Zone 1 descriptor: *Unit 18, all Kuskokwim River drainages north and west of a line beginning at the confluence of Whitefish Lake and Ophir Creek at the Unit 18 boundary and continuing southwest to the confluence of Tuluksak and Fog Rivers, then southerly to the lower Kisaralik River-Kasigluk River cutoff of the Kisaralik River, then southwesterly to the lower Kisaralik River-Kasigluk River cutoff of the Kasigluk River, then southwesterly to the Akulikutak River where the snowmachine trail crosses the river from the east side of Three Step Mountain, then westerly to the confluence of Kwethluk River and Magic Creek, then southwesterly to the confluence of Eek River and Middle Fork Eek River, then southwesterly to the Unit 18 boundary at 60° 4.983' N, 161° 37.140' W; and all drainages easterly of a line from the mouth of the Ishkowiik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake at 60° 59.41' N, 162° 22.14' W, continuing upriver along a line ½ mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver*

*along the east bank of Crooked Creek to the outlet at Arhymot Lake, then following the south bank of Arhymot Lake easterly to the Unit 18 boundary (Figure 1).*

<sup>2</sup> full season is Sep. 1-Oct. 15, but ADF&G uses discretionary authority to set dates in Zone 1 each year

<sup>3</sup> Zone 2 descriptor: *Unit 18, all Kuskokwim River drainages south and east of a line beginning at the confluence of Whitefish Lake and Ophir Creek at the Unit 18 boundary and continuing southwest to the confluence of Tuluksak and Fog Rivers, then southerly to the lower Kisaralik River-Kasigluk River cutoff of the Kasigluk River, then southwesterly to the lower Kisaralik River-Kasigluk River cutoff of the Kasigluk River, then southwesterly to the Akulikutak River where the snowmachine trail crosses the river from the east side of Three Step Mountain, then westerly to the confluence of Kwethluk River and Magic Creek, then southwesterly to the confluence of Eek River and Middle Fork Eek River, then southwesterly to the Unit 18 boundary at 60° 4.983' N, 161° 37.140' W (Figure 1).*

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

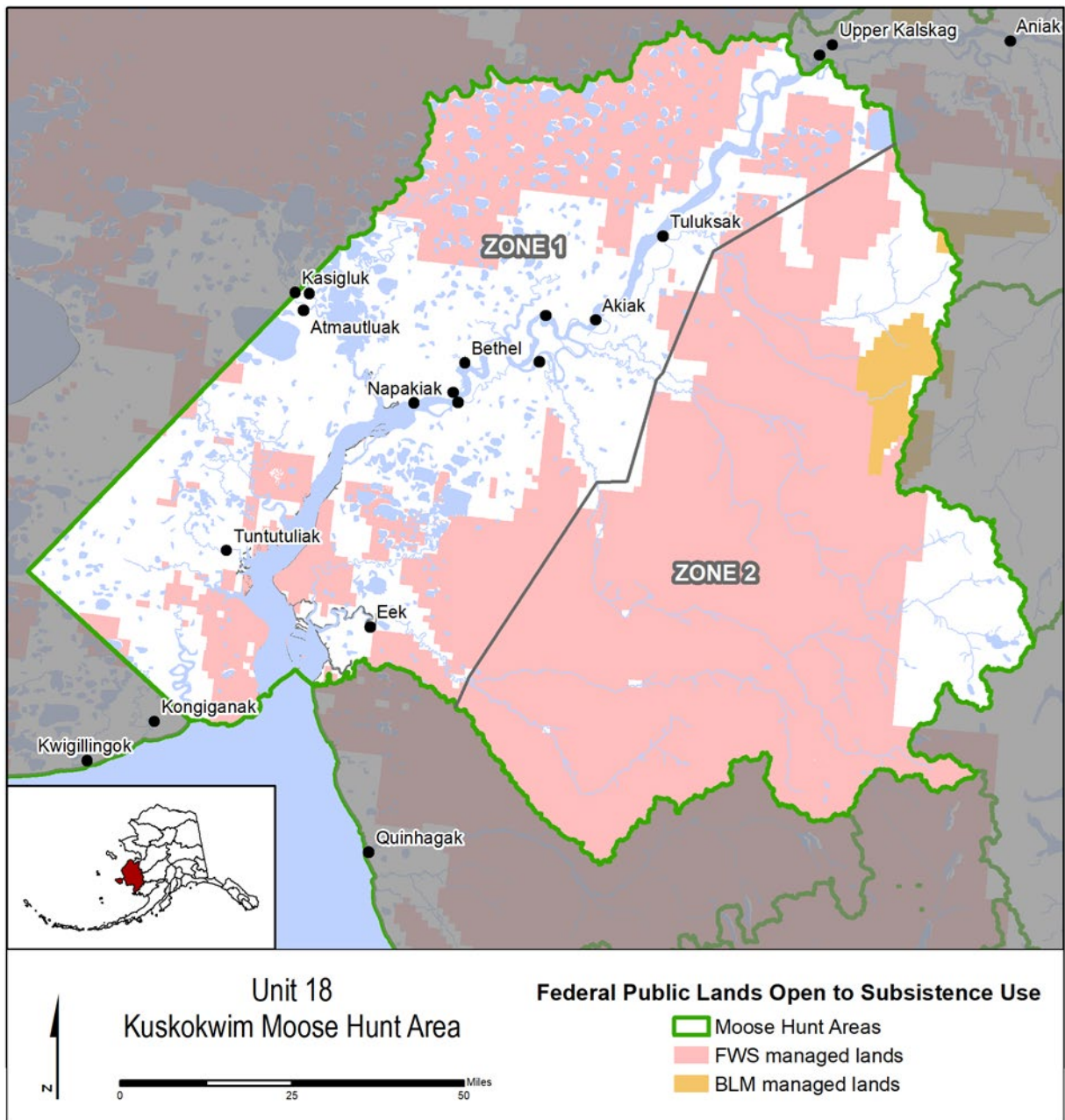
Unit 18 is comprised of 68% Federal public lands and consists of 65% U.S. Fish and Wildlife Service (USFWS) managed lands and 3% Bureau of Land Management (BLM) managed lands.

The Unit 18 Kuskokwim moose hunt area is comprised of 57% Federal public lands and consists of 56% USFWS managed lands and 1% BLM managed lands (**Figure 1**). Zone 2 within the Kuskokwim moose hunt area is comprised of 82% Federal public lands and consists of 79% USFWS managed lands and 3% BLM managed lands (**Figure 1**).

### **Customary and Traditional Use Determination**

Residents of Unit 18, Upper Kalskag (Kalskag), Lower Kalskag, Aniak, and Chuathbaluk have a customary and traditional use determination for moose in Unit 18, that portion of the Yukon River drainage upstream of Russian Mission and that portion of the Kuskokwim River drainage upstream of, but not including, the Tuluksak River drainage.

Residents of Unit 18, Lower Kalskag, and Kalskag have a customary and traditional use determination for moose in Unit 18 remainder.



**Figure 1.** Land status and hunting zones in the Unit 18 Kuskokwim moose hunt area.

### Regulatory History

Federal public lands in the Kuskokwim area have been closed to non-federally qualified users since 1991, when the Federal Subsistence Board (Board) acted on Proposal P91-124. Submitted by the Togiak NWR, P91-124 requested that the moose season in the southern portion of Unit 18, including the Kanektok and Goodnews River drainages, be closed to allow establishment of a harvestable population. The Board adopted this proposal with modification to close Federal public lands

throughout Unit 18 to moose harvest, except by federally qualified subsistence users, given low moose densities throughout Unit 18.

Until 2004, Federal and State moose harvest limits for the lower Kuskokwim River area were one bull or one antlered bull, and the fall seasons were approximately one month. The State winter season varied widely from a continuous fall/winter season (Sep. 1–Dec. 31) to a 10-day December season and a winter “to be announced” season. The Federal winter season has varied from a 10-day season to a “to be announced” season.

Both the Federal and State seasons were closed in the fall of 2004 as part of a coordinated effort to build the Kuskokwim moose population. In 2003, at the request of local residents, the Alaska Board of Game (BOG) established a five-year moratorium on moose hunting under State regulations. The Board adopted Proposal WP04-51 in April 2004 that established a five-year moratorium on Federal public lands. The intent of the moratorium was to promote colonization of underutilized moose habitat. The moratorium was largely instigated by the Lower Kuskokwim Fish and Game Advisory Committee (AC), which worked with the Alaska Department of Fish and Game (ADF&G), USFWS, and area residents to close the moose season for five years or when a population of 1,000 moose was counted in the lower Kuskokwim survey unit. Considerable outreach efforts were made to communicate the impact of the moratorium on the growth potential of the affected moose population to local communities.

In March 2009, the BOG established a registration hunt (RM615), in preparation for ending the moratorium on June 30, 2009. A September 1 – 10 season was established, with a harvest limit of one antlered bull by registration permit. The season was closed when the quota was met. In November 2009, the BOG adopted a proposal that changed the boundary separating the Unit 18 lower Kuskokwim area from the Unit 18 remainder area.

In May 2010, the Board adopted Proposals WP10-58 and WP10-62, with modification to make boundary changes similar to the BOG actions. Adoption of these proposals helped to clarify the boundary for moose hunters and law enforcement. At the same meeting in May 2010, the Board adopted Proposal WP10-54 with modification to reduce the pool of federally qualified subsistence users eligible to hunt moose on Federal public lands within the lower Kuskokwim hunt area. This was necessary because of the small number of moose available to harvest relative to the large number of subsistence users with a customary and traditional use determination for moose (42 communities including Bethel).

Special action requests were approved to establish Federal moose seasons in the lower Kuskokwim hunt area in 2010 and 2012. In 2010, Emergency Wildlife Special Action WSA10-02 was approved to establish a Sep. 1 – 5 moose season. In 2012, Emergency Wildlife Special Action WSA12-06 was approved to establish a Sep. 1 – 30 moose season. The harvest quota was set prior to the start of the season and the harvest limit was one antlered bull by State registration permit.

In April 2014, the Board adopted WP14-27 with modification, establishing a Federal moose season in the lower Kuskokwim hunt area. The Sep. 1 – 30 season had a harvest limit of one antlered bull by

State registration permit. The Yukon Delta NWR manager was delegated the authority to establish an annual quota and close the season once the quota was met.

In August 2018, the Tuluksak Native Community submitted Emergency Special Action Request WSA18-02, requesting that the Board open the moose season early in the Kuskokwim hunt area to accommodate a food shortage emergency. The Board approved this request with modification to open an August 18 – 31 emergency season only to residents of Tuluksak, with a quota of seven antlered bulls by Federal registration permit.

In 2020, the BOG adopted Proposal 7 as amended to change the State season dates for the RM615 moose hunt to Sep. 1-Oct.15 with a harvest limit of one bull, excluding the take of male calves. The first amendment to Proposal 7 was to extend the season from Sep. 1 – Sep. 30 to Sep. 1 – Oct. 15. Consideration was made to accommodate the holiday and teacher in-service days by keeping the season open date the same to allow continued opportunity for youth hunts. The second amendment to Proposal 7 changed the harvest limit from one antlered bull to one bull excluding the take of male calves. This was done to allow for proxy hunting but continue to prohibit the potential harvest of calves or incidental harvest of cows (ADF&G 2020).

In April 2020, the Board considered Wildlife Closure Review WCR20-38 and Wildlife Proposal WP20-35 concerning moose in the Kuskokwim hunt area. The Board voted to maintain status quo on the Federal lands closure reviewed by WCR20-38 because demand for moose by federally qualified subsistence users exceeded sustainable harvest levels. Proposal WP20-35 requested the addition of a may-be-announced season between Dec. 1 – Jan. 31. The Board rejected this proposal as part of the consensus agenda because of conservation concerns. While the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council (Yukon-Kuskokwim Council) had submitted this proposal, they recommended to the Board to oppose it to allow more time for the moose population to fully recover following the harvest moratorium. Additionally, the Council noted that snowmachine access during a winter season could dramatically increase harvest pressure in the area, including accidental harvest of cows, further hampering recovery of the population.

In July 2020, the Board approved Wildlife Special Action WSA20-05, which requested extending the fall moose season in Zone 2 of the Unit 18, Kuskokwim hunt area from Sep. 1 – 30 to Sep. 1 – Oct. 7 for the 2020/21 regulatory year. Yukon Delta NWR submitted, and the Board approved Wildlife Special Action WSA20-05 to provide more subsistence hunting opportunity since moose harvest quotas were not being met in Zone 2.

In August 2020, the Board approved a revised closure policy, which stipulated all closures will be reviewed every four years. The policy also specified that closures, like regulatory proposals, will be presented to the Councils for a recommendation and then to the Board for a final decision. Previously, closure reviews were presented to Councils who then decided whether to maintain the closure or to submit a regulatory proposal to modify or eliminate the closure.

In 2021, the Board adopted the Council's recommendation on Wildlife Special Action WSA21-03, extending the fall moose season in Zone 2 of the Unit 18, Kuskokwim hunt area from Sep. 1–30 to



Sep. 1–Oct. 15 for the 2021/22 regulatory year. The Board adopted this special action to provide additional subsistence opportunity and to reduce regulatory complexity by aligning with State regulations.

In 2022, the Board considered Proposal WP22-43 and Proposal WP22-44 concerning moose in the Kuskokwim hunt area. The Yukon-Kuskokwim Delta and Western Interior Councils opposed Proposal WP22-43 and supported Proposal WP22-44. The Board adopted Proposal WP22-44 as modified by OSM to extend the fall moose season in the Kuskokwim Zone 2 hunt area of Unit 18 from Sep. 1–30 to Sep. 1–Oct. 15, and to establish a may-be-announced winter season from Dec. 1–Jan. 31 with a harvest limit of one antlered bull by Federal registration permit. The modification was to clarify the regulatory language and to delegate authority to the Yukon Delta NWR manager to announce the winter season via delegation of authority letter. This proposal provided additional opportunity for federally qualified subsistence users and mitigated conservation concerns through harvest quotas and in-season management. Proposal WP22-43 requested delegating authority to the Federal in-season manager to increase the moose harvest quota in Zone 1 of the Kuskokwim hunt area of Unit 18 if the water levels are too low to access Zone 2. The Board rejected this proposal as part of the consensus agenda because of conservation concerns.

In November 2022, the Board adopted Wildlife Special Action WSA22-04 as modified by OSM to delegate additional authority to the Yukon Delta NWR to limit the number of permits issued and set permit conditions for the winter moose hunt in Zone 2 for the 2022/23 regulatory year. The OSM modifications were to clarify the effective period of the additional authority and to specify that permit conditions must comply with the Office of Management and Budget (OMB) information collection. The Board stated that limiting permit numbers and setting any needed permit conditions ensures the in-season manager can effectively manage the winter may-be-announced moose hunt in Zone 2 of the Kuskokwim hunt area of Unit 18. The Board also noted that these tools could help provide federally qualified subsistence users with more harvest opportunity while preventing overharvest.

In December 2023, the Board delegated additional authority to the Yukon Delta NWR manager to once again limit the number of registration permits issued for the Zone 2 winter moose hunt. Yukon Delta NWR requested this additional authority to provide subsistence harvest opportunity while safeguarding against overharvest. As delegating authority is administrative and not regulatory in nature, a special action request was not necessary.

In January 2024, the BOG adopted Proposal 10 as amended to liberalize the bag limit for moose in Unit 18 and provide up to 100 drawing permits for antlerless and antlered hunts. Adoption of Proposal 10 opened two additional opportunities for residents in the Kuskokwim hunt area: 1) an antlerless moose by drawing permit hunt with a season of Sept. 1- Oct 15, and 2) a winter antlered bull by drawing permit hunt with a season of Dec.1-Jan.31. The fall antlerless hunt targets Zone 1, which has low bull:cow ratios but may be reaching carrying capacity based on browse removal rates. The winter bull hunt targets Zone 2 and would only be opened if the Zone 2 harvest quota was not met during the fall hunt.

In April 2024, the Board adopted Wildlife Proposal WP24-20 as part of the consensus agenda to change the harvest limit for the winter season to “up to one moose” by Federal permit, and delegating additional authority to the Yukon Delta NWR manager to announce sex and antler restrictions, determine the permit allocation system (i.e. registration or drawing permits), and set any needed permit conditions for the winter season through delegation of authority letter only (**Appendix 1**). Liberalizing the harvest limit during the winter season and delegating additional authority to manage the winter hunt allowed for flexible, adaptable hunt management that optimizes subsistence harvest opportunity and conservation.

Also in 2024, the Board voted to retain status quo on Wildlife Closure Review WCR24-38 and adopted Proposal WP24-21 as modified by OSM and the Yukon-Kuskokwim Council to add the communities of Kipnuk, Kongiganak, Kwigillingok, and Quinhagak to the group of communities who are eligible to harvest moose in the Kuskokwim hunt area in Unit 18.

### **Current Events**

Proposal WP26-01 requests to move authority to manage Federal hunts currently delegated to Federal in-season managers through Delegation of Authority Letters (DALs) into unit-specific regulations for many hunts across Alaska and to rescind the associated DALs. The delegated authority to the Yukon Delta NWR manager for in-season management of Unit 18 moose in the Kuskokwim hunt area is included in this proposal.

### **Biological Background**

Moose are believed to have begun colonization of the Yukon-Kuskokwim Delta in the 1940s (Perry 2014). By the 1990s, when the Federal public lands closure was initiated, moose densities throughout much of Unit 18 were very low. Though established populations existed in the far eastern portions of Unit 18, moose were only sparsely distributed throughout much of the unit. Harvested moose were likely immigrants from other areas, rather than part of a local breeding population (FSB 1991), and hunting pressure was effective in limiting growth of the moose population along the Kuskokwim River corridor (Perry 2014). The 2004 – 2008 hunting moratorium was effective in establishing a harvestable population, and the most recent indicators suggest that the population along the Kuskokwim River main stem and in its tributaries continues to grow.

Quantitative State management objectives for the Unit 18 Kuskokwim River moose population include: 1) Allow the lower Kuskokwim River moose population to increase above its estimated size of 1,378 moose to at least 2,000 moose, and 2) Manage for a post-hunt (fall) sex ratio of 30 bulls:100 cows (Perry 2023).

Prior to 2020, the most recent population survey of the lower Kuskokwim survey area, which includes the main stem riparian corridor between Kalskag and Kwethluk, occurred in 2015. At that time, the population in Zone 1 was estimated to be 1,378 moose, or 1.6 moose/mile<sup>2</sup> (**Figure 2**). This represents an annual growth rate of 20% between 2011 and 2015. The 2015 population estimate for Zone 2 was

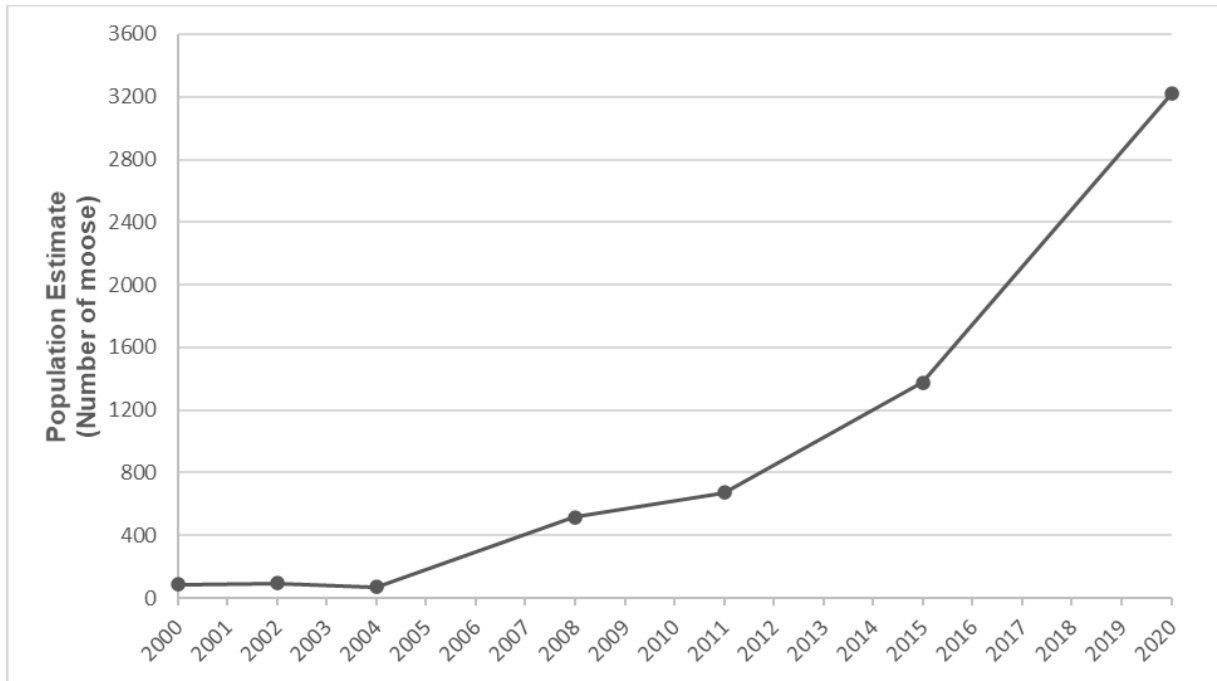
508 moose (YKDRAC 2019a). At that time, the Kuskokwim hunt area moose population remained below the State's population objective of at least 2,000 moose in this area (Perry 2014, 2023).

Lack of snow cover precluded additional population surveys between 2015 and 2020. The survey completed in 2020 shows an increase of the moose populations in both zones. The estimated mid-point population in Zone 1 was 3,220 moose, and the minimum count in Zone 2 was 789 moose, which exceeds State population objectives (**Figure 2**) (Jones 2021, pers. comm., YKDRAC 2019b). Browse surveys indicate that the moose population in Zone 1 is potentially reaching a point that will limit or stop growth, while the Zone 2 population is about one-half of what it could be (Jones 2021, pers. comm.). The winter 2024 moose population within Zone 2 was estimated to be 1,700 moose (YDNWR 2024).

Composition estimates for the main stem (Zone 1) in 2020 and 2022 were 25 bulls and 27 bulls:100 cows, respectively (ADF&G 2020, 2024a). Bull:cow ratios, which were quite high during the harvest moratorium, declined when harvest resumed in 2009, but remained consistently above the minimum State management objective of 30 bulls:100 cows until 2020 (**Table 1**). The recent decline in the bull:cow ratio followed an increase in reported harvest and a liberal hunting season in 2019. Unreported harvest, increased winter mortality, and misclassification of young bulls with small antlers during surveys may also have contributed to the lower ratio in 2020. Bull:cow ratios in the Kuskokwim tributaries (Zone 2) are very high, although surveys have occurred infrequently. In 2015 and 2020, ratios were 83 and 62 bulls:100 cows, respectively (Oster 2020, Jones 2021, pers. comm), but declined somewhat in 2021 to 55 bulls:100 cows (ADF&G 2024).

Fall calf:cow ratios of < 20 calves:100 cows, 20-30 calves:100 cows, and > 30-40 calves:100 cows may indicate declining, stable, and growing moose populations, respectively (Stout 2010). Between 2007 and 2022, calf:cow ratios in the main stem survey area (Zone 1) ranged from 45-73 calves:100 cows (**Table 1**; Jones 2018, pers. comm., ADF&G 2020, Oster 2020, ADF&G 2024). Between 2015 and 2021, calf:cow ratios in the Kuskokwim tributaries (Zone 2) ranged from 33-62 calves:100 cows (**Table 1**; Oster 2020, ADF&G 2024). These high calf:cow ratios indicate a growing moose population.

Twinning rates, which provide an index of nutrition, are also high, averaging 43% between 2015 and 2019 (YKDRAC 2019a, ADF&G 2020). Browse removal rates in Zone 1 increased from 16% in 2016 to 23% in 2019, indicating cow harvest may be important in leveling off the population to avoid overcrowding (ADF&G 2024b).



**Figure 2.** Estimated moose population size along the main stem of the Kuskokwim River, 2000 – 2020 (Perry 2014; Jones 2018, pers. comm.; Jones 2021, pers. comm.).

**Table 1.** Composition estimates for moose along the main stem of the Kuskokwim River (Zone 1) and in the tributaries (Zone 2), 2007 – 2022 (YDNWR 2015; Jones 2018, pers. comm.; ADF&G 2020; Oster 2020).

Year	Zone 1		Zone 2	
	Bulls:100 cows	Calves:100 cows	Bulls:100 cows	Calves:100 cows
2007	98	73		
2009	52	49		
2010	51	49		
2011	50	49		
2013	41	72		
2015	73	53	83	62
2016	70	56		
2019	43	49		
2020	25	45	63	40
2021	29	50	55	33
2022	27	52		

### Cultural Knowledge and Traditional Practices

Forty-two widely dispersed communities, roughly 27,000 people, have a customary and traditional use determination for moose in the Unit 18 Kuskokwim hunt area (ADLWD 1993). However, in 2010 the Board found that 15 communities (roughly 13,000 people) have the highest customary dependence on

moose in the Unit 18 Kuskokwim hunt area, based on the three criteria in ANILCA Section 804: customary and direct dependence upon the populations as the mainstay of livelihood, local residency, and the availability of alternative resources. Only residents of these 15 communities are eligible to harvest moose in the Unit 18 Kuskokwim hunt area, presented from lower to upper river communities: Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk, Atmautluak, Oscarville, Bethel, Kwethluk, Akiachak, Akiak, Tuluksak, Lower Kalskag, and Kalskag.

All but two of the 15 communities are situated within the hunt area; Kalskag and Lower Kalskag are situated along the Kuskokwim River in Unit 19A, upriver from the hunt area.

These communities share some characteristics. Most are small with populations between 70 people in Oscarville to over 800 in Kwethluk. The exception is the community of Bethel, population over 6,000 people, which is the hub community in the area, a center of healthcare, trade, and government, providing services to outlying areas. Most of the communities are not connected by roads and are accessed by boats or planes, snow machines, off-road vehicles, or highway vehicles on trails and the frozen Kuskokwim river during winter. Kalskag and Lower Kalskag are connected by a State-maintained 4.2-mile road.

A primary source of information regarding the harvest and use of moose on the Kuskokwim is focused on Chuathbaluk, a central Kuskokwim Yup'ik village that has much in common with lower Kuskokwim communities in terms of culture, weather, environment, and hunting patterns (Charnley 1983).

Seasonal harvest patterns are influenced by several factors. Moose are hunted year-round; however, the intensity of harvest effort is influenced by weather conditions and regulations. Moose are available to hunters July, August, and September in habitats such as willows bordering rivers, creeks, and lakes. Bulls and cows are especially fat during these times. Bulls enter the rut in late September. In October the better-tasting meat of cows is preferred. In fall, access to moose habitat is possible if and when rivers and creeks are swollen from heavy rain. However, moose are more sedentary in rainy weather and harder to find, and gravel bars, where moose can sometimes be found feeding, become submerged. Freeze-up along the Kuskokwim River usually occurs in November, and it is often unsafe for travel. Warm spells in winter can return rivers and creeks to dangerous conditions for travel by hunters. Deep snow aids hunting by allowing travel by snow machine and by hampering moose mobility (Charnley 1983).

Community involvement in harvesting depends on the season. Moose hunting is almost always engaged in by adult and adolescent men. During September an extended family group that often includes the wife, sisters, mother, and daughters of the hunter camp together for up to a week. At this time, generally, women and children gather berries while men hunt moose and black bear. Sometimes two or three households camp together in one area. The November and February hunts usually involve the male members of a household only, and hunting occurs while checking trap lines and during day or overnight trips from the village. In February, camping is limited by cold weather (Charnley 1983).

Several means are used to access harvest areas. Moose are typically hunted from boats in the fall. Motors are shut off and boats are allowed to drift downstream, guided by oars. Most moose hunting takes place within one mile of either side of the waterway that is being hunted. Snow machines also are used to travel to areas where moose are likely to be found. Fresh tracks are followed on snow machine or foot. Moose are sometimes tracked with snowshoes to beds where they are resting for the day. Aircraft is seldom used in moose hunting (Charnley 1983).

The season of harvest dictates proper processing and preservation methods of the harvest. Generally, moose are butchered at the kill site by members of hunting parties, taken back to the village, and further processed. In the past, meat was dried and smoked at fall hunting camps. When enough animals had been taken, skin boats were constructed using the animal hides, and the hunters drifted back downstream (Charnley 1983).

Dry meat is a staple food eaten throughout the summer when families are at fish camp. Most villagers depend on the weather to prevent their meat from spoiling. For this reason, hunting seasons that occur during months when temperatures have already fallen below freezing are preferred. The hind and front quarters and rump are commonly hung in a salmon smokehouse, or suspended from a rack, wrapped with material such as burlap to protect them from animals (Charnley 1983).

During warm months, meat is placed in garbage bags and submerged in creeks to be kept cool. If meat is hung it is also brushed with a brine solution to discourage flies from laying eggs. The large, butchered parts of the animal such as legs, rump, and ribs are smoked to create a hardened outer layer over the meat. This protective layer keeps flies off the meat (Charnley 1983).

Preparing moose meat for meals commonly means boiling it, and less often frying, roasting, and barbecuing. Marrow from the leg bone is considered a delicacy. Moose head soup is a favorite dish, the nose, tongue, cheek meat, and brains being the most desirable parts. The liver, heart, kidneys, part of the stomach muscle, and one of the four stomachs are all eaten. Moose fat is highly valued and is cooked and eaten or rendered into oil (Charnley 1983).

### Harvest and Use of Moose

Moose harvest and use data are lacking or incomplete for Unit 18 communities. One cause of this data gap is that while moose hunters have been required to obtain harvest tickets to hunt in some areas of Unit 18, returning harvest reports has not always been mandatory. Information concerning the harvest and use of moose in Unit 18 was obtained primarily through household harvest surveys. A registration permit has been required to hunt for moose in the Kuskokwim hunt area since it re-opened in 2009 after a five-year moratorium on hunting moose, and harvest reporting is now mandatory when hunting in this area.

The estimated harvest (from any area) of moose based on periodic household surveys is displayed in **Table 2**. The estimated moose harvest ranged from a low of 2 moose in Oscarville in 2010 and Lower Kalskag in 2005 to a high of 357 moose by Bethel residents in 2012. The difference between these harvest levels is in part because the population in Bethel is so much higher than in other communities.

These harvest estimates track well with the reported harvest to ADF&G (ADF&G 2022a). Some of these harvest surveys were comprehensive surveys that included questions regarding the harvest of all wild resources during the study year. Based on these surveys, moose made up between 2% and 25% of the harvest of all wild resources, in pounds of edible weight (ADF&G 2022b).

**Table 3** demonstrates that while local users hunting for moose are not always successful, the majority of households in every community use moose either by harvesting it themselves or by receiving it from another household. Of the total reported annual harvest of moose in these communities from 2011 to 2021, between 37% and 62% were taken from other areas, outside the Unit 18 Kuskokwim hunt area, based on the ADF&G reporting system and online database (ADF&G 2022a).

**Table 2.** The estimated harvest of moose in communities eligible to harvest moose in the Unit 18 Kuskokwim hunt area, organized by community and based on household surveys (blank=question not asked, ADF&G 2022b).

Community	Study year	Estimated harvest of moose	Lower estimate	Upper estimate	Per person harvest (in pounds of edible weight)
Akiachak	1998	106	93	119	145
Akiak	2010	27	20	33	38
Bethel	2011	279	220	338	25
Bethel	2012	357	294	419	34
Eek	2013	14	14	14	22
Kalskag	2003	21	12	32	46
Kalskag	2004	9	9	10	26
Kalskag	2005	12	6	21	24
Kalskag	2009	15	12	18	40
Kwethluk	1986	33	33	33	45
Kwethluk	2010	33	25	42	25
Lower Kalskag	2003	30	14	52	53
Lower Kalskag	2004	12	10	15	25
Lower Kalskag	2005	2	1	10	5
Lower Kalskag	2009	18	15	21	32
Napakiak	2011	13	13	13	29
Napaskiak	2011	29	29	29	43
Nunapitchuk	1983	12	3	22	19
Oscarville	2010	2	2	4	20
Tuluksak	2010	20	16	24	24
Tuntutuliak	2013	17	17	17	22

**Table 3.** The percentage of households reporting using, attempting to harvest, or harvesting moose in communities eligible to harvest moose in the Unit 18 Kuskokwim hunt area, organized by community and based on household surveys (blank=question not asked; ADF&G 2022b).

Community	Study year	Number of households interviewed	Percentage of households using moose	Percentage of households attempting to harvest moose	Percentage of households harvesting moose
Akiachak	1998	81	95%	84%	68%
Akiak	2010	63	94%	62%	27%
Bethel	2011	473	61%	28%	13%
Bethel	2012	466	75%	34%	19%
Eek	2013	64	77%	59%	16%
Kalskag	2003	34	74%	59%	29%
Kalskag	2004	50	72%	76%	16%
Kalskag	2005	34	59%	50%	18%
Kalskag	2009	48	92%	92%	25%
Kwethluk	1986	36		63%	29%
Kwethluk	2010	93	84%	51%	22%
Lower Kalskag	2003	34	74%	62%	24%
Lower Kalskag	2004	53	36%	41%	17%
Lower Kalskag	2005	30	40%	30%	3%
Lower Kalskag	2009	63	81%	81%	24%
Napakiak	2011	56	71%	46%	14%
Napaskiak	2011	56	89%	64%	29%
Nunapitchuk	1983	17			24%
Oscarville	2010	12	75%	33%	17%
Tuluksak	2010	68	71%	65%	24%
Tuntutuliak	2013	67	87%	64%	15%

## Harvest History

Following the harvest moratorium, moose harvest on non-Federal lands was allowed under State regulations, beginning in 2009. In 2010, harvest on Federal public lands was opened to a subset of federally qualified subsistence users, including residents of Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk, Atmautluak, Oscarville, Bethel, Kwethluk, Akiachak, Akiak, Tuluksak, Lower Kalskag, and Kalskag. In this analysis, this user group will be referred to as local users. In 2024, residents of Kipnuk, Kongiganak, Kwigillingok, and Quinhagak were added to the pool of users eligible to harvest moose under Federal regulations in the Kuskokwim hunt area. These communities are included in the ‘local users’ after 2024.

Since 2011, reported harvest has averaged 183 moose annually (ADF&G 2022a). Notably, reported harvest has increased, doubling between 2014 and 2017 (**Figure 2**). Local users have taken 95% of the reported moose harvest in the Kuskokwim hunt area since 2009, with 30% of the harvest attributable to residents of Bethel. However, non-local use is increasing, from two harvest reports in 2013 to 18 in



2021 (ADF&G 2022a). Non-local users that report harvesting moose are primarily federally qualified subsistence users from coastal communities of Unit 18, but also include a few users from Southcentral Alaska (ADF&G 2019a). About 30 moose, including around 20 cows are harvested each year for funerals and potlatches in Zone 1 (YKDRAC 2019b; Moses 2020, pers. comm.).

Despite increases in quotas and harvest, demand still outweighs moose availability. From 2009 to 2019, an average of approximately 1,450 hunters have obtained permits to harvest moose in the Kuskokwim hunt area each year, but only 10% of permit holders successfully harvested moose (ADF&G 2019a). The disparity between demand and the relatively small quotas has routinely resulted in emergency closure of the State season within days of its opening (**Table 4**). This has resulted in some frustration among locals, who note that short unpredictable seasons make planning difficult. In response to this, ADF&G no longer uses quotas or closes Zone 1 with emergency closures. Fixed dates determined by estimated time needed to reach the set harvest objective are released prior to the start of each season (Jones 2021, pers. comm.). Local residents have also commented on the challenges of hunting in early September in recent years, given warm conditions that make proper meat care difficult (YKDRAC 2017b).

In an effort to better serve users in an area of checkerboard land status, State and Federal managers adjusted the structure of the hunt in 2017, introducing a zone-based hunt (**Figure 1**). An important feature of the zones is that, while they correspond roughly to State and Federal lands, they are delineated by easily identifiable geographical features (e.g. river confluences). Each of the two zones is managed with its own harvest objective. Zone 1, which is comprised primarily of State managed lands, is located along the main stem of the Kuskokwim River. The season and harvest objective for the main stem hunt are managed by ADF&G. Zone 2 is comprised primarily of Federal public lands, including those in the Tuluksak, Kisaralik, Kasigluk, and Eek river drainages (“tributaries”). The season and harvest quota in the tributary hunt are managed by the Yukon Delta NWR (Rearden 2018, pers. comm.; YKDRAC 2017a).

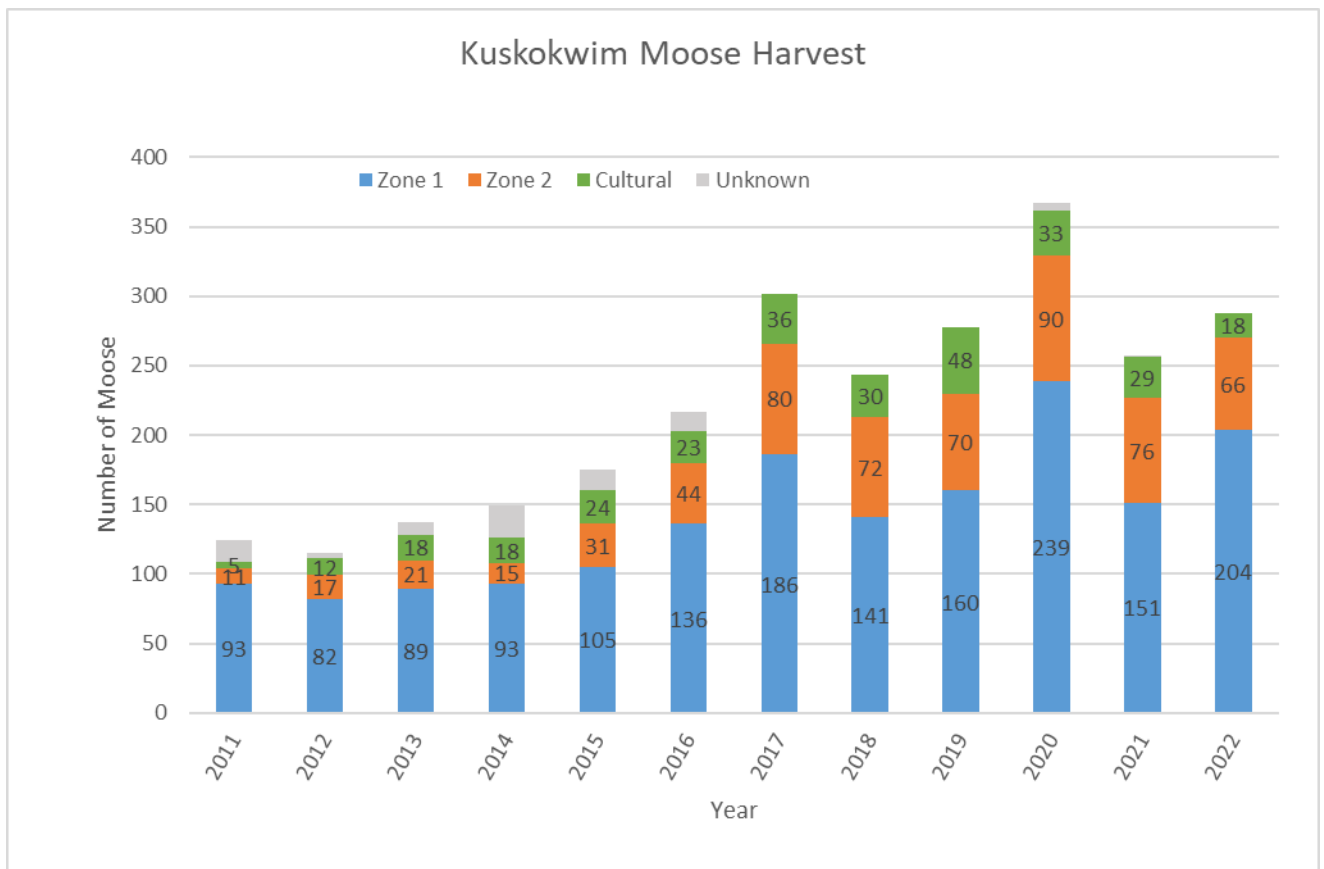
There is more demand for moose in Zone 1, along the main stem, compared to Zone 2, in the tributaries. This is evident by the rate at which the quota is met within each zone, and the corresponding season length. On average, the main stem hunt has been open fewer than six days annually from 2011 through 2018, and the quota has been met or exceeded most years. Since ADF&G has changed to the fixed season using the harvest objective method, Zone 1 hunt has been open for 8-11 days each year from 2020-2024 (Jones 2021, pers. comm.). For the hunt in the tributaries, the quota has only been met once, in 2014, despite increasing season lengths (**Table 4**). Local managers report that hunting in the tributaries is difficult, requiring specialized boats, longer travel times, and more fuel. Heavy vegetation along the banks contributes to the difficulty. The unmet quota is likely a function of these difficulties, rather than lack of need for moose meat (YKDRAC 2017a, 2017b; Rearden 2018, pers. comm.).

In 2022, the Board established a may-be-announced winter moose season under Federal regulations to provide additional opportunity for subsistence users to harvest moose and achieve the Zone 2 quota. Under delegated authority, the Yukon Delta NWR announced a month-long season from January 1-31,

2023, for antlered bulls only by Federal registration permit FM1803. For the 2023/24 regulatory year, the Yukon Delta NWR announced a winter season from December 20, 2023-January 31, 2024. For the 2024/25 regulatory year, a winter season from Dec. 14, 2024 – Jan. 31, 2025 was announced with a harvest quota of 70 moose and 140 registration permit available.

The Kuskokwim moose population has been managed for continued growth with harvest limited to bulls-only and by quotas. However, the moose population in Zone 1 may be approaching carrying capacity as indicated by browse removal surveys (YKDRAC 2019a, ADF&G 2024). The BOG adopted Proposal 10 in 2024, establishing an antlerless draw permit hunt in Zone 1.

Local users took 51% of their reported moose harvest outside the Unit 18 Kuskokwim hunt area from 2011 to 2021, primarily in the remainder area of Unit 18, from a low of 42% in 2011 to a high of 63% in 2020 (ADF&G 2022a).



**Figure 3.** Reported moose harvest by RM615 in the Kuskokwim hunt area, 20011 – 2022 (ADF&G 2019a, 2024; Oster 2020, Jones 2021, pers. comm.; Moses 2020, pers. comm.).

**Table 4.** State and Federal moose quotas and harvest, 2011 – 2022 (Jones 2022, pers. comm.; Moses 2020, pers. comm.).

Year	Quota/Season length* (number of moose)			Harvest (number of moose)				
	State	Federal	Total	State	Federal	Cultural	Unknown	Total
2011	81	19	100	93	11	5	15	124
2012	81	19	100	82	17	12	4	115
2013	81	19	100	89	21	18	9	137
2014	81	19	100	93	15	18	23	149
2015	110	45	155	105	31	24	15	175
2016	150	90	240	136	44	23	14	217
2017 <sup>a</sup>	170	110	280	186	80	36	0	302
2018 <sup>a</sup>	170	110	280	141	72	30	0	243
2019 <sup>a</sup>	N/A <sup>c</sup>	120	N/A <sup>c</sup>	160	70	48	0	278
2020 <sup>a</sup>	11 days	110	N/A <sup>c</sup>	239	90	33	5	367
2021 <sup>a</sup>	9 days	110	N/A <sup>c</sup>	151	76	29	1	257
2022 <sup>a</sup>	9 days	110	N/A <sup>c</sup>	188 <sup>b</sup>	60 <sup>b</sup>			
2023	8 days							
2024	8 days	110						

\* The State stopped using quotas in 2019, using fixed season dates instead. The numbers post 2019 correspond to season length.

<sup>a</sup> The State quota corresponds to Zone 1 and the Federal quota corresponds to Zone 2.

<sup>b</sup> Reported harvest as of October 24, 2022.

<sup>c</sup> State uses fixed season dates instead of quota.

## Discussion and Effects

If Proposal WP26-43 is adopted, the Yukon Delta NWR manager would be delegated authority to open a may-be-announced antlerless moose hunt between Sept.1- Oct. 15<sup>th</sup> in the Kuskokwim hunt area of Unit 18. This would provide additional harvest opportunity for federally qualified subsistence users and could increase total moose harvest in this area. No negative impacts to the moose population are expected as this hunt would be closely managed through harvest quotas, season dates, and permit numbers. Rather, limited antlerless moose harvest may benefit subsistence users and the Zone 2 moose population in the long run by maintaining the population within sustainable levels and helping to prevent over browsing of habitat.

Adoption of this proposal would also increase alignment between State and Federal regulations by establishing fall antlerless hunts from Sept. 1-Oct. 15. However, the State hunt is by State drawing permit and targets Zone 1, while the Federal hunt would be by either Federal registration or Federal drawing permit and targets Zone 2.

If WP26-44 is adopted, the closing date of the may be announced winter hunt would be extended to March 31<sup>st</sup>. This extension increases subsistence opportunity and would further provide for flexible hunt management and the ability to adapt to weather conditions, changing moose population trends, hunter behavior and their ability to identify bulls without antlers. No negative impacts to the moose population are expected as this hunt would be closely managed through harvest quotas and permit numbers.

## OSM PRELIMINARY CONCLUSION

**Support** Proposals WP26-43 and WP26-44 **with modification** to clarify the regulatory language.

The draft regulations read:

### Unit 18 – Moose

*Unit 18, that portion east of a line running from the mouth of the Ish-kowik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60°59.41' Latitude; W162°22.14" Longitude), continuing upriver along a line 1/2 mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet at Arhymot Lake, then following the south bank east of the Unit 18 border and then north of and including the Eek River drainage<sup>1</sup> - 1 antlered bull by State registration permit during the fall season* *Sep. 1-Oct. 15.*

*OR*

*1 antlerless moose by Federal permit during a may-be-announced fall season.* *May be announced between Sept. 1 - Oct. 15*

*OR*

*~~Up to~~ one moose by Federal permit during a may-be-announced winter season* *May be announced between Dec. 1-~~Jan. 31~~ Mar. 31*

*Federal public lands are closed to the taking of moose except by residents of Akiachak, Akiak, Atmautlauk, Bethel, Eek, Kalskag, Kasigluk,*

## Unit 18 – Moose

*Kipnuk, Kongiganak, Kwethluk, Kwigillingok, Lower Kalskag, Napakiak, Napaskiak, Nunapitchuk, Oscarville, Quinhagak, Tuluksak, and Tuntutuliak.*

***The Yukon Delta NWR manager after coordination with ADF&G, the BLM Anchorage Field Office, OSM, and the Chair of the affected Council(s) is authorized within the regulatory parameters set by the Board, to determine annual harvest quotas, close the fall bull season, open/close an antlerless fall season, open/close a winter season, announce sex and antler restrictions for the winter hunt, and determine the permit allocation system on an annual basis, including the number of permits issued through a limited registration or random drawing hunt for the fall antlerless hunt and winter hunt.***

<sup>1</sup>Referred to as the Kuskokwim hunt area throughout the analysis.

### Justification

These proposals increase subsistence opportunity and there are no conservation concerns as the Zone 2 moose population is closely managed through harvest quotas and permit numbers. Extending the season for the winter may-be-announced season, establishing an antlerless fall hunt and delegating authority for its in-season management, allows for flexible, adaptable hunt management that optimizes subsistence harvest opportunity and conservation. This proposal allows for additional harvest opportunity by federally qualified subsistence users in conjunction with the new State antlerless fall hunt and increases flexibility and opportunity for the may-be-announced winter moose hunt in Zone 2.

The modification removes the words “up to” from the new antlerless moose hunt as they are unnecessary and confusing. The modification also removed the word “registration” from the new antlerless moose hunt as the in-season manager has delegated authority to decide whether to allocate permits through first-come, first-serve registration permits or through random drawing permits. The modification also adds the delegated authority for the rest of the hunt into the unit-specific regulations as Proposal WP26-01 requests rescinding delegation of authority letters and moving most delegated authority into unit-specific regulations. Additionally, the authority to set permit conditions is not needed in codified regulations. The authority to set permit conditions such as reporting periods is inherent to any Federal manager administering a Federal permit.

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## APPENDIX 1



### Federal Subsistence Board

Office of Subsistence Management  
1011 East Tudor Road, MS 121  
Anchorage, Alaska 99503 - 6199



FISH and WILDLIFE SERVICE  
BUREAU of LAND MANAGEMENT  
NATIONAL PARK SERVICE  
BUREAU of INDIAN AFFAIRS

JUN 20 2024

FOREST SERVICE

In reply refer to:  
OSM.B24042

Refuge Manager  
Yukon Delta National Wildlife Refuge  
P.O. Box 346  
Bethel, Alaska 99559

Dear Refuge Manager:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the manager of the Yukon Delta National Wildlife Refuge to issue emergency or temporary special actions if necessary to ensure the conservation of a healthy wildlife population, to continue subsistence uses of wildlife, for reasons of public safety, or to assure the continued viability of a wildlife population. This delegation only applies to the Federal public lands subject to Alaska National Interest Lands Conservation Act (ANILCA) Title VIII jurisdiction within Unit 18, that portion east of a line running from the mouth of the Ishkowiik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60° 59.412 Latitude; W 162° 22.142 Longitude), continuing upriver along a line ½ mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet of Arhymot Lake, then following the south bank east of the Unit 18 border and then north of and including the Eek River drainage for the management of moose on these lands.

It is the intent of the Board that actions related to management of moose by Federal officials be coordinated, prior to implementation, with the Alaska Department of Fish and Game (ADF&G), representatives of the Office of Subsistence Management (OSM), and the Chair of the affected Council(s) to the extent possible. The OSM will be used by managers to facilitate communication of actions and to ensure proposed actions are technically and administratively aligned with legal mandates and policies. Federal managers are expected to work with managers from the State and other Federal agencies, the Council Chair or alternate, local Tribes, and Alaska Native corporations to minimize disruption to subsistence resource users and existing agency programs, consistent with the need for special action.



## DELEGATION OF AUTHORITY

1. **Delegation:** The manager of the Yukon Delta National Wildlife Refuge is hereby delegated authority to issue emergency or temporary special actions affecting moose on Federal lands as outlined under the Scope of Delegation. Any action greater than 60 days in length (temporary special action) requires a public hearing before implementation. Special actions are governed by Federal regulation at 36 CFR 242.19 and 50 CFR 100.19.

2. **Authority:** This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and

50 CFR 100.10(d)(6), which state: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest seasons within frameworks established by the Board."

3. **Scope of Delegation:** The regulatory authority hereby delegated is limited to the following authorities within the limits set by regulation at 36 CFR 242.26 and 50 CFR 100.26:

- Close the fall season
- Open and close a season between December 1 and January 31
- Determine annual harvest quotas
- Announce sex and antler restrictions for the winter hunt.
- Determine the permit allocation system on an annual basis (i.e. set the number of permits to be issued through a limited registration or random drawing hunt).
- Set any needed permit conditions. Permit conditions must be approved by OSM and in accordance with the current OMB information collection.

This delegation also permits you to close and reopen Federal public lands to non-subsistence hunting, but does not permit you to specify methods and means, permit requirements, or harvest and possession limits for State-managed hunts.

This delegation may be exercised only when it is necessary to conserve moose populations, to continue subsistence uses, for reasons of public safety, or to assure the continued viability of the populations. All other proposed changes to codified regulations, such as customary and traditional use determinations or adjustments to methods and means of take, shall be directed to the Board.

The Federal public lands subject to this delegated authority are those within Unit 18 that portion east of a line running from the mouth of the Ishkowiik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60° 59.412 Latitude; W 162° 22.142 Longitude), continuing upriver along a line ½ mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet of Arhymot Lake, then

following the south bank east of the Unit 18 border and then north of and including the Eek River drainage.

**4. Effective Period:** This delegation of authority is effective from the date of this letter and continues until superseded or rescinded.

**5. Guidelines for Delegation:** You will become familiar with the management history of the wildlife species relevant to this delegation in the region, with current State and Federal regulations and management plans, and be up-to-date on population and harvest status information. You will provide subsistence users in the region a local point of contact about Federal subsistence issues and regulations and facilitate a local liaison with State managers and other user groups.

You will review special action requests or situations that may require a special action and all supporting information to determine (1) consistency with 50 CFR 100.19 and 36 CFR 242.19, (2) if the request/situation falls within the scope of authority, (3) if significant conservation problems or subsistence harvest concerns are indicated, and (4) what the consequences of taking an action or no action may be on potentially affected federally qualified subsistence users and non-federally qualified users. Requests not within your delegated authority will be forwarded to the Board for consideration. You will maintain a record of all special action requests and rationale for your decision. A copy of this record will be provided to the Administrative Records Specialist in OSM no later than sixty days after development of the document.

For management decisions on special actions, consultation is not always possible, but to the extent practicable, two-way communication will take place before decisions are implemented. You will also establish meaningful and timely opportunities for government-to-government consultation related to pre-season and post-season management actions as established in the Board's Consultation Policies (Federal Subsistence Board Government-to-Government Tribal Consultation Policy 2012 and Federal Subsistence Board Policy on Consultation with Alaska Native Claim Settlement Act Corporations 2015).

You will immediately notify the Board through the Assistant Regional Director for OSM, and coordinate with the Chair(s) or alternate of the affected Council(s), local ADF&G managers, and other affected Federal conservation unit managers concerning emergency and temporary special actions being considered. You will ensure that you have communicated with OSM to ensure the special action is aligned with ANILCA Title VIII, Federal Subsistence regulations and policy, and that the perspectives of the Chair(s) or alternate of the affected Council(s), OSM, and affected State and Federal managers have been fully considered in the review of the proposed special action.

If the timing of a regularly scheduled meeting of the affected Council(s) permits without incurring undue delay, you will seek Council recommendations on the proposed temporary special action(s). If the affected Council(s) provided a recommendation, and your action differs from that recommendation, you will provide an explanation in writing in accordance with 50 CFR 100.10(e)(1) and 36 CFR 242.10(e)(1).

You will issue decisions in a timely manner. Before the effective date of any decision, reasonable efforts will be made to notify the public, OSM, affected State and Federal managers, law enforcement personnel, and Council members. If an action is to supersede a State action not yet in effect, the decision will be communicated to the public, OSM, affected State and Federal managers, and the local Council members at least 24 hours before the State action would be effective. If a decision to take no action is made, you will notify the proponent of the request immediately. A summary of special action requests and your resultant actions must be provided to the coordinator of the appropriate Council(s) at the end of each calendar year for presentation to the Council(s).

You may defer a special action request, otherwise covered by this delegation of authority, to the Board in instances when the proposed management action will have a significant impact on a large number of federally qualified subsistence users or is particularly controversial. This option should be exercised judiciously and may be initiated only when sufficient time allows for it. Such deferrals should not be considered when immediate management actions are necessary for conservation purposes. The Board may determine that a special action request may best be handled by the Board, subsequently rescinding the delegated regulatory authority for the specific action only.

Sincerely,



Anthony Christianson  
Chair

cc: Federal Subsistence Board  
Office of Subsistence Management  
Chair, Yukon-Kuskokwim Delta Subsistence Regional Advisory Council  
Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and Game  
Mark Burch, Assistant Director for Wildlife Conservation, Alaska Department of Fish and Game  
Interagency Staff Committee  
Administrative Record