

## WP26–58 Executive Summary

<b>General Description</b>	Wildlife Proposal WP26-58 requests to eliminate the Federal moose permit FM2202 and to change the harvest limit from “one bull” to “one antlered bull” for the winter moose hunt in Unit 22B west of the Darby mountains. <i>Submitted by the Alaska Department of Fish and Game.</i>
<b>Proposed Regulation</b>	<p style="text-align: center;"><b>Unit 22B—Moose</b></p> <p><i>Unit 22B, west of the Darby Mountains—1 bull by State registration permit.      Sep. 1-14. Quotas and any needed closures will be announced by the Anchorage Field Office Manager of the BLM, in consultation with NPS and ADF&amp;G</i></p> <p><i>Federal public lands are closed to the taking of moose except by federally qualified subsistence users hunting under these regulations</i></p> <p><i>Unit 22B, west of the Darby Mountains—1 <b>antlered</b> bull by <del>either Federal or</del> State registration permit. Quotas and any needed season closures will be      Jan. 1-31. announced by the Anchorage Field Office Manager of the BLM, in consultation with NPS and ADF&amp;G.</i></p> <p><i>Federal public lands are closed to the taking of moose except by residents of White Mountain and Golovin hunting under these regulations</i></p>
<b>OSM Preliminary Conclusion</b>	<b>Support</b> Proposal WP26-58.
<b>Seward Peninsula Subsistence Regional Advisory Council Recommendation</b>	
<b>Interagency Staff Committee Comments</b>	
<b>ADF&amp;G Comments</b>	

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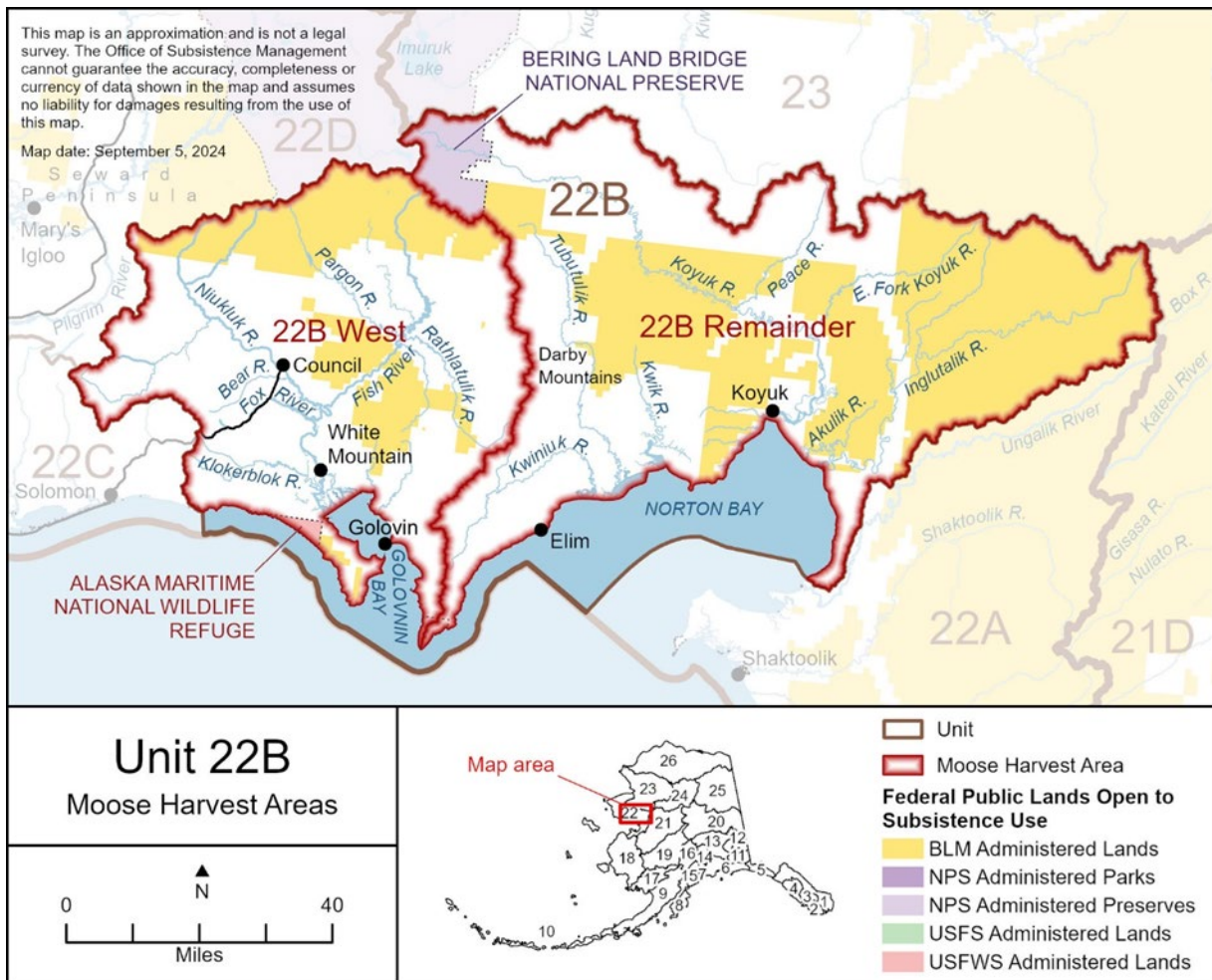
**Written Public  
Comments**

**None.**

## Draft Wildlife Analysis WP26-58

### ISSUE

Wildlife Proposal WP26-58, submitted by the Alaska Department of Fish and Game (ADF&G), requests to eliminate the Federal moose permit FM2202 and to change the harvest limit from “one bull” to “one antlered bull” for the winter moose hunt in Unit 22B west of the Darby mountains (22B West) (Map 1).



**Map 1.** Map of the Unit 22B West hunt area.

### Proponent Statement

The proponent states eliminating the Federal permit and only requiring the State permit for the winter moose hunt in Unit 22B West will create consistency between Federal and State regulations. This will allow users to better understand and adhere to regulations. The proponent also states that State

regulations allow hunters to only pick up permits in White Mountain or Golovin during the winter moose hunt, making the federal lands closure in this area redundant. Changing the harvest limit to “one antlered bull” will afford protection to breeding bulls recovering from the rut. The current any-bull harvest limit in Federal regulations is not biologically warranted as the Unit 22B moose population is managed under a quota system to avoid overharvest.

## **Current Federal Regulations**

### **Unit 22B—Moose**

*Unit 22B, west of the Darby Mountains—1 bull by State registration permit. Sep. 1-14.  
Quotas and any needed closures will be announced by the Anchorage Field  
Office Manager of the BLM, in consultation with NPS and ADF&G*

*Federal public lands are closed to the taking of moose except by federally  
qualified subsistence users hunting under these regulations*

*Unit 22B, west of the Darby Mountains—1 bull by either Federal or State Jan. 1-31.  
registration permit. Quotas and any needed season closures will be announced  
by the Anchorage Field Office Manager of the BLM, in consultation with NPS  
and ADF&G.*

*Federal public lands are closed to the taking of moose except by residents of  
White Mountain and Golovin hunting under these regulations*

## **Proposed Federal Regulations**

### **Unit 22B—Moose**

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with NPS and ADF&G.*

*Federal public lands are closed to the taking of moose except by residents of  
White Mountain and Golovin hunting under these regulations*

## **Current State Regulations**

**Note:** Unit 22B remainder under State regulations is the same as Unit 22B West under Federal regulations.

### **Unit 22B—Moose**

*Unit 22B, Residents: One bull by permit available in person in Brevig RM840 Sep. 1-14  
remainder Mission, Golovin, Nome, Teller, and White Mountain from  
July 25-Aug. 25. Harvest quota to be announced. Season will  
be closed by emergency order when quota is reached.*

*OR*

*Residents: One antlered bull by permit available in person RM843 Jan. 1-31.  
in White Mountain and Golovin beginning Dec. 1. Harvest  
quota to be announced. Season will be closed by emergency  
order when quota is reached.*

*Nonresidents No open  
season.*

## **Extent of Federal Public Lands**

Unit 22B west of the Darby Mountains is comprised of approximately 28% Federal public lands, consisting of 27% Bureau of Land Management (BLM) and 1% U.S. Fish and Wildlife Service (USFWS) managed lands (**Map 1**).

## **Customary and Traditional Use Determination**

Residents of Unit 22 have a customary and traditional use determination for moose in Unit 22.

## **Regulatory History**

In 2001, the Board adopted a modified emergency special action, WSA01-09, which closed Federal public lands in Units 22B West, 22D Kuzitrin, 22D SW, and 22E. This action reduced the season length in Units 22D Kuzitrin and 22E and harvest limit in 22E, from one moose to one bull. The same year the Board considered WSA01-11, which requested a winter moose season for residents of Unit 22B West. The Board decided, through the results of the §804 analysis, to establish a Jan. 1–Jan. 31 moose season in Unit 22B West, open only to residents of Golovin and White Mountain.

In 2002, WP02-34 requested to codify the decisions from WSA01-09 for the conservation of a declining moose population. This proposal not only closed Federal public lands, it also shortened the season length and limited the number of moose harvested from each unit. The Board adopted WP02-34 with OSM modification to require either a Federal or State permit and to limit harvest to bulls only other than the fall 22D Kuzitrin hunt and the winter 22D SW hunt. Adoption of this proposal addressed conservation concerns for the moose population while still providing for the continuation of subsistence uses of moose on Federal public lands in Unit 22. At the same time the Board adopted proposal WP02-35, a §804 subsistence user prioritization analysis, which restricted harvest even further to residents living within some of these units. This proposal restricted participation in the Unit 22B West winter hunt to residents of Unit 22B West. The fall Unit 22D Kuzitrin hunt was restricted to residents of Unit 22D. Both the fall and winter hunts in Unit 22D SW were restricted to residents of Unit 22D. The Board felt closing Federal public lands to all except federally qualified subsistence users, or a subset of them, would improve subsistence harvest opportunities for moose.

In 2004, Special Action Requests WSA04-01 and WSA04-02 were submitted to adjust the moose harvest quotas in Unit 22B West, for both the fall and winter seasons. This request was submitted due to depressed moose population estimates, which led the State to reduce their harvest quotas. Special Action WSA04-01 was approved by the Board to reduce the combined fall Federal/State harvest quota to 23 moose. Special Action WSA04-02 was approved by the Board to reduce the total Federal/State harvest quota for both the August/September and January seasons to 30 moose.

In 2005, the Board adopted Proposal WP05-14a, which codified the regulatory changes made by WSA04-01 and WSA04-02. The Board also adopted Proposal WP05-15, to allow the winter harvest quota to remain flexible and delegate authority for quota announcements and closures to the Anchorage Field Office Manager of the BLM, in consultation with NPS and ADF&G.

In 2006, the Board adopted Proposal WP06-40, which shifted season dates, removed the quota numbers from regulation, and placed into unit specific regulations authority for the Anchorage Field Office Manager of the BLM, in consultation with NPS and ADF&G, to announce any needed closures and quotas.

During closure reviews at their winter 2011 and 2015 meetings, the Seward Peninsula Subsistence Regional Advisory Council (Council) recommended to retain the closures (WCR10-11/12 & WCR14-11/12) because of the continued low moose population in Unit 22B. In both September 2013 and 2014, the State announced emergency orders to close the fall moose season in Unit 22B west of the Darby Mountains early as smaller quotas had recently been enacted in this area due to declining populations. This hunt area was covered under registration permit hunt RM840 with a fall harvest quota of 20 bulls.

At the 2020 Board of Game (BOG) meeting, Proposal 35 was adopted as amended to change the availability of moose permits RM843 and RM840 in Unit 22. RM840 moose permits are now only available in person in Unit 22 from July 25 to August 25 for the fall season. RM843 permits are only available in White Mountain and Golovin Dec. 1–Jan. 31 for the winter season.

In August 2020, the Board approved a revised closure policy, which stipulated that all closures would be reviewed every four years. The policy also specified that closures, similar to regulatory proposals, would 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 2022, the Board considered Wildlife Closure Review WCR22-11/12. They decided to maintain the status quo due to the moose population being below State management objectives. The decision to maintain the closure was consistent with the Council's recommendation.

On September 9, 2023, ADF&G closed the fall RM840 hunt by Emergency Order (EO) R5-6-23 (ADF&G 2023). This hunt was only open for 9 days out of the scheduled 14-day season. In January 2024, ADF&G closed the RM843 hunt in Unit 22B West by EO R5-1-24 (ADF&G 2024a). This winter season was only open for 5 days total before the harvest quota was reached. These two hunts have been consistently closed early via EO since 2018 (ADF&G 2019, 2020b, 2021, 2022).

### **Current Events**

Proposal WP26-59 requests shifting the fall moose season dates in Unit 22B west from Sep. 1-14 to Sep. 6-20.

The Board will consider Wildlife Closure Review WCR26-11/12 at their April 2026 meeting. WCR26-11 reviews the closure to moose hunting by non-federally qualified users in Unit 22B West during the fall season. WCR26-12 reviews the closure to moose hunting, except by residents of White Mountain and Golovin in Unit 22B west during the winter season.

On February 8, 2025, ADF&G re-opened the RM843 hunt for antlered bull moose in Unit 22B West by EO 05-01-25 to provide additional opportunity because the annual quota had not been met (ADF&G 2025a). On February 14, 2025, ADF&G closed the RM843 hunt in Unit 22B West by EO 05-02-25 as the quota had been met (ADF&G 2025b).

## Biological Background

Moose migrated onto the Seward Peninsula starting in the 1930s and occupied almost all the suitable habitat by the late 1960s. Even though moose are a relatively recent addition to the Seward Peninsula, once established, they rapidly became an important food source for rural subsistence users. Fortunately, populations grew rapidly and expanded through the 1980s. But then, severe winters in the late 1980s and early 1990s caused declines in moose numbers. Densities decreased from highs of 1.0–1.5 moose/mi<sup>2</sup>, to lows of 0.2–0.5 moose/mi<sup>2</sup>. Populations in Units 22B and 22D experienced the largest declines and have never recovered to these higher numbers but have stabilized at lower densities (Germain 2023). Brown bear predation on calves is considered the main limiting factor on Unit 22 moose populations (Henslee 2024, pers. comm.).

State management goals for moose in Unit 22 are to protect, maintain and enhance the moose population and its habitat. The goal of ADF&G is to increase or stabilize the moose population to achieve recovery in Units 22A, 22B, and 22D (Henslee 2025). Specific population objectives include:

- Unit 22: 5,000–7,000 moose
- Unit 22B West and Unit 22C combined: 1,500–1,800 moose
- Unit 22B East: 800–1,500 moose
- Manage for a post-hunt (fall) sex ratio of 30 bulls:100 cows in all areas of Unit 22
- Unit 22 Harvest objective: 300–680 moose

Prior to 2020, Units 22B West and 22C had separate populations objectives (Unit 22B West: 1,000–1,200 moose; Unit 22C: 450–525 moose). However, in 2020, the population objective for these subunits were combined because movement data from collared cows and ear-tagged bulls suggest movement between these subunits is common (Henslee 2025).

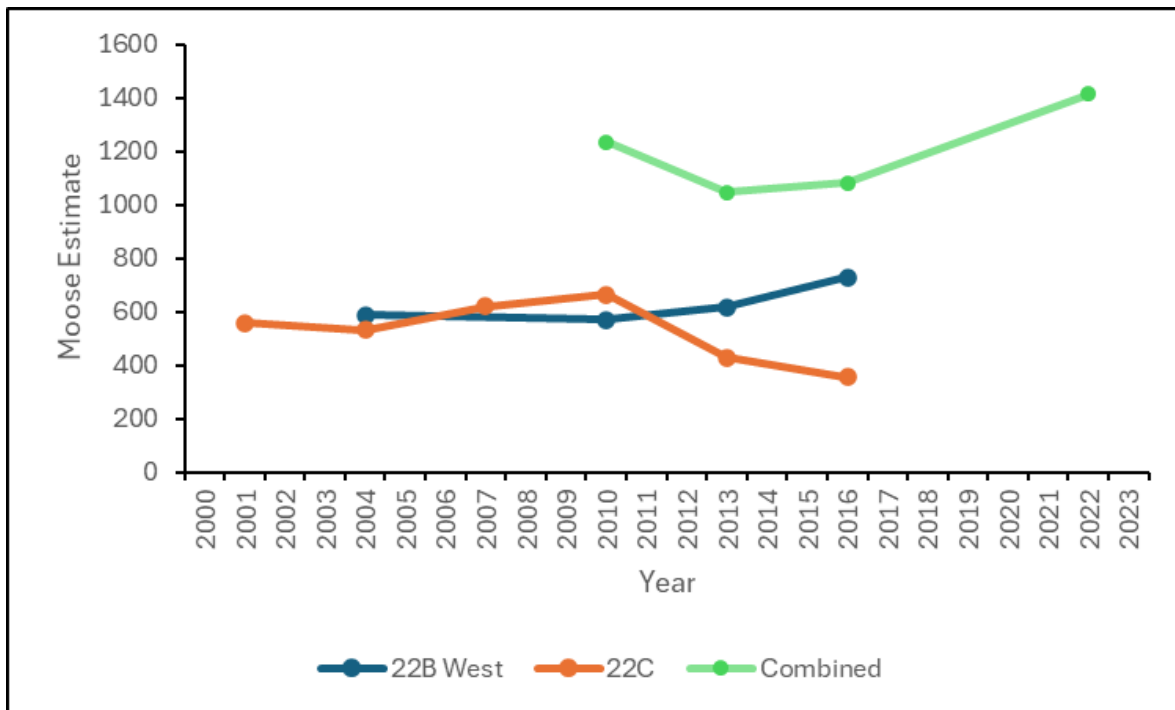
In 2024, ADF&G estimated the total Unit 22 moose abundance as 6,700 moose, which is within State management objectives (ADF&G 2024a). Between 2004 and 2016, the Unit 22B west moose population ranged from 570 to 728 moose, averaging 626 moose (**Figure 1**). The moose population in this area trended upward over that period but remained well below the management objective. In 2023, ADF&G changed their analysis methodology for moose surveys due to moose movement between units (Henslee 2024, pers. comm.). Moose population estimates for Units 22B West and 22C are now combined. This new method resulted in an estimate of 1,415 moose in Units 22B and 22C in 2022 (**Figure 1**). This combined population estimate has also trended upward since 2016 but is just below management objectives for these subunits combined.

Age-sex composition ratios of bulls and calves to cows are used to evaluate trends in abundance, calf recruitment, and harvestable surpluses. Calf:cow ratios may also be used as an index to estimate growth, as ratios of < 20 calves:100 cows, 20–40 calves:100 cows, and > 40 calves:100 cows may indicate declining, stable, and growing moose populations, respectively (Stout 2012). Calf:cow ratios in all surveyed years for Unit 22B are lower than 20 calves:100 cows, indicative of a declining population (**Figure 2**). The 2004 calf cohort appeared non-existent. This may have been due to the

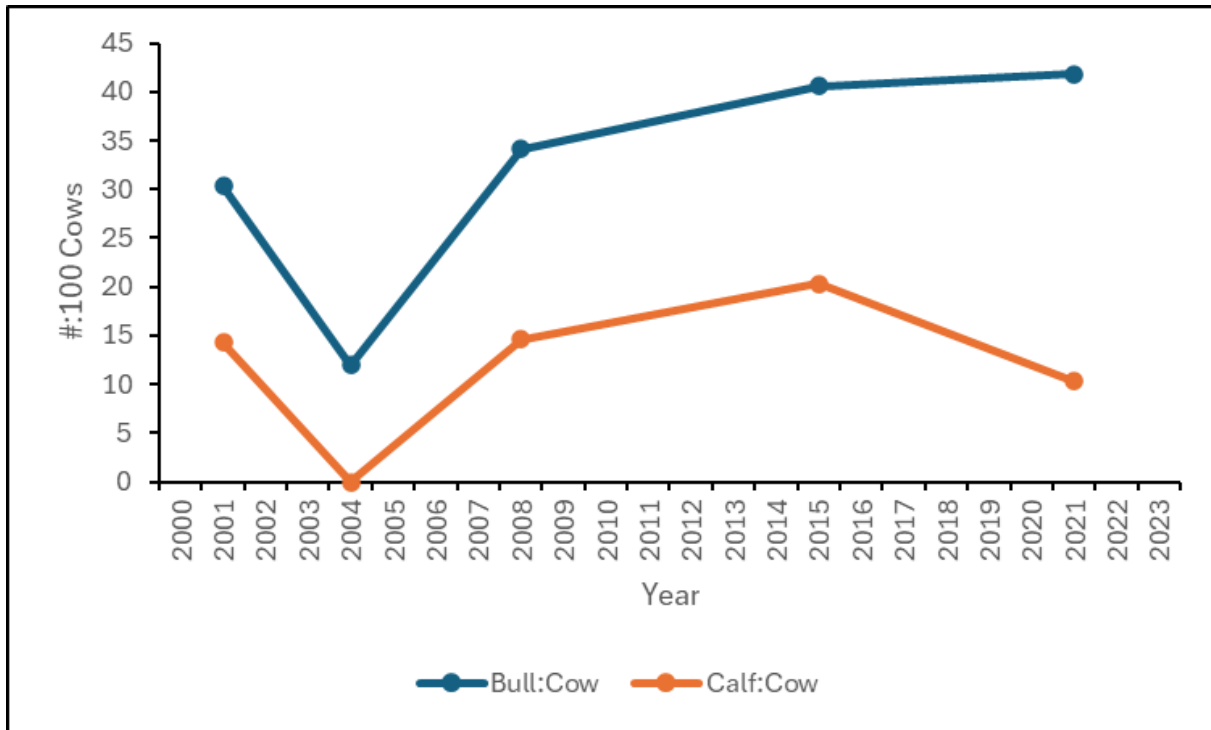


overall population crash that started in the 1990s, but Unit 22B West has always had lower calf recruitment rates (Persons and Gorn 2006).

Between 2001 and 2021 bull:100 cow ratios met or exceeded State management objectives, ranging from 30 to 42 bulls:100 cows (**Figure 2**) (Henslee 2024, pers. comm.). The bull:cow ratio has increased since 2001 and has always remained above management objectives, indicating surplus bulls available for harvesting.



**Figure 1.** Moose population estimates for Unit 22B West, 22C and combined Unit 22B West & 22C (Henslee 2024, pers. comm.).



**Figure 2.** Bull:100 cow and calf:100 cow ratios for Unit 22B West moose (Henslee 2024, pers. comm.).

### Cultural Knowledge and Traditional Practices

The Inupiaq, Siberian Yupik, and Central Yup'ik people of the Seward Peninsula subsistence region have a deeply rooted practice of subsistence hunting, fishing, and gathering of wild resources (Raymond-Yakobian and Zdor 2020). Until European contact in the early 19th century, many of these groups were semi-nomadic, moving with the seasons based on the availability of wild resources. During the winter months, people often lived in permanent villages along the coast where they harvested seals, belugas, other marine mammals, fish and small land mammals. During warmer months, they established family fish camps near rivers and lakes to harvest fish and plant resources (Ray 1984).

Historically, people in the Seward Peninsula area hunted a variety of species opportunistically. Large ungulates were not readily available on the Seward Peninsula in the second half of the 19th century (Tape et al. 2016). While caribou were hunted traditionally, their numbers declined in the mid-1800s (Dau 2000). Reindeer were introduced from Siberia in 1892 under a Federal program initiated by Sheldon Jackson to provide more meat for the Iñupiat people in the area (Dau 2000). The reindeer industry was an important source of food in the region until the 1990s, when caribou moved back into the area. Reindeer dispersed with migrating caribou, and the reindeer industry declined (Finstad et al. 2007). Moose began moving into the Seward Peninsula in the 1940s following major fires in the region, and harvest of this species grew as their population increased (SPRAC 2019a, 2019b; Braem et al. 2017; Tape et al. 2016).

Under current Federal regulations, only residents of White Mountain (population: 212) and Golovin (population: 186) (ADLWD 2024) may harvest moose on Federal public lands in Unit 22B West during the January hunt. Other residents of Unit 22 are permitted to hunt moose in this subunit during the fall hunt. Most local users in Unit 22 will typically only hunt moose in winter if they do not successfully harvest in the fall (SPRAC 2019a). However, the winter hunt is often critical for residents of Golovin and White Mountain (Mikow et al. 2018, Braem et al. 2017), who have harvested all of their moose during the winter hunt in some years (e.g., Braem and Kostick 2014).

Based on moose search and harvest areas mapped in household subsistence surveys, residents of Golovin and White Mountain typically harvest all of their moose in Unit 22B West (Braem et al. 2017). Moose hunt areas used by residents of Golovin in 2012 included areas around Cheenik Creek and White Mountain (Braem et al. 2017). Moose hunt areas used by residents of White Mountain from 2015—2016 focused on those immediately around the community and north of the community in an area containing McCarthy Marsh (Mikow et al. 2018). In winter, it is very difficult and dangerous for residents of Golovin and White Mountain to travel to other areas for moose (OSM 2002).

Local knowledge shared at Council meetings indicates that the brown bear population has increased substantially, posing safety threats to hunters and population threats to Unit 22 moose (SPRAC 2023, 2020, 2019a, 2019b, Braem et al. 2017). Residents of Golovin link the increase in brown bear population to trophy hunting, stating that the large male bears being harvested would otherwise help keep the overall brown bear population low (Braem et al. 2017).

Other factors that directly impact moose hunting include later freeze-up, earlier break up, less snowfall in some years, and changing vegetation, all of which make hunting travel more challenging and dangerous (Braem et al. 2017). These issues are compounded by rising fuel costs. As one resident of Golovin described:

Well, going back to the later freeze-up and the earlier break up, we've also had years of hardly any snowfall. And that's a lot of wear and tear on your snowmachine. And also, it has an effect on how far you can go in a reasonable amount of time. And snow conditions also have an effect on how much gasoline you burn. And right now, we got 6 bucks a gallon and, well, some people can't afford to go hunting (Braem et al 2017: 82).

Additionally, declines in other species are increasing local dependence on moose. In Golovin, increasingly frequent and severe flooding in summer and fall hinder subsistence harvest of salmon and nonsalmon fish (Braem et al. 2017). In other areas of Unit 22, declining salmon harvest has increased people's reliance on other food resources, including moose (SPRAC 2021). In White Mountain, residents have become more reliant on moose as caribou have become less readily available (SPRAC 2023). These issues point to the interconnected nature of subsistence harvest; moose may be a critical resource in years where other resources are less abundant.

Subsistence household surveys conducted by ADF&G, Division of Subsistence provide insight into the local importance and harvest of moose under both Federal and State hunting regulations. Based on the household survey data from Golovin, moose harvest has declined from an estimated 21 moose

harvested in 1989 to an estimated 4 moose harvested in 2012 (**Table 1**). Likewise, the percent of households using moose has declined over time in Golovin (**Table 1**). In contrast, moose harvest has remained stable in White Mountain, ranging from an estimated 12—17 moose harvested across survey years from 1999—2015 (**Table 1**). Moose have also become a more widely used resource in White Mountain, with the percentage of households using moose increasing from 70% in 1999 to 92% in 2015 (**Table 1**). Both communities increased in population from 1990 to 2024, with the population in Golovin increasing by 59 people and the population in White Mountain increasing by 32 people (U.S. Census Bureau 1990, ADLWD 2024).

**Table 1.** Estimated harvest and use of moose by residents of Golovin and White Mountain (ADF&G 2025).

Community	Survey Year	Estimated Number of Moose Harvested	Estimated Pounds of Moose Harvested per Person	Percentage of Surveyed Households Using Moose
Golovin	1989	21	67.5	91%
	2001	0	0	47%
	2010	3	11.8	61%
	2012	4	10.7	42%
White Mountain	1999	17	42.6	70%
	2006	12	32.9	60%
	2008	15	41.2	82%
	2015	14	39.1	92%

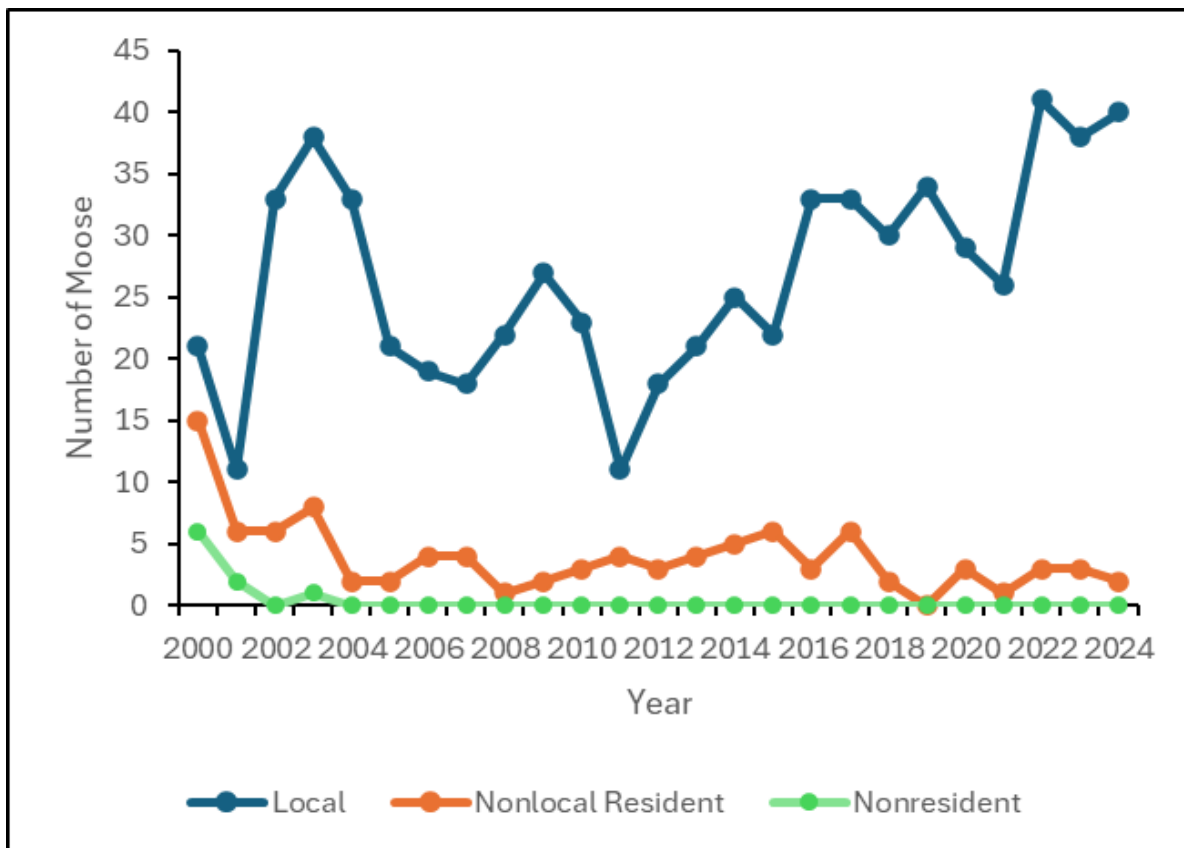
## Harvest History

In Unit 22B West, harvest occurs by Alaska residents under Federal and State regulations by registration permit RM840 during the September hunt and registration permit RM843 during a January season. Actions taken by the BOG (see Regulatory History) have limited the availability of State permits to Unit 22 only, making it difficult for any nonlocal resident to receive a permit. All harvest under State regulations has occurred on non-Federal lands since 2002 due to the Federal lands closure. The non-resident season was eliminated in Unit 22B West in 2002.

Under Federal regulations, harvest may also occur by Federal (FM2202) registration permit during the January season. While a Federal moose permit for the winter hunt exists, it has only ever been issued in 2001, which was before this closure was enacted. Six permits were issued, with two in Golovin and four in White Mountain, with the harvest of one moose reported. Since either a Federal or a State registration permit may be used during the Federal January season, this was the only year anyone opted for the Federal permit (OSM 2024).

Moose harvests in Unit 22B west are managed by quotas. Between 2000 and 2024, total reported moose harvest for fall and winter hunts ranged from 15–47 moose, averaging 27 moose per year (**Figure 3**). The fall RM840 hunt in Unit 22B West is heavily used and it has closed early by emergency order from 2014 to 2024, with seasons ranging from 4-9 days (ADF&G 2019, 2020a, 2020b, 2021, 2022, 2023). The RM843 permit for the January season has been available since 2011 and annual reported harvest has ranged from 2 to 16 moose per year. The RM843 hunt also closed early in 2024 (see Regulatory History section).

The vast majority of moose harvested in Unit 22B West are taken by federally qualified subsistence users. Local residents of Unit 22 accounted for 50%–100% of all moose harvested in Unit 22B west between 2000 and 2024, averaging 86 of the harvest (Henslee 2024, pers. comm.). Since the closure was established in 2002, local residents have accounted for an average 89% of all moose harvest in Unit 22B West (Henslee 2024, pers. comm.; Carson 2025, pers. comm.) Residents of White Mountain and Golovin are the primary users of RM843 (ADF&G 2024b) and are quite dependent on moose, as it is eaten in 92% and 42% of households, respectively (**Table 1**).



**Figure 3.** Reported moose harvest in both fall and winter hunts by user group in Unit 22B west (Henslee 2024 pers. comm.; Carson 2025, pers. comm.). Local users are Unit 22 residents, which correspond to federally qualified users for the fall hunt. Data was not refined to separate Golovin and White Mountain residents from other local residents for the winter hunt.

## **Discussion and Effects**

If this proposal is adopted, the Federal permit requirement for the winter moose hunt in Unit 22B West will be eliminated; all harvest will occur by State registration permit RM843. This would decrease regulatory complexity by aligning State and Federal permit requirements as well as decrease the administrative burden on users and managers. This change would not affect federally qualified subsistence users harvesting moose in Unit 22B West as the Federal moose permit (FM2202) for the winter hunt has not been utilized since 2001; all harvest already occurs by State registration permit. Since the inception of the Federal permit, FM2202, it has only been issued 6 times in 2001. State permits are easier to obtain than Federal permits, as they can be picked up at the same time as the required State hunting license.

Adopting this proposal would also change the harvest limit for the Unit 22B winter moose hunt to “one antlered bull,” which will protect the breeding segment of the bull moose population while they are recovering from the rut. As moose abundance in Units 22B and 22C are below State management objectives with State seasons closing early by EO due to quotas being met, protecting the breeding stock from harvest is important, especially in the middle of winter.

## **OSM PRELIMINARY CONCLUSION**

**Support** Proposal WP26-58.

### **Justification**

Removing the Federal permit requirement is mostly a housekeeping, administrative change and will not affect federally qualified subsistence users. The last time these permits were used was in 2001 and all moose harvest has occurred by State registration permit. Changing the harvest limit to ‘one antlered bull’ protects an important breeding component of the moose population and may contribute to increasing moose abundance in the area. Adopting this proposal will make Federal and State harvest regulations consistent for Unit 22B, reducing regulatory complexity and confusion.

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