Draft Wildlife Closure Review
WCR26-09A/B/C

ISSUE: Wildlife Closure Reviews WCR26-09A/B/C review closures to moose hunting in Unit 22A. WCR26-09A reviews the closure to moose hunting by non-federally qualified users from Sept. 21–Aug. 31 in the northern portion of Unit 22A (22A North). WCR26-09B reviews the closure to moose hunting by non-federally qualified users in the central portion of Unit 22A around Unalakleet (22A Unalakleet). WCR26-09C reviews the closure to moose hunting by non-federally qualified users from Oct. 1–Aug. 31 in the southern portion of Unit 22A (22A Remainder). (**Map 1**). It is the Federal Subsistence Board's (Board) policy that Federal public lands should be reopened when a closure is no longer necessary, and that closures will be reviewed at least once every four years. The purpose of this review is to determine if this closure is still warranted.

Closure Location and Species: Unit 22A–Moose (**Map 1**)

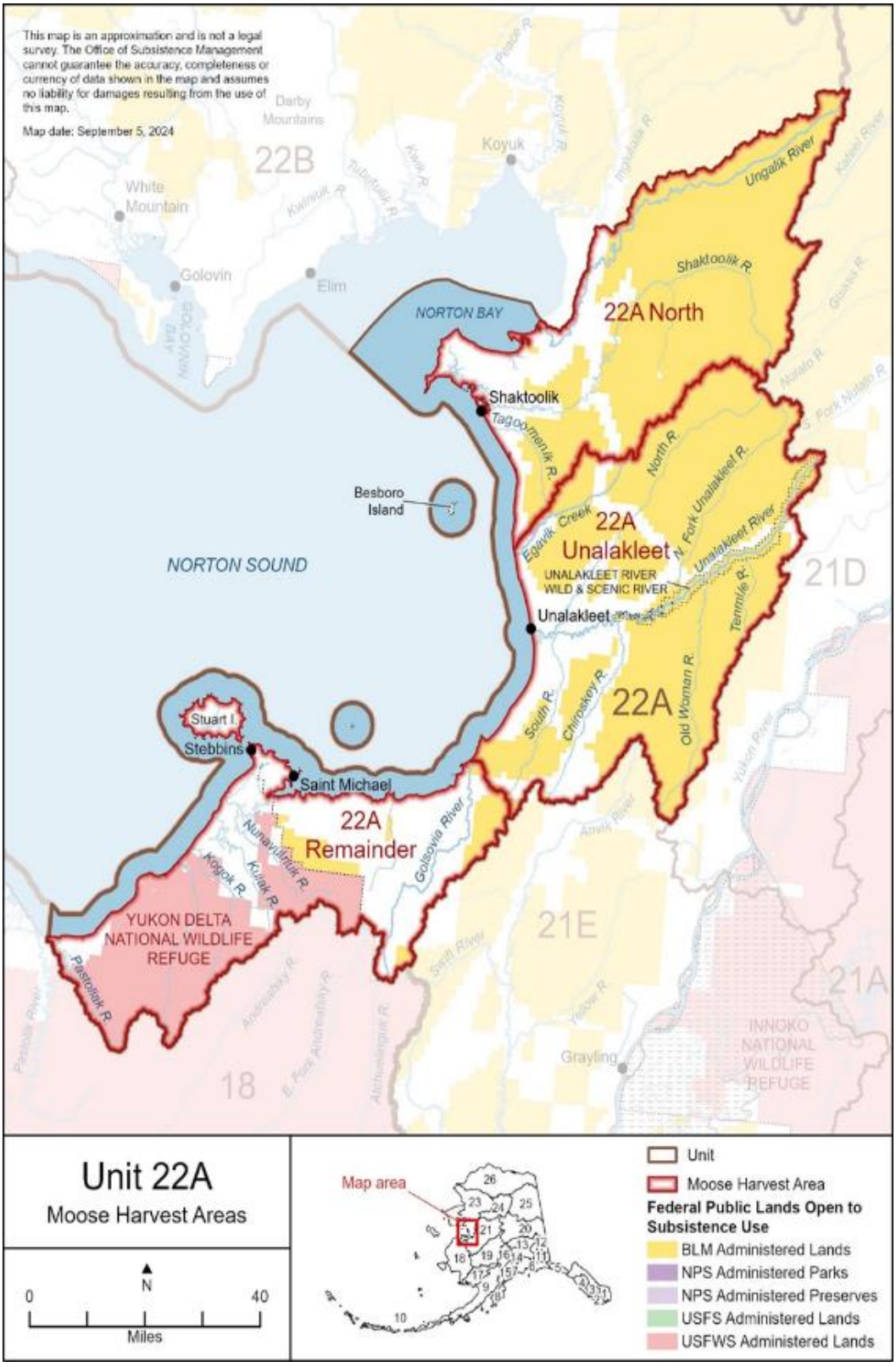
WCR26-09A: Unit 22A, that portion north of the Egavik Creek drainage (22A North)

WCR26-09B: Unit 22A, that portion in the Unalakleet drainage and all drainages flowing into Norton Sound north of the Golsovia River drainage and south of and including the Egavik Creek drainage (22A Unalakleet)

WCR26-09C: Unit 22A, remainder

Closure Dates:

WCR26-09A: Sep. 21–Aug. 31.
WCR26-09B: Year-round.
WCR26-09C: Oct. 1–Aug. 31.



Map 1. Map showing all hunt/closure areas in Unit 22A.

Current Federal Regulations

Unit 22A—Moose

Unit 22A, that portion north of the Egavik Creek drainage—1 bull.	*Aug. 1–Sep. 30.*
Federal public lands are closed to hunting Sep. 21–Aug. 31 except by federally qualified users hunting under these regulations	
Unit 22A, that portion in the Unalakleet drainage and all drainages flowing into Norton Sound north of the Golsovia River drainage and south of and including the Egavik Creek drainage—1 bull by Federal registration permit.	*Aug. 15–Sep. 14.*
Federal public lands are closed to the taking of moose except by federally qualified users hunting under these regulations. The BLM Anchorage Field Office is delegated authority to close the season in consultation with ADF&G	
Unit 22A, remainder—1 bull. However, during the period Jan.1–Feb. 15, only an antlered bull may be taken.	*Aug. 1–Sep. 30.* *Jan. 1–-Feb. 15.*
Federal public lands are closed to the taking of moose, Oct. 1–Aug. 31, except by federally qualified subsistence users	

Current State Regulations

Unit 22A−Moose

Unit 22A, north of the Egavik Creek drainage	*Residents: One bull*	*HT*	*Aug. 1–Sep. 30*
	Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side	*HT*	*Sep. 1–Sep. 20*
Unit 22A, Unalakleet River drainage and all drainages flowing into	*Residents: One bull by permit available online at http://hunt.alaska.gov and in person in Unalakleet beginning Jul 2. Harvest quota to be announced.*	*RM841*	*Aug. 1–Sep. 30*

Norton Sound north of Golsovia River drainage and south of and including the Egavik Creek drainage	*Season will be closed by emergency order when quota is reached.* *OR*		
	Residents: One antlered bull by permit available online at http://hunt.alaska.gov and in person at license vendors in Unalakleet beginning November 12.	*RM844*	*Dec. 1–Feb. 28*
	Nonresidents		*No open season*
Unit 22A, remainder	*Residents: One bull*	*HT*	*Aug. 1–Sep. 30*
	Or		
	Residents: One antlered bull	*HT*	*Jan. 1–Jan. 31*
	Nonresidents: One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side	*HT*	*Sep. 1–Sep. 30*

Regulatory Year Initiated: 1995 (Oct. 1–10 closure, except by Unit 22A residents); 1996 (Dec. 1–Jan. 31 closure, except by Unit 22A residents); 2004 (year-round closure, except by Unit 22A residents); 2006 (closure to all users in Unit 22A Unalakleet); 2008 (closure, except by Unalakleet residents in Unit 22A Unalakleet); 2018 (closure to non-federally qualified users in Units 22A North and 22A remainder); 2020 (Oct. 1–Aug. 31 closure to non-federally qualified users in Unit 22A remainder); 2022 (Sept. 21–Aug. 31 closure to non-federally qualified users in Unit 22A North and closure to non-federally qualified users in Unit 22A Unalakleet).

Closures last reviewed:

WCR26-09A: 2022–WP22-49
WCR26-09B: 2022–WCR22-09B
WCR26-09C: 2022–WCR22-09C

Justification for Original Closure

Section 815(3) of ANILCA states:

> *Nothing in this title shall be construed as – (3) authorizing a restriction on the taking of fish and wildlife for nonsubsistence uses on public lands (other than national parks and monuments) unless necessary for the conservation of healthy populations of fish and wildlife, for the reasons set forth in section 816, to continue subsistence uses of such populations, or pursuant to other applicable law…*

In 1995, the Board adopted Proposal P95-42 with modification. Proposal P95-42 requested extending the fall moose season in Unit 22A from Aug. 1–Sep. 30 to Aug. 1–Oct. 10. At the State's request, the Federal Subsistence Board (Board) modified the proposal to close Federal public lands for the Oct. 1 – 10 portion of the season to all users except residents of Unit 22A (§804 restriction) in order to limit moose harvest as much as possible (FSB 1995a). The Board understood that moose occurred in Unit 22A in low densities and extending the season into the rut could contribute to harvest above sustainable levels.

Later that year, the Board reversed its decision on P95-42 through approval of RFR95-11 due to a probable decline in the moose population. However, due to the conservation concerns, the Board also closed Federal public lands in Unit 22A to the harvest of moose to all users except residents of Unit 22A during the Dec. 1–Jan. 31 season (FSB 1995b).

Council Recommendation for Original Closure

The Seward Peninsula Subsistence Regional Advisory Council (Council) supported Proposal P95-42, extending the season dates from Aug. 1–Sep. 30 to Aug. 1–Oct. 10 which would be more aligned with traditional harvest practices. The Board made the modification to close the October portion of the season to all users, except residents of Unit 22A, as suggested by the State. The Council did not have the opportunity to make a recommendation on this modification; however, the Council Chair was supportive of the amendment as nonlocal use of the area during October was low (FSB 1995a).

State Recommendation for Original Closure

ADF&G opposed Proposal P95-42 because the proposal did not indicate users were not being accommodated by current regulations and the 10-day season extension could result in increased harvest that could adversely impact the low-density moose population. ADF&G stated that if the Board were to approve the proposal, they should restrict harvest within the 10-day season extension to residents of Unit 22A (FSB 1995a). ADF&G subsequently submitted a request for reconsideration for P95-42 (R95-11).

Extent of Federal Public Lands

The Unit 22A North hunt area is comprised of 78% Federal public lands, all of which are managed by the Bureau of Land Management (BLM).

Unit 22A Unalakleet is comprised of 75% Federal public lands, all of which are managed by BLM.

Unit 22A remainder is comprised of 50% Federal public lands and consists of 43% U.S. Fish and Wildlife Service (USFWS) managed lands and 7% BLM 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

Prior to 1995, Federal public lands in Unit 22A were open to moose harvest by all users. In 1995, the Council submitted Proposal P95-42, requesting that the fall moose season in Unit 22A be extended from Aug. 1–Sep. 30 to Aug. 1–Oct. 10. The Board adopted this proposal with modification to extend the season, as proposed, and to close Federal public lands for the Oct. 1 –10 portion of the season to all users except residents of Unit 22A due to conservation concerns over moose harvests increasing to unsustainable levels (FSB 1995a).

ADF&G subsequently submitted a Request for Reconsideration, R95-11, asserting that the Oct. 1–10 Federal public lands closure was not substantiated, and that the season extension violated established principles of wildlife management. The Board reversed their decision on P95-42, concurring that the season extension was not consistent with the maintenance of a healthy moose population. The Board recognized that residents of Unit 22A traditionally harvested moose in October but was concerned that the season extension overlapped the rut and could have led to unsustainable harvests. As a result of the Board's decision, the fall moose season was open Aug. 1–Sep. 30. The Board also closed Federal public lands in Unit 22A to the harvest of moose to all users, except residents of Unit 22A during the Dec. 1–Jan. 31 season (FSB 1995b). This closure represents a §804 restriction, as the eligible users are a subset of the federally qualified subsistence users, defined as those who have a customary and traditional use determination for moose in Unit 22A and includes all residents of Unit 22.

In 1996, the Council submitted Proposal P96-50 to ensure continuation of the Aug. 1–Sep. 30 season in Unit 22A, as well as to request closure of Federal public lands to the harvest of moose except by federally qualified subsistence users during this season. The Board rejected this proposal (FSB 1996) but retained the Aug. 1–Sep. 30 season.

In 1998, the Council submitted Proposal P98-86, requesting the Unit 22A moose harvest limit be changed from one antlered bull to one moose for the Aug. 1–Sep. 30 and Dec. 1–Jan. 31 seasons. The Board adopted this proposal with modification to change the harvest limit to one bull, which provided additional harvest opportunity, particularly during the winter season when many bulls are antlerless, while protecting cows (OSM 1998).

In 2003, the Alaska Board of Game (BOG) made several regulatory changes for moose in Unit 22. In Unit 22A, three distinct hunt areas were established, seasons and harvest limits were adjusted to account for localized patterns of harvest, and the nonresident season in Unit 22A Unalakleet was eliminated. Prior to these changes the State resident season was Aug. 1–Sep. 30 and Dec. 1–Jan. 31, and the harvest limit was one bull throughout Unit 22A. The BOG's actions: 1) closed the winter

season in Unit 22A North; 2) shortened the fall season to Aug. 15–Sep. 25 and closed the winter season in Unit 22A Unalakleet; and 3) shortened the winter season to Dec. 1–31 and changed the harvest limit for the winter season to one antlered bull in Unit 22A remainder (Persons 2004). These changes were scheduled to become effective in regulatory year 2004/05. However, data showing steep declines in the Unit 22A moose population prompted ADF&G to issue Emergency Order 05-05-03 in November 2003, which implemented the new regulations immediately. Due to the timing of the Emergency Order, only the winter seasons were affected. The same changes to the winter seasons were made in Federal regulation through Special Action WSA03-14, approved by the Board in December 2003.

In 2004, the Council submitted Proposal WP04-70, requesting, in part, retention of the temporary changes made through Special Action WSA03-14. Specifically, the proposal requested: 1) changing the harvest limit from one bull to one antlered moose throughout Unit 22A; 2) eliminating the winter seasons in Unit 22A North and Unalakleet; 3) shortening the fall season from Aug. 1–Sep. 30 to Aug. 15–Sept. 30 in Unit 22A Unalakleet; and 4) closing Federal public lands throughout Unit 22A to the harvest of moose in all seasons, except by residents of Unit 22A (OSM 2004). The Board adopted Proposal WP04-70 with Council modification. The modifications included setting the harvest limit at one bull for the fall seasons and one antlered bull for the winter season in Unit 22A Remainder, further reducing the Unit 22A Unalakleet season, to Aug. 15–Sep. 25, and aligning hunt areas with State regulations (OSM 2016). These changes resulted in alignment of State and Federal moose seasons and harvest limits in Unit 22A and year-round Federal lands closures in Unit 22A, except by Unit 22A residents.

In 2005 two special actions were submitted due to poor moose population metrics which affected harvest in Unit 22A. First, moose harvest was temporarily closed in Unit 22A Unalakleet when the Board approved Special Action WSA05-03 due to low population and recruitment estimates (OSM 2021a). The State season in 22A Unalakleet was also closed by Emergency Order 05-04-05. Then, in Unit 22A remainder, harvest seasons were shifted from Dec. 1–31 to Jan. 1–31 with the Board's approval of Special Action WSA05-12/13.

In 2006, the Board adopted two proposals submitted by the Council, both of which further aligned Federal and State regulations. WP06-38 eliminated the December season and codified the January season established by WSA05-12/13 in Unit 22A remainder. This shifted season provided communities more harvest opportunity, due to more favorable hunting conditions later in the winter and was not expected to affect the moose population due to the scarcity of mature antlered bulls at this time of year (OSM 2021b). WP06-39 closed Federal public lands to the harvest of moose in Unit 22A Unalakleet to all users. ADF&G concurred with this Board action as there was a dramatic decrease in the moose population in the Unalakleet River drainage.

Special Action WSA07-08, submitted by the Stebbins Community Association, requested that a Feb. 1–Mar. 1, 2008, bull season be added in Unit 22A remainder to provide additional harvest opportunity when inclement weather affected the accessibility of the winter season. The Board approved the special action but modified the season to Feb. 27–Mar. 5 because a decision could not be made in time to accommodate the original request.

Several regulatory and special actions occurred in Unit 22A regarding moose in 2008. Special Action WSA08-17 extended the winter bull moose season in Unit 22A remainder by two weeks (Feb. 7–20, 2009). The season extension was approved by the Board to provide additional harvest opportunities for federally qualified subsistence users after a period of inclement weather and high gas prices prevented users from accessing hunting grounds (OSM 2021b). The Unit 22A Unalakleet closure to all users was also changed when the Board adopted Proposal WP08-36/37 with modification to allow residents of Unalakleet to harvest one bull moose during an Aug. 15–Sep. 14 season, by Federal registration permit. As part of the analysis for this proposal, a Section 804 analysis was conducted for Unit 22A Unalakleet, which determined that residents of Unalakleet were the most dependent on moose in the area (OSM 2021a). The BOG also lifted the State closure in 2007 via adoption of State Proposal 19 and established a Sep. 1–14 moose season in Unit 22A Unalakleet.

In 2010, Proposal WP10-80, submitted by the Stebbins Community Association, requested that the winter moose season in Unit 22A remainder be shifted from Jan. 1–31 to Jan. 15–Feb. 15. The Board adopted the proposal with modification to extend the season to February 15 but kept the January 1 start date. The modification provided additional harvest opportunity to federally qualified subsistence users (OSM 2021b).

In 2012, Special Action WSA11-09 was approved by the Board (OSM 2021b) and Emergency Order 05-06-12 was issued by the State to provide a 14-day extension to the winter moose season in Unit 22A remainder to provide additional harvest opportunity. Once again, winter weather of 2011/12 was unusually cold and prevented many federally qualified subsistence users from harvesting moose during the Jan. 1–Feb. 15 season.

In 2013, ADF&G submitted State Proposal 14 to establish a Dec. 1–31 may-be-announced season in Unit 22A Unalakleet. This was due to the State's harvest quota not being met during the Sep. 1–14 season in regulatory years 2011 and 2012. The BOG adopted Proposal 14 at their January 2014 meeting, establishing a winter season, effective in 2014. Harvest during this season was limited to one antlered bull and was open to residents only. In 2013, 2014 and 2015, State harvest quotas remained unmet for the fall registration hunt in Unit 22A Unalakleet. As a result, the season was extended from Sep. 1–14 to Sep. 1–20 each year by Emergency Order (05-05-13, 05-11-14, 05-08-15, respectively). In 2015, the quota was met during the extended season and as a result, the season was closed by Emergency Order on September 17, 2015 (05-09-15).

In 2017, the BOG extended the State nonresident season in Unit 22A North, from Sep. 1–14 to Sep. 1–20, by adopting Proposal 27 at their January 2017 meeting. The BOG expressed concern about increasing nonresident harvest in an area where subsistence harvest is high, and deliberated the merits of requiring a registration permit, in order to closely monitor harvest. Ultimately, they concluded that the high bull:cow ratio in the area provided sufficient protection against overharvest and adopted the proposal without modification. The State also changed its fall season dates in Unit 22A Unalakleet from Sep. 1–14 to Sep. 1–20 to align regulations with the season dates previously provided through season extension by emergency orders. However, a 2017 population survey demonstrated an increase in the Unit 22A Unalakleet moose population, resulting in an increased harvest quota. ADF&G issued

an emergency order to first open, then extend the winter season until January 31, 2018, although the quota was still not met. In 2018, ADF&G extended the fall moose season until Sep. 30 as the quota had not been met and petitions from RM841 permit holders and the Native Village of Unalakleet indicated preference for increased fall hunting opportunity over winter.

Also in 2017, the Board considered Temporary Special Action WSA17-01, which requested the Federal public lands closure in Unit 22A remainder be rescinded Sep. 1–30, 2017. The proponent asserted that the moose population in this hunt area had grown considerably, due in part to the rapid growth of the Unit 18 moose population. The Board rejected this request on the grounds that conservative management of the Unit 22A remainder moose population was still warranted but acknowledged that continued review of the issue was prudent to ensure that the closure remained justifiable.

In 2018, Proposals WP18-37 and WP18-38 requested that the Federal public lands closures in Unit 22A remainder and 22A North, respectively, both be rescinded Sep. 1–20, to coincide with the State's nonresident season. The Board adopted both proposals with modification to open Federal public lands to the harvest of moose by all federally qualified subsistence users, which includes all residents of Unit 22. In their deliberation, the Board expressed the difficulty of the decision, noting the absence of clear biological evidence to support fully rescinding the closure. They opted for the more conservative incremental liberalization, but again expressed an interest in additional population level information that might support removal of the closure in the future.

In 2020, both Federal and State Boards considered proposals regarding moose in Unit 22A. The BOG adopted Proposal 38 as amended, which extended the resident fall and winter seasons in Unit 22A Unalakleet. The amendment changed the boundary between the Unit 22A North and Unit 22A Unalakleet hunt areas. The Village of Shaktoolik and the Southern Norton Sound Fish and Game Advisory Committee (AC) supported the amendment to change the hunt area boundary to better align with traditional hunting areas.

The Federal Subsistence Board rejected Proposal WP20-41, which was the same request as WP18-38. The Council opposed WP20-41 due to lack of biological information and concern over the negative impacts from non-local and guided airplane hunters who could easily access habitat where the moose currently go for protection. The Board rejected WP20-41 in deference to the Council. However, several Board members supported WP20-41 as they did not think it would create a biological concern or result in lost subsistence hunting opportunity due to low harvests and increases in the moose population. The Board also committed to working with ADF&G to conduct moose surveys in Unit 22A in 2020 (FSB 2020).

Also in 2020, the Board did adopt Proposal WP20-42 to rescind the closure to NFQU in Unit 22A remainder from Sept. 1–30, while maintaining the closure for the rest of the year. The Board commented that while current biological information for Unit 22A remainder was lacking, adjacent units had medium-high density moose populations with good bull:cow ratios. Additionally, the Board noted Unit 22A remainder is extremely remote and the number of NFQU accessing the hunt area was likely low. Guiding on USFWS lands within the hunt area was limited to one guide with a maximum

harvest of eight bulls per year. Federally qualified subsistence users still have a priority in the hunt area due to a longer season, and the potential for user conflicts and overharvest remains low.

In 2022, the Board adopted Proposal WP22-48, which aligned the hunt area boundaries for moose in Unit 22A North and Unit 22A Unalakleet with the State boundaries, shifting the boundary between the two subunits from the Tagoomenik and Shaktoolik river drainages to the Egavik Creek drainage. This change allowed residents of Shaktoolik to harvest moose in traditional harvest areas. They also adopted WP22-49, which requested rescinding the Federal lands closure in Unit 22A North from Sept. 1-20 to coincide with the State's nonresident moose season. The Council was opposed to this proposal as they believed opening this area to sport hunters while subsistence users cannot access the same area does not favor a subsistence priority. However, the Board stated there was no biological concern and the moose population in the area could support the additional harvest from sport hunters.

Also in 2022, the Board voted to modify Wildlife Closure Review WCR22-09B to allow harvest by all federally qualified subsistence users in Unit 22A Unalakleet. They felt there was not enough biological evidence of a conservation concern to warrant maintaining the closure and wanted to incrementally ease the restriction to allow more harvest. WCR22-09C was retained as part of the consensus agenda at the same time. While there was evidence of a growing moose population, the Board wanted to retain the closure in Unit 22A remainder to assess any increase in harvest as the result of partially rescinding the closure in 2020.

In 2024, the BOG adopted Proposal 24 as amended to modify the moose season dates in Unit 22A Unalakleet. Proposal 24, submitted by ADF&G, requested codifying winter season dates of Dec. 1–Jan. 31 and eliminating the may-be-announced winter season because there was no longer a harvest quota and to reduce the regulatory burden on ADF&G staff of issuing Emergency Orders announcing the winter season. The BOG amended the proposal to change both the fall and winter season dates to Aug. 1–Sept. 30 and Dec. 1–last day of February.

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 went from highs of 1.0–1.5 moose/mi^2, to lows of 0.2–0.5 moose/mi^2 (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 (Germain 2023). Specific population objectives include:

- Unit 22: 5,000–7,000 moose
- Unit 22A: 600–800 moose

- Units 22A, B, D and E: post-hunt sex ratio of 30 bulls:100 cows
- Harvest objective: 300–680 moose (in all of Unit 22)

In 2024, ADF&G estimated the total Unit 22 moose population at 6,700 moose, which is within State management objectives (ADF&G 2024a). Spring abundance and fall composition surveys are conducted on a four-year rotating schedule by survey area to assess population status and trends. Surveys are limited to select drainages because of logistics, weather, and the prioritization of regional resources (Gorn and Dunker 2014, Dunker 2022, pers. comm.). Consequently, management decisions for moose throughout Unit 22A have typically been made based on surveys conducted in and around the Unalakleet River drainage. Specifically, the Unit 22A survey area is in the Unit 22A Unalakleet hunt area and contains similar habitat and conditions to Unit 22A North. This is the only survey conducted for all of Unit 22A. Survey data is then extrapolated to derive population estimates for Unit 22A North and 22A remainder. The estimate for Unit 22A North also relies on population information from adjacent Unit 22B, to support and improve the extrapolated estimate. Given the limited biological information available for and greater distance of Unit 22A remainder from the Unalakleet survey area, this analysis also considers population estimates in adjacent areas, including Unit 21E to the southeast, and Unit 18 to the south to evaluate the moose population status in Unit 22A remainder.

Based on population survey data from Unit 22A Unalakleet and extrapolated estimates for Units 22A North and Unit 22A remainder, the total Unit 22A moose population far exceeds State management objectives, with estimates of 2,043 moose in 2017 and 1,866 moose in 2021 (Henslee 2024, pers. comm).

Unit 22A Unalakleet

The moose population in this area has been increasing since 2003 and was estimated to be 840 moose in 2017 (**Figure 1**). This estimate is above the upper bound of the management objective for the entirety of Unit 22A of 600–800 moose. The following survey in 2021 estimated this population at 766, which is lower than the previous estimate, but still within the management objective. The bull:cow ratio has remained well above management objectives since 2003 and peaked at over 120 bulls:100 cows in 2016 and 2020 (**Figure 3**). This unusually high bull:cow ratio raises questions about the influences of local harvest patterns and moose movements. Local biologists believe that this issue warrants further investigation (BOG 2017, SPRAC 2017).

Fall calf:cow 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). Spring surveys, in addition to estimating abundance, estimate the percentage of 10-month-old calves which serves as an index of recruitment (Germain 2023). While calf:cow ratios have only been below 20 calves:100 cows once in 2006 (**Figure 4**), all other calf:cow ratios are 30 or above and indicative of a stable population, although abundance has increased considerably as shown in **Figure 1**.

Unit 22A North

Based on the survey data and results in Unit 22A Unalakleet, the extrapolated population estimate for 22A North was 645 moose in 2017 and 590 moose in 2021 (**Figure 1**, Henslee 2024). Please see Unit 22A Unalakleet section for more detail.

Unit 22A Remainder

Based on the survey data and results in Unit 22A Unalakleet, the extrapolated population estimate for 22A Remainder was 558 moose in 2017 and 510 moose in 2021 (**Figure 1,** Henslee 2023). Moose population information from adjacent units is included below to provide further insights into the status of the Unit 22A remainder moose population.

Unit 21E

Moose are present throughout Unit 21E, but local residents reported declining populations beginning in the mid-1990s. In response, the BOG established an intensive management (IM) plan to reduce predators for Unit 21E in 2010, but to date, wolf control has not been initiated and the IM program is inactive (ADF&G 2016). Population estimates between 2000 and 2012 indicate that the population was relatively stable (**Figure 2**). The most recent survey data available is from 2019, when the moose population was estimated to be 8,607 moose, which is below the minimum population objective of 9,000 moose. The population is believed to be stable at 1.1 moose/mi^2, exceeding the IM objective of 1.0 moose/mi^2 (Peirce 2018). Herd composition metrics are above management objectives of post-hunt ratios of 30 bulls and 40 calves:100 cows. Bull:cow ratios in Unit 21E were high between 2008 and 2011, averaging 62 bulls:100 cows (**Figure 3**), exceeding this management objective. Between 2008 and 2011, the fall calf:cow ratio averaged 45 calves:100 cows, also above the management objective and indicative of a growing population.

Unit 18

The Yukon River moose population currently occupies most of the available riparian habitat in the lower Yukon River drainage and has increased in abundance since 2002 (Perry 2023). Moose densities are at moderate to high levels and continue to grow (Perry 2023). There are several moose survey areas in Unit 18, but the Lowest Yukon and Andreafsky areas are the most relevant to this analysis as they are closest to Unit 22A remainder. Population (and density) estimates from 2021 are 12,031 (2.1moose/mi^2) moose and 6,852 (1.7moose/mi^2) moose, respectively (**Figure 2**), which greatly exceed the management objective for the lower Yukon River, which is to grow the population to at least 4,000 moose.

Composition surveys are conducted periodically to provide additional information about herd health (**Figures 3, 4**). In the Lowest Yukon survey area from 2005 to 2016, the bull:cow ratio has averaged 33 bulls:100 cows, which is above the management objective of 30 bulls:100 cows (**Figure 3**). The Andreafsky area has been well above management objectives, averaging 51 bulls:100 cows from 2010–2020 (**Figure 3**). The average calf:100 cow ratio has been 71 and 45 in the Lowest Yukon and Andreafsky survey areas, respectively, which are also well above the management objective of 30

calves:100 cows (**Figure 4**). Calf:cow ratios in these survey areas have been consistently high and are indicative of a growing moose population (**Figure 4**) (Perry 2006, 2008, 2014, 2023; Rearden 2015, Oster 2020).

The degree to which moose dispersal from Units 18 and 21E are influencing moose density in southern Unit 22 is unknown. However, given the continued growth of the Yukon, Andreafsky, and the Unit 21E moose populations, it is likely that some migration is occurring. Local biologists report that, in Unit 18, moose can be found anywhere there are willows present (Rearden 2017, pers. comm.). This suggests that movement through the riparian corridors of the Andreafsky drainages into Unit 22A is likely. During its April 2020 meeting, the Board received public testimony that moose have been observed traveling between Units 18 and 22A, and that the rolling hills and low passes that separate these units makes for easy moose travel (FSB 2020).

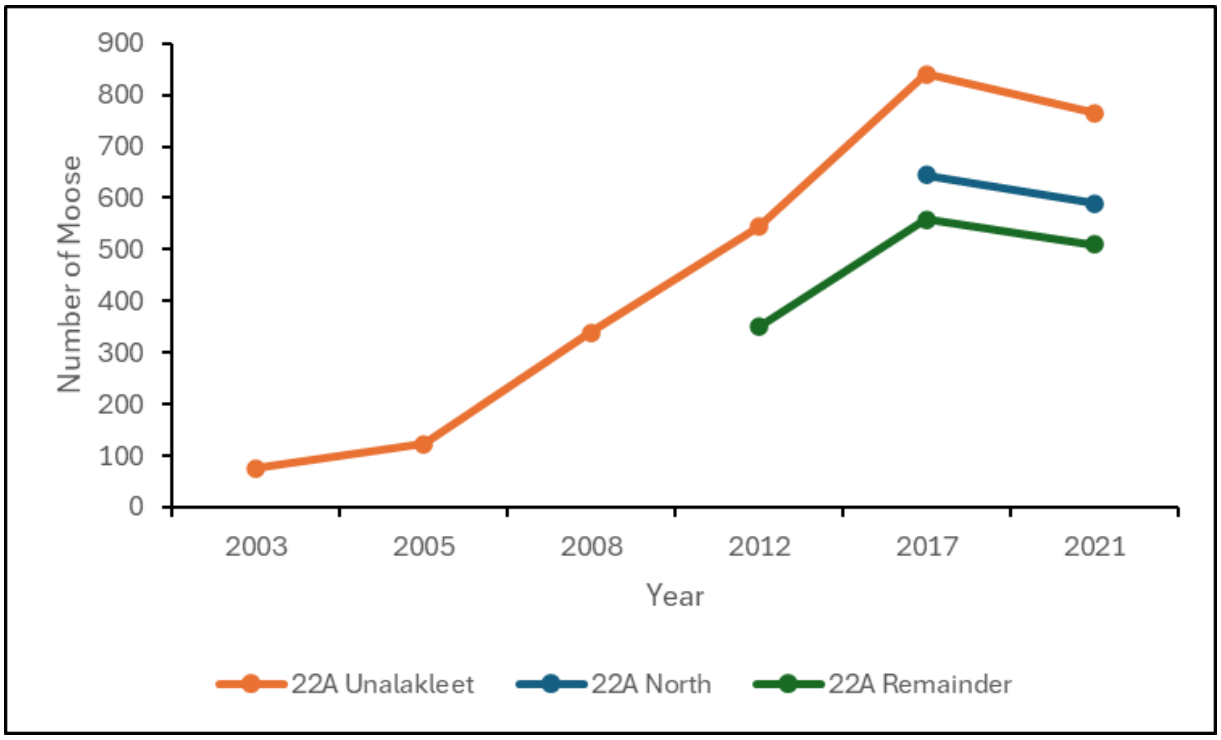


Figure 1. Moose population estimates for Unit 22A. 22A North and 22A Remainder estimates are extrapolated from Unit 22A Unalakleet estimates (Henslee 2024, pers. comm.).

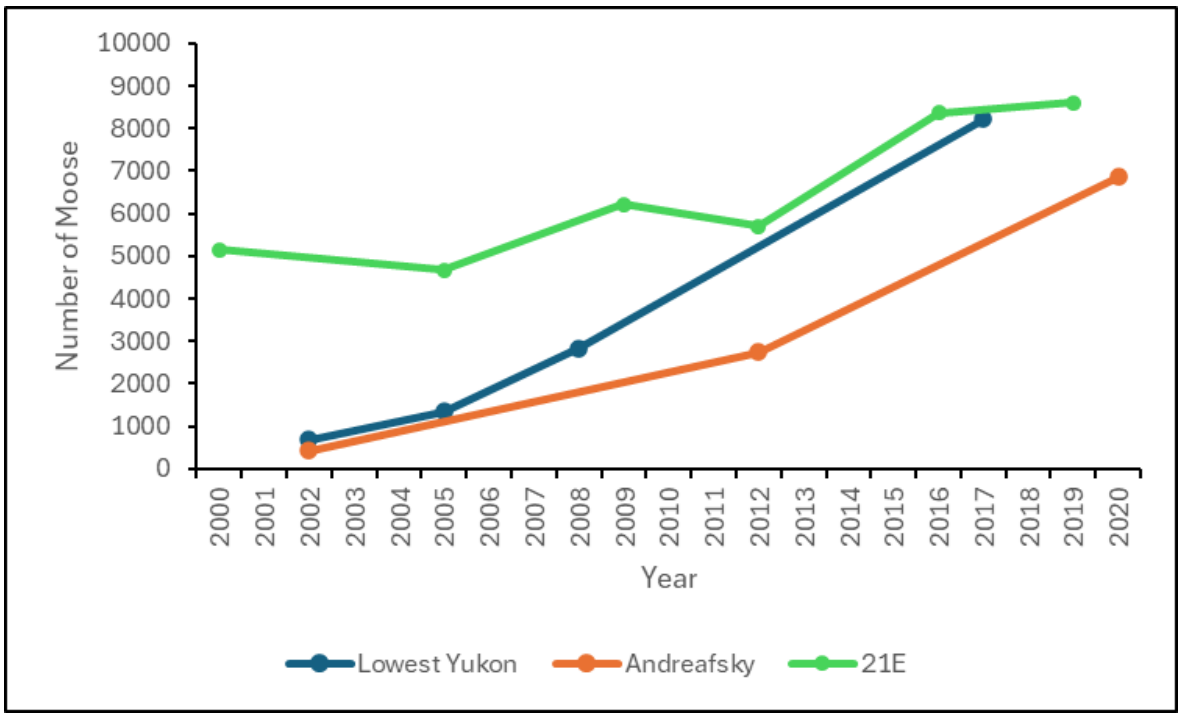


Figure 2. Moose population estimates for survey areas adjacent to Unit 22A remainder (Peirce 2014 and 2017, pers. comm.; Reardon 2015 and 2017, pers. comm.; Burch 2019, pers. comm.; ADF&G 2021a, 2021b).

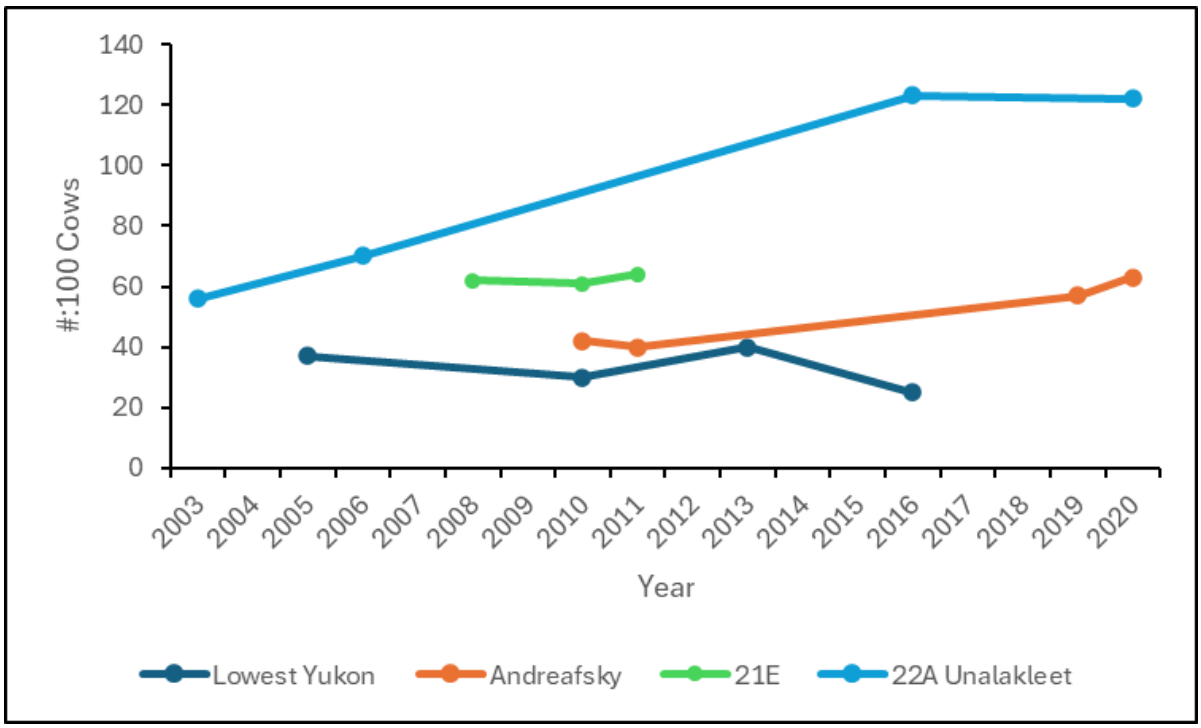


Figure 3. Bull:100 cow ratios for survey areas in Units 18 Lowest Yukon, 18 Andreafsky, 21E, and 22A Central (Unalakleet) (Henslee 2024, pers. comm.; Peirce 2014, 2017; Burch 2019, pers. comm.).

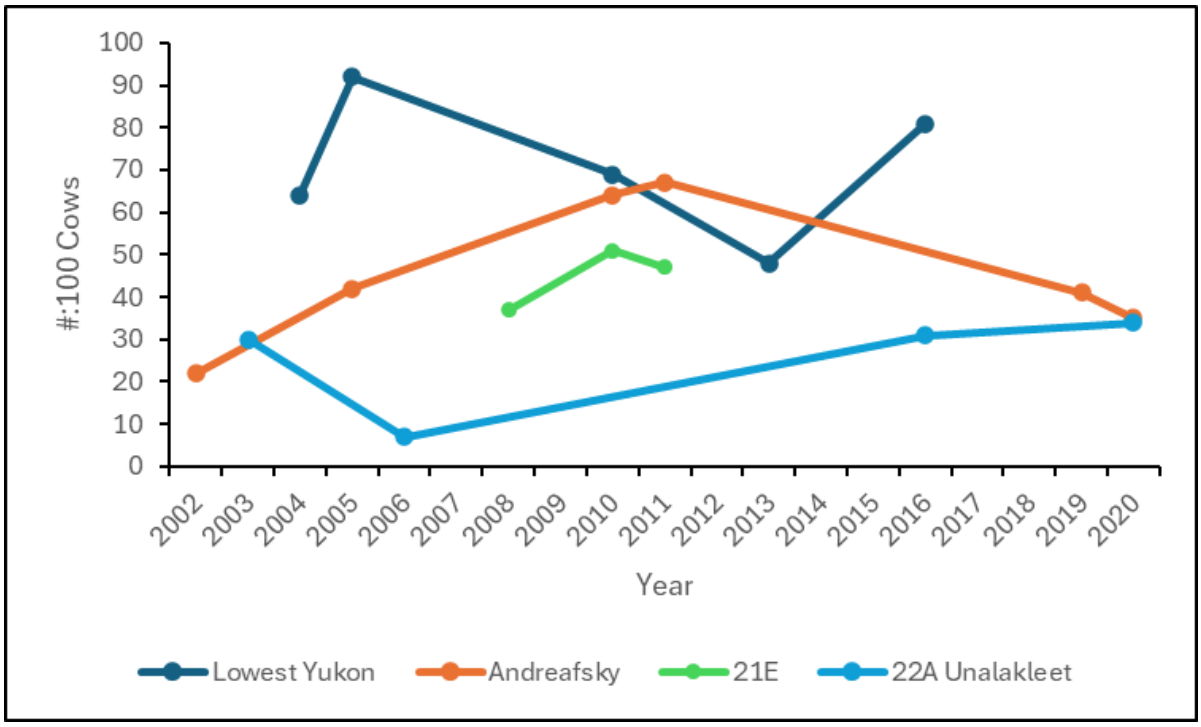


Figure 4. Calf:100 cow ratios for survey areas in Units 18 Lowest Yukon, 18 Andreafsky, 21E, and 22A Central (Unalakleet) (Henslee 2024, pers. comm.; Peirce 2014, 2017; Burch 2019, pers. comm.).

Cultural Knowledge and Traditional Practices

The Iñupiaq, Siberian Yupik, and Central Yup'ik people of the Seward Peninsula 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).

Most residents of Unit 22 prefer to hunt moose in late summer and early fall, when access by roads and rivers is best, and the moose are not yet in rut (SPRAC 2019a, Persons 2000). In some communities, such as Stebbins, the winter moose hunt has historically been more important (Georgette et al. 2004, Braem et al. 2017). In addition to harvest by hunters, local knowledge shared at Council meetings indicates that predation by wolves and brown bears is increasingly impacting the Unit 22 moose population (SPRAC 2020, SPRAC 2019a, 2019b).

This analysis reviews closures to moose hunting in three separate portions of Unit 22A: Unit 22A North, Unit 22A Unalakleet, and Unit 22A remainder. All three closures apply to non-federally qualified users, while federally qualified subsistence users—residents of Unit 22— remain eligible to hunt moose on Federal public lands throughout Unit 22A.

Unit 22A North

Shaktoolik is located on the eastern shore of Norton Sound, 125 miles east of Nome and 33 miles north of Unalakleet (DCRA 2024). It is the only community located within Unit 22A North (**Map 1**). Shaktoolik has been relocated several times due to erosion and other natural factors (Ray 1983, DCRA 2024). In 2023, the community had an estimated population of 207 (ADLWD 2023).

A subsistence study conducted in the early 1980s documented Shaktoolik's preferred moose hunting areas, which included the Shaktoolik River, and particularly the portions upstream of Punuk (Thomas 1982), a local place name meaning "little hill," or "little bluff" (Ray 1983). Hunters preferred this area because "from Punuk upriver, hills are available to allow the hunters to climb to higher elevations and glass the surrounding area" (Thomas 1982: 233). Thomas noted that moose are important to Shaktoolik residents because they "can be harvested in the fall when caribou are not accessible due to lack of snow cover" (Thomas 1982: 232). More recently, in 2009, surveyed households in Shaktoolik obtained 57% of their moose harvest in August and the remaining 43% in September (Braem 2012).

Moose use by residents of Shaktoolik has been documented in four survey years between 1998 and 2009 (Georgette et al. 2004, Braem 2012, ADF&G 2024, **Table 1**). Based on the survey administered for 2009, the most recent year for which data are available, Shaktoolik harvested more caribou than moose, but moose were still an important part of the subsistence diet for many households (Braem 2012). On average, residents of Shaktoolik harvested 13 moose per survey year, resulting in about 31.1 pounds of food per person, and an average of 60% of surveyed households used moose (ADF&G 2024, **Table 1**). Of note, Shaktoolik's moose harvest, as measured both by the number of moose harvested and the pounds of moose harvested per person, has declined since surveys began being conducted in 1998 (ADF&G 2024, **Table 1**). Likewise, the percentage of surveyed households using moose has also declined over time (ADF&G 2024**, Table 1**).

Unit 22A Unalakleet

The village of Unalakleet is located at the mouth of the Unalakleet River in eastern Norton Sound, approximately 148 miles southeast of Nome (DCRA 2024) (**Map 1**). Unalakleet is a subregional hub community, but it is not connected by road to Nome (Ahmasuk and Trigg 2007). The Kaltag Portage,

an important traditional trade route, ran from Kaltag along the Unalakleet river, ending at Unalakleet (Pratt 2012). Since the mid-nineteenth century the Unalakleet River has marked a rough linguistic boundary between speakers of Iñupiaq to the north and Central Yup'ik speakers to the south (Woodbury 1984). In 2023, Unalakleet had an estimated population of 685 (ADLWD 2023).

Moose harvest by residents of Unalakleet has been documented in subsistence surveys in 2002 and 2004 (Georgette et al. 2004, ADF&G 2024, Table 2). During the 2002 study year, residents of Unalakleet harvested all their moose in August and September (Georgette et al. 2004). **Table 2** shows that Unalakleet residents harvested an average of 19 moose per survey year, resulting in about 14 pounds of food per person. An average of 60% of households used moose across both study years (ADF&G 2024).

Unit 22A remainder

There are two communities located within Unit 22A remainder, Stebbins and Saint Michael (**Map 1**). Both are Central Yup'ik communities (DCRA 2024). Stebbins is located on the northwest coast of St. Michael Island, 120 miles southeast of Nome, and it is connected by road to Saint Michael (Magdanz et al. 2007, Braem et al. 2017). The Yup'ik name for the village is *Tapraq*, while the name Stebbins first appeared in 1900 (Ray 1983, DCRA 2024). Stebbins is culturally connected to communities in the Yukon Delta, and many residents trace their ancestry to Nelson Island (Wolfe 1981). In 2023, Stebbins had an estimated population of 631 (ADLWD 2023).

Saint Michael is also located on the southern shore of Norton Sound, on the opposite side of Saint Michael Island from Stebbins, 125 miles southeast of Nome (DCRA 2024). The Yup'ik name for Saint Michael is *Taciq* (DCRA 2024). A Russian American Company trading post was built at Saint Michael in 1833, and many residents have Russian ancestry (DCRA 2024). In 2023, Saint Michael had an estimated population of 435 (ADLWD 2023).

Moose use by residents of Stebbins has been documented in three subsistence surveys conducted between 1980 and 2013 (Wolfe 1981, Georgette et al. 2004, Braem et al. 2017, ADF&G 2024, **Table 3**). **Table 3** shows that residents of Stebbins harvested an estimated average of 15 moose per survey year, resulting in 16 pounds of food per person (ADF&G 2024). On average, 54% of surveyed households used moose across all survey years (ADF&G 2024, **Table 3**).

A subsistence survey of Saint Michael was conducted in 2003 (ADF&G 2024, Table 4). Table 4 shows that in 2003 residents of Saint Michael harvested an estimated five moose, resulting in about six pounds of food per person (ADF&G 2024). Forty-four percent of surveyed households in Saint Michael used moose in 2003 (ADF&G 2024).

There is more information available on moose hunting practices in Stebbins than Saint Michael. In 2013, ADF&G, Division of Subsistence documented a wide search area for moose by residents of Stebbins, who traveled as far as the Yukon River communities of Alakanuk and Emmonak for their hunting (Braem et al. 2017). This may indicate difficulty finding moose locally, or it may reflect cultural connections with these Yukon River communities. Search areas for moose documented by

Braem et al. (2017) also included Federal public lands in the vicinity of both Stebbins and Saint Michael.

During the 2013 study year, residents of Stebbins harvested most of their moose in August and September, with some additional harvest occurring in December and January (Braem et al. 2017). In an earlier study year, 2002, most of Stebbin's moose harvest occurred in December and January (Georgette et al. 2004). Lack of snow cover due to late freeze-up, low snowfall and thinner ice on rivers have made it more difficult for Stebbins hunters to take advantage of their winter moose hunt in some years (Braem et al. 2017, SPRAC 2017). Twenty-six percent of surveyed Stebbins households reported needing more moose in 2013, the most recent survey year (Braem et al. 2017). The Council member from Stebbins has previously requested that a survey be conducted of moose in Unit 22A remainder, due to conservation concern s (SPRAC 2021, 2023).

Caribou are not reliably available enough to mitigate challenges in accessing moose. The closest winter range of the Western Arctic caribou herd is 50 miles away from Stebbins. This contrasts with the situation 20 years ago, when caribou were closer to the community during winter months. Subsistence harvest for moose and caribou has historically been supplemented by use of reindeer, but freezing rain conditions now often result in widespread scattering of the herds (Braem et al. 2017).

Table 1. Three measures of moose use by residents of Shaktoolik as documented in subsistence surveys from 1998 to 2009 (ADF&G 2024).

Year	Estimated Number of Moose Harvested	Estimated Pounds of Moose Harvested per Person	Percentage of Surveyed Households Using Moose
1998	21	47.8	82%
1999	14	32.1	69%
2003	10	25.4	62%
2009	8	18.4	27%
Avg	**13**	**31.1**	**60%**

Table 2. Three measures of moose use by residents of Unalakleet as documented in subsistence surveys conducted from 2002 to 2006 (ADF&G 2024).

Year	Estimated Number of Moose Harvested	Estimated Pounds of Moose Harvested per Person	Percentage of Surveyed Households Using Moose
2002	29	20.5	67%
2004	9	6.6	53%
2006	3	2.4	6%
Avg	**14**	**10.1**	**42%**

Table 3. Three measures of moose use by residents of Stebbins as documented in subsistence surveys conducted from 1980 and 2013 (ADF&G 2024).

Year	Estimated Number of Moose Harvested	Estimated Pounds of Moose Harvested per Person	Percentage of Surveyed Households Using Moose
1980	5	9.4	No data
2002	20	17.4	42%
2006	26	24.2	89%
2013	20	19.0	66%
Avg	**18**	**18.2**	**66%**

Table 4. Three measures of moose use by residents of Saint Michael as documented in subsistence surveys conducted in 2003 and 2006 (ADF&G 2024).

Year	Estimated Number of Moose Harvested	Estimated Pounds of Moose Harvested per Person	Percentage of Surveyed Households Using Moose
2003	5	6.1	44%
2006	17	20.5	49%
Avg	**11**	**13.7**	**47%**

Harvest History

Most of the reported harvest within all of Unit 22A is attributable to local residents, defined here as federally qualified subsistence users who reside in Unit 22. Between 2000 and 2023, local residents have been responsible for 71% of all harvest; nonlocal residents, defined as residents of Alaska outside of Unit 22, were responsible for 6% of moose harvested, while nonresidents, who are required to use a guide to harvest moose, were responsible for 23% of all moose harvested in Unit 22A.

Reported moose harvest in Unit 22A is not evenly distributed among the three hunt areas. This observation cannot be explained solely based on human population size and expected harvest pressure. For instance, the Unit 22A Unalakleet hunt area is home to 35% of Unit 22A residents, but accounts for 80% of the total reported harvest. In contrast, the remaining two hunt areas, Unit 22A North and Unit 22A remainder contain 11% and 54% of the human population but account for 4% and 16% of the total local resident moose harvest, respectively (ADLWD 2024; Henslee 2024, pers. comm.; OSM 2024). One explanation for this disparity may be the permit requirements and associated reporting rates. Specifically, Unit 22A Unalakleet requires a State or Federal registration permit, which includes penalties for non-reporting, while the other hunt areas require a harvest ticket that includes no such penalties. This suggests reported harvests in Unit 22A North and Unit 22A remainder (**Figures 5, 7**) do not sufficiently represent actual harvest within these hunt areas.

Unit 22A North

Reported harvest in Unit 22A North is very low, likely due to a combination of low hunting pressure and because harvest tickets do not have a strict reporting requirement. Between 2000 and 2023, total reported harvest ranged from 0–6 moose/year, averaging 2 moose/year. Over the same time period, local residents in Unit 22A North, nonlocal residents, and nonlocal residents reported harvesting 54%, 17%, and 30% of the total 22A North moose harvest, respectively (**Figure 5**). Reported moose harvest for the same time period by local Unit 22A North residents, nonlocal residents, and nonresidents averaged one moose/year, 0.3 moose/year, and 0.5 moose/year, respectively.

Additional harvest insight can be gained by considering results from household surveys. These surveys show that moose harvest by residents of Shaktoolik, the only community within Unit 22A North, was 10 and 8 moose in 2003 and 2009, respectively (ADF&G 2024, **Table 1**). This contrasts with the ADF&G harvest report of two moose in 2003 and zero moose in 2009 by local residents within Unit 22A North (Henslee 2024, pers. comm.). ADF&G estimates approximately 10–15 additional moose are harvested each year by local residents in Unit 22A North but are not reported (BOG 2017). ADF&G reports that given the very high bull:cow ratios observed in Unit 22A, hunting pressure is very low (Dunker 2022, pers. comm.), and additional bulls are available for harvest.

Reported harvest by user group varies annually and is inconsistent, with only nonresidents reporting harvests in some years, while in other years, only local residents report any harvests. The majority of harvest from Unit 22A North comes from local residents. While nonresident harvest does occur, it is at lower levels of harvest and not consistent. Since 2022, when the Federal lands closure was rescinded Sept. 1–20 to coincide with the State's nonresident season, no nonresident moose harvest has been reported in Unit 22A North

Unit 22A Unalakleet

The Unit 22A Unalakleet moose population is managed through Federal and State registration permits. Harvest under Federal regulations occurs by Federal registration permit (FM2201) (during a fall season (**Figure 6**). Harvest under State regulations occurs by registration permit hunt (RM841) during a fall season and by RM844 during a winter season. The population has recovered to such a high level that the State fall season was extended, and the winter season was permanently adopted into State regulations in 2024, and there is no longer a harvest quota. Both State hunts are only open to residents and there is no nonresident season.

Between 2000 and 2023, local residents in Unit 22A Unalakleet reported harvesting 93% of the total Federal and State Unit 22A Unalakleet moose harvest. Non-local residents account for 5% and nonresidents for 3% of the total reported moose harvest (even though the nonresident season was eliminated in 2004) in 22A Unalakleet (**Figure 6**). Over the same time period, total Federal and State moose harvest averaged 22 moose/year with harvest by local residents averaging 21 moose/year, non-local residents averaging 1 moose/year, and nonresidents also averaging 1 moose/year. Reported Federal harvest from 2008–2023 was 63 total moose, ranging from 1–10 moose/year and averaging 4 moose/year. The vast majority of harvest from Unit 22A Unalakleet comes from local residents. This

may be due to permit distribution requirements, the difficulty of accessing Federal and State lands, as well as the Federal lands closure to non-federally qualified users.

Unit 22A remainder

Between 2000 and 2023, total reported moose harvest in Unit 22A remainder ranged from 3–26 moose/year, averaging 14.6 moose/year. Local residents in 22A remainder, nonlocal residents, and nonresidents reported harvesting 35%, 6%, and 59% of the total 22A remainder moose harvest, respectively (**Figure 7**). Over the same time period, harvest by local residents, nonlocal residents, and nonresidents averaged 4 moose/year, 0.6 moose/year, and 10 moose/year, respectively.

However, moose harvest is trending upward, primarily due to increasing nonresident harvests with the highest harvest reported occurring in 2023. From 2018–2023, local residents averaged 2 moose/year or 12% of total harvest. Nonlocal residents averaged 1 moose/year or 5% of total harvest, while nonresidents averaged 16 moose/year or 84% of total harvest. A large majority of reported harvest from Unit 22A remainder comes from nonresident hunters who typically always report harvests when only harvest tickets are required. In 2020, the Federal lands closure in Unit 22A remainder was rescinded from Sept. 1–30, which coincides with the State's nonresident season. This may explain some of the increase in nonresident harvest.

Guide and Transporter Use

Guides are regulated by the Alaska Big Game Commercial Services Board. To operate within a specific guide use area, a guide must be registered in that guide use area, and it must be within a game management unit in which they are licensed to conduct hunts. In addition, guides must be authorized to operate within a given area by the public or private landowner (ADCCED 2024). In Guide Use Area 22-07, which encompasses Unit 22A remainder, there are six active guides (ADCCED 2024).

The bulk of the Federal public lands within Unit 22A remainder are managed by the Yukon Delta National Wildlife Refuge (Refuge) (**Map 1**). The Refuge maintains an exclusive guide concession for the Andreafsky portion of the Refuge, which includes southern Unit 22A and adjacent areas in Unit 18. This concession is awarded to a single competitor every ten years. Beginning in 2020, guided clients could hunt on the Federal public lands within Unit 22A remainder from Sept. 1–30, which corresponds with the State's non-resident moose season. Transporters are also authorized to work in the Andreafsky area. There is no limit on the number of transporters that can operate in a given area, though there are limits on the number of people they may take in (Rearden 2019, pers. comm.).

BLM, which also manages lands within Unit 22A remainder and North, requires guides to secure permits to operate on Federal public lands. Unlike the Refuge guide use program, the BLM program does not limit the number of permits issued to guides. Currently, six guides are permitted on BLM lands in Unit 22A. Currently, the BLM actively permits 2 guides to operate for moose in Unit 22A North and two guides in 22A remainder. In 2023 and 2024, guided hunters reported taking 23 and 21 moose in Unit 22 remainder, respectively (Justham, 2024 pers. comm.). Under BLM rules, transporters are not required to secure permits prior to operating on public BLM lands (Seppi 2017 and 2019, pers. comm.).

At its April 2019 meeting, the Council expressed concern about the potential impacts of guided moose hunting on moose migration into Unit 22A (SPRAC 2019).

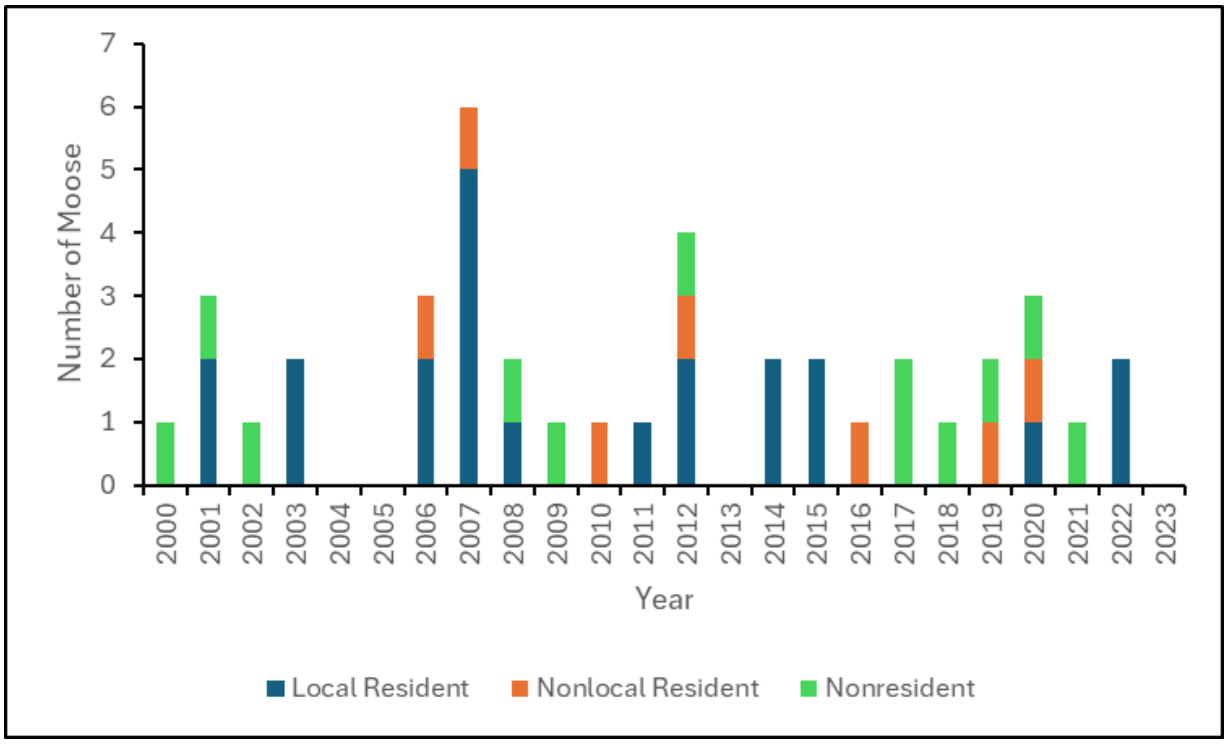


Figure 5. Reported moose harvest by user group in Unit 22A North, 2000–2023 (Henslee 2024, pers. comm.).

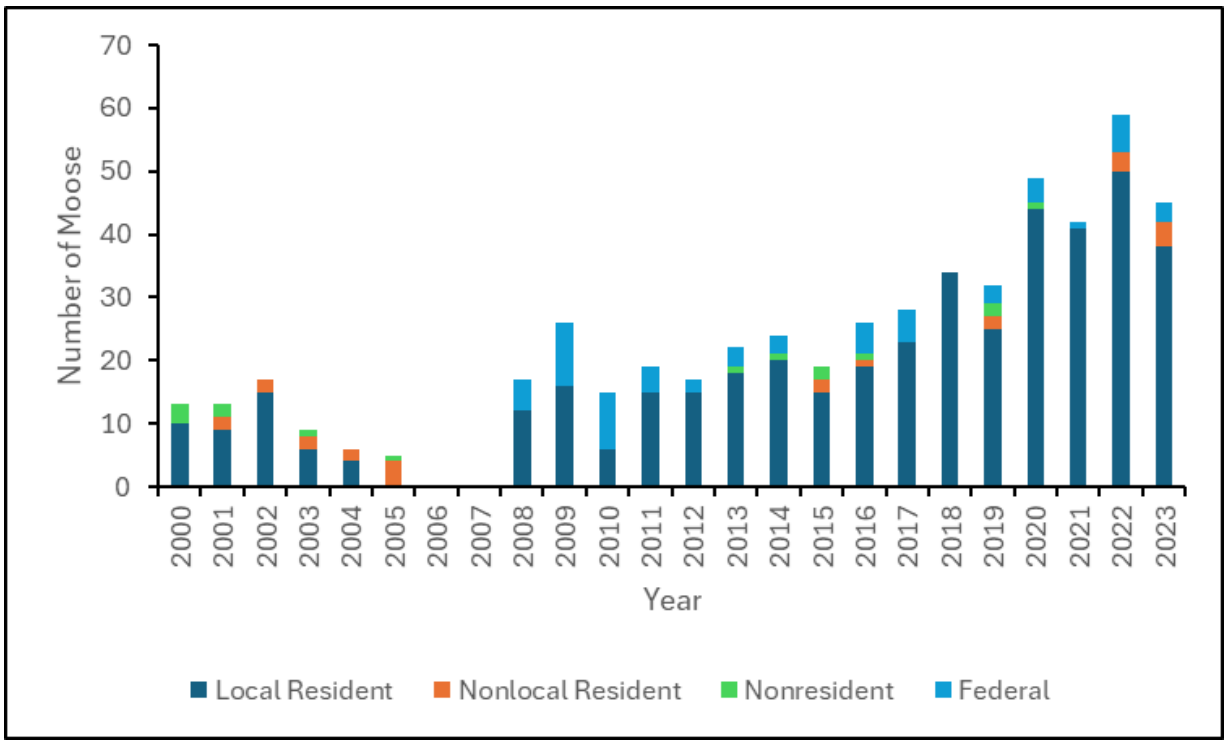


Figure 6. Reported moose harvest by user group in Unit 22A Unalakleet (Henslee 2024, pers. comm.).

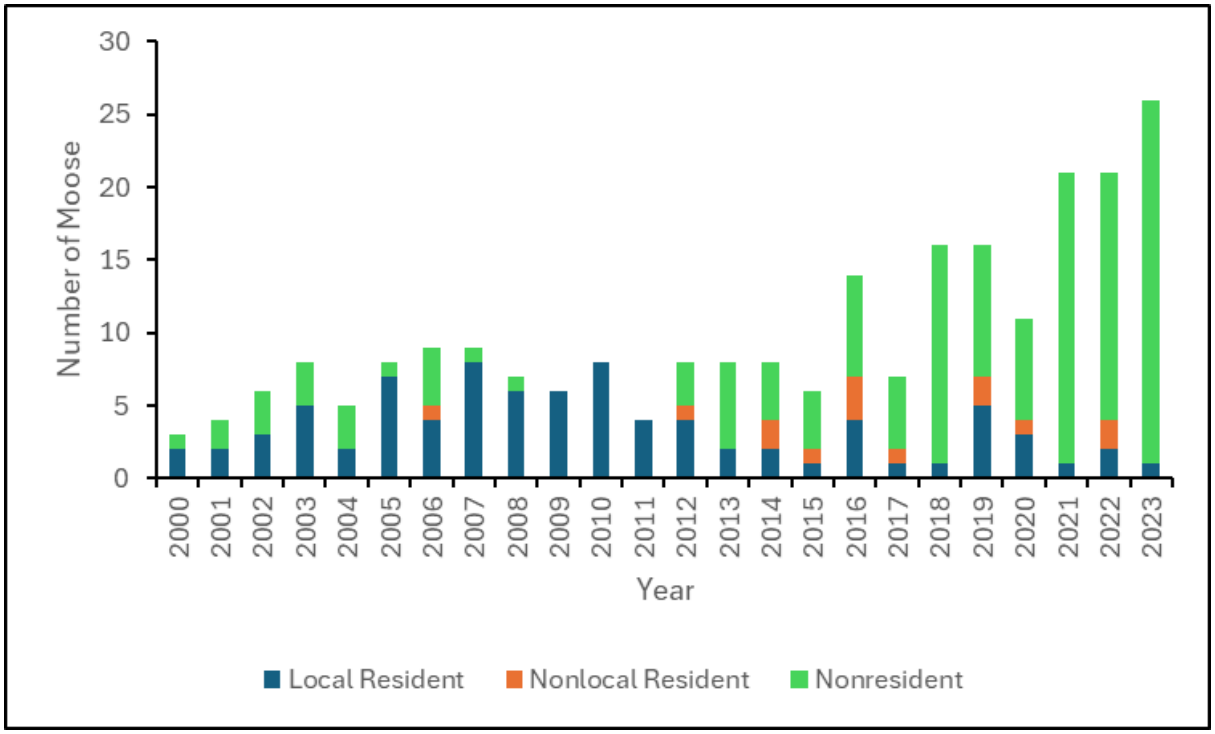


Figure 7. Reported moose harvest by user group in Unit 22A remainder (Henslee 2024, pers. comm.).

Alternative(s) Considered

One alternative considered was to require registration permits for the Unit 22A North and Unit 22A remainder moose hunts. This would improve harvest reporting and allow better tracking of harvest but would be more burdensome for users and administrators. However, this is beyond the scope of a closure review; a Federal regulatory proposal would need to be submitted to effect this change under Federal regulations. A proposal could also be submitted to the BOG to require a registration permit in these hunt areas under State regulations.

Another alternative considered was to extend the fall season to Aug. 1–Sept. 30 and establish a winter season from Dec. 1–last day of February in the Unit 22A Unalakleet hunt area to align with recently adopted State regulations. Currently Federal regulations are more restrictive than State regulations, precluding subsistence opportunity. However, this alternative is beyond the scope of a closure review; a Federal regulatory proposal would need to be submitted to effect this change under Federal regulations

Effects

If these closures are rescinded, non-federally qualified users would be able to hunt moose on Federal public lands in all of Unit 22A throughout the entirety of the State moose season. Over the last 5 years, reported nonlocal and nonresident harvest have averaged 5% and 27%, respectively. Rescinding the closure in Unit 22A Unalakleet would not affect nonresident harvest or potential user conflicts as there is no nonresident season in this hunt area, which is the portion of the Unit 22A moose population most heavily utilized by federally qualified subsistence users. Completely rescinding the closures in 22A North and in Unit 22A remainder would also not change nonresident harvest, as the closures have already been rescinded in these hunt areas during the nonresident seasons. Harvest by non-local residents may increase in all these hunt areas, although reported harvest by non-local residents has been extremely low historically and has been zero in some years (**Figures 5–7**).

The effects of rescinding the closure during September in Unit 22A remainder in 2020 on subsistence users is uncertain, although nonresident harvest has increased in the area since 2020, while local resident reported harvest has remained low (**Figure 7**). While this closure was originally enacted for reasons of conservation, subsistence users have reported difficulty in harvesting enough moose to meet their needs. Due to the remoteness of the unit, opening Federal lands in September had the potential to further disperse non-federally qualified users throughout the area and away from traditional hunting areas, reducing user conflicts. However, the converse was also a possibility due to the potential for more NFQU accessing the unit either through transporters or self-supported hunts.

The effects of rescinding the closure during the State's nonresident season in Unit 22A North in 2022 are also uncertain. Rescinding the closure allowed any of the five guides registered to operate within the hunt area to seek BLM permits to operate on Federal public lands. It also allowed transporters to operate on these lands in support of non-federally qualified users. While nonresident harvest was expected to increase as a result of rescinding the closure, nonresidents did not report any moose harvested in Unit 22A North in either 2022 or 2023 (**Figure 5**). The Shaktoolik River provides access

to Federal public lands, which increased the chances that rescinding the closure could result in additional nonlocal hunting pressure. However, reported harvest in Unit 22A North has been extremely low, likely due to the remoteness of the area and low harvest pressure.

Federally qualified subsistence users in Unit 22 may be affected by rescinding the Federal lands closure. If additional harvest has detrimental effects on the moose population, there will be long-term negative effects for local users. However, extremely high bull:cow ratios and population estimates far exceeding State management objectives in Unit 22A indicate no conservation concerns and that many surplus bulls are available for harvest.

In addition, an increase in nonlocal users may result in increased user conflict in the area. However, at the April 2020 Board meeting, the proponent of Proposal WP20-41 provided testimony to the Board that many of the Federal public lands he guides on in Unit 22A North are extremely remote and accessible only by airplane, and that the existing closure served only to concentrate all users on the same travel corridors along the Shaktoolik and other local rivers (FSB 2020).

Unit 22A North has a small amount of reported harvest that has remained stable for the last 20 years. If nonresident harvest were to increase, it may occur in areas outside of where local residents are harvesting their moose. Unit 22A remainder has seen the greatest increase in nonresident harvest, but also has the greatest chance of increased migration from adjacent units with a high population and very high bull to cow ratios. Again, most of this harvest is occurring outside of where local residents are harvesting their moose, so user conflicts are not expected.

OSM PRELIMINARY CONCLUSION

☐ **Retain the Status Quo**
☒ **Rescind the Closure**
☐ **Modify the Closure to**
☐ **Defer Decision on the Closure or Take No Action**

Justification

The moose populations appear to be increasing across Unit 22A and bull:cow ratios are extremely high, indicating an abundance of surplus bulls available for harvest and no conservation concerns. Rescinding these closures is not expected to substantially increase harvest as nonlocal resident harvest is very low and the closures were already rescinded during the nonresident seasons in Unit 22A North and remainder, and there is currently no State nonresident season in Unit 22A Unalakleet.

Rescinding these closures is in accordance with Federal Regulations (CFR100.10(d)(4)(vi)) and the Federal Subsistence Board closure policy, which states, closures shall be rescinded, “as soon as practicable once the conditions that originally justified the closure have changed.” The increasing moose abundance, high bull:cow ratios, and overall low harvest pressure demonstrate that the original conservation concerns which established these closures no longer exist. Therefore, rescinding these Federal land closures and providing harvest opportunity to all users is warranted.

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