

STAFF ANALYSIS
TEMPORARY SPECIAL ACTION
WSA 19-07

ISSUES

Temporary Wildlife Special Action Request, WSA19-07, submitted by Togiak National Wildlife Refuge (NWR) and Yukon Delta NWR, requests the harvest limit for Mulchatna caribou be decreased from two caribou to one caribou in all or portions of Units 9A, 9B, 9C, 17A, 17B, 17C, 18, 19A, and 19B for the 2019/20 regulatory year.

DISCUSSION

The proponents state that the summer 2019 population estimate for the Mulchatna Caribou Herd (MCH) was 13,500 caribou, which represents a 50% decline from the previous five years and is well below the State's minimum population objective of 30,000 caribou. The proponents believe this request will reduce harvest and help conserve the MCH. The proponents recognize this request will reduce harvest opportunity in the short run, but that conserving the MCH now will increase harvest opportunity in the future. The proponents also state that harvest of other resources such as moose may increase in response to this request.

Note: While the submitted request did not include the Alagnak River drainage in Unit 9C, the proponent clarified that they wanted this hunt area included in the request.

The applicable Federal regulations are found in 36 CFR 242.19(b) and 50 CFR 100.19(b) (Temporary Special Actions) and state that:

... After adequate notice and public hearing, the Board may temporarily close or open public lands for the taking of fish and wildlife for subsistence uses, or modify the requirements for subsistence take, or close public lands for the taking of fish and wildlife for nonsubsistence uses, or restrict take for nonsubsistence uses.

Existing Federal Regulation

Unit 9—Caribou

<i>Unit 9A—2 caribou by State registration permit</i>	<i>Aug. 1 – Mar. 15.</i>
<i>Unit 9B—2 caribou by State registration permit</i>	<i>Aug. 1 – Mar. 31.</i>
<i>Unit 9C, that portion within the Alagnak River drainage—2 caribou by State registration permit</i>	<i>Aug. 1 – Mar. 15.</i>
<i>Unit 9C, that portion draining into the Naknek River from the north, and Graveyard Creek and Coffee Creek—2 caribou by State registration</i>	<i>Aug. 1 – Mar. 15.</i>

permit. Public lands are closed to the taking of caribou except by residents of Unit 9C and Egegik

Unit 17–Caribou

Unit 17A-all drainages west of Right Hand Point—2 caribou by State registration permit Aug. 1 – Mar. 31.

Units 17B and 17C-that portion of 17C east of the Wood River and Wood River Lakes—2 caribou by State registration permit Aug. 1 – Mar. 31.

Unit 18–Caribou

Unit 18-that portion to the east and south of the Kuskokwim River—2 caribou by State registration permit Aug. 1 – Mar. 15.

Unit 18, remainder—2 caribou by State registration permit Aug. 1 – Mar. 15.

Unit 19–Caribou

Units 19A and 19B (excluding rural Alaska residents of Lime Village)—2 caribou by State registration permit Aug. 1 – Mar. 15.

Proposed Federal Regulation

Unit 9–Caribou

Unit 9A—2 1 caribou by State registration permit Aug. 1 – Mar. 15.

Unit 9B—2 1 caribou by State registration permit Aug. 1 – Mar. 31.

Unit 9C, that portion within the Alagnak River drainage—2 1 caribou by State registration permit Aug. 1 – Mar. 15.

Unit 9C, that portion draining into the Naknek River from the north, and Graveyard Creek and Coffee Creek—2 1 caribou by State registration permit. Public lands are closed to the taking of caribou except by residents of Unit 9C and Egegik Aug. 1 – Mar. 15.

Unit 17–Caribou

Unit 17A-all drainages west of Right Hand Point—2 1 caribou by State registration permit Aug. 1 – Mar. 31.

Units 17B and 17C-that portion of 17C east of the Wood River and Wood River Lakes—2 1 caribou by State registration permit Aug. 1 – Mar. 31.

Unit 18—Caribou

*Unit 18—that portion to the east and south of the Kuskokwim River—2 1 Aug. 1 – Mar. 15.
caribou by State registration permit*

Unit 18, remainder—2 1 caribou by State registration permit Aug. 1 – Mar. 15.

Unit 19—Caribou

*Units 19A and 19B (excluding rural Alaska residents of Lime Village)—2 Aug. 1 – Mar. 15.
1 caribou by State registration permit*

Existing State Regulation

Note: These are the State regulations for the 2019/20 regulatory year as established by emergency order 04-06-19. The State codified regulations have a harvest limit of 2 caribou, but are otherwise the same. No seasons are open to nonresidents within the range of the MCH.

Unit 9—Caribou

*Residents: Units 9A and 9C, that portion within the Alagnak River RC503 Aug. 1 – Mar. 15
drainage—one caribou by permit available online at
<http://hunt.alaska.gov> and in person in Anchorage, Bethel, Dilling-
ham, Fairbanks, Homer, King Salmon, McGrath, Palmer, Soldotna,
and at local license vendors beginning July 11*

*Residents: Unit 9B—one caribou by permit available online at RC503 Aug. 1 – Mar. 31
<http://hunt.alaska.gov> and in person in Anchorage, Bethel, Dilling-
ham, Fairbanks, Homer, King Salmon, McGrath, Palmer, Soldotna,
and at local license vendors beginning July 11*

*Residents: Unit 9C, that portion north of the north bank of the RC503 Aug. 1 – Mar. 31
Naknek River and south of the Alagnak River drainage—one cari-
bou by permit available online at <http://hunt.alaska.gov> and in per-
son in Anchorage, Bethel, Dillingham, Fairbanks, Homer, King
Salmon, McGrath, Palmer, Soldotna, and at local license vendors
beginning July 11*

Unit 17—Caribou

*Residents: Units 17A remainder, 17B and 17C east of the east RC503 Aug. 1 – Mar. 31
banks of the Wood River, Lake Aleknagik, Agulowak River, Lake
Nerka and the Agulupak River—one caribou by permit available
online at <http://hunt.alaska.gov> and in person in Anchorage, Bethel,
Dillingham, Fairbanks, Homer, King Salmon, McGrath, Palmer,
Soldotna, and at local license vendors beginning July 11*

Unit 18—Caribou

Residents: One caribou by permit available online at <http://hunt.alaska.gov> and in person in Anchorage, Bethel, Dillingham, Fairbanks, Homer, King Salmon, McGrath, Palmer, Soldotna, and at local license vendors beginning July 11 RC503 Aug. 1 – Mar. 15

Unit 19—Caribou

Residents: Units 19A and 19B— one caribou by permit available online at <http://hunt.alaska.gov> and in person in Anchorage, Bethel, Dillingham, Fairbanks, Homer, King Salmon, McGrath, Palmer, Soldotna, and at local license vendors beginning July 11 RC503 Aug. 1 – Mar. 15

Extent of Federal Public Lands

Collectively, Units 9A, 9B, 9C, 17A, 17B, 17C, 18, 19A, and 19B are comprised of 48% Federal public lands and consist of 32% U.S. Fish and Wildlife Service (USFWS) managed lands, 11% National Park Service (NPS) managed lands, and 5% Bureau of Land Management (BLM) managed lands (**Figure 1**). Land status by Unit is as follows.

Unit 9A is comprised of 40% Federal public lands and consists of 39% NPS managed lands and less than 1% each USFWS and BLM managed lands.

Unit 9B is comprised of 34% Federal public lands and consists of 26% NPS managed lands and 8% BLM managed lands

Unit 9C is comprised of 86% Federal public lands and consists of 78% NPS managed lands, 4% BLM managed lands and 4% USFWS managed lands.

Unit 17A is comprised of 87% Federal public lands and consists of 87% USFWS managed lands and less than 1% BLM managed lands.

Unit 17B is comprised of 8% Federal public lands and consists of 6% NPS managed lands, 1% BLM managed lands, and 1% USFWS managed lands.

Unit 17C is comprised of 25% Federal public lands and consists of 15% USFWS managed lands and 10% BLM managed lands.

Unit 18 is comprised of 67% Federal public lands and consists of 64% USFWS managed lands and 3% BLM managed lands.

Unit 19A is comprised of 23% Federal public lands and consists of 21% BLM managed lands and 2% USFWS managed lands.

Unit 19B is comprised of 13% Federal public lands and consists of 11% NPS managed lands, 2% BLM managed lands and less than 1% USFWS managed lands.

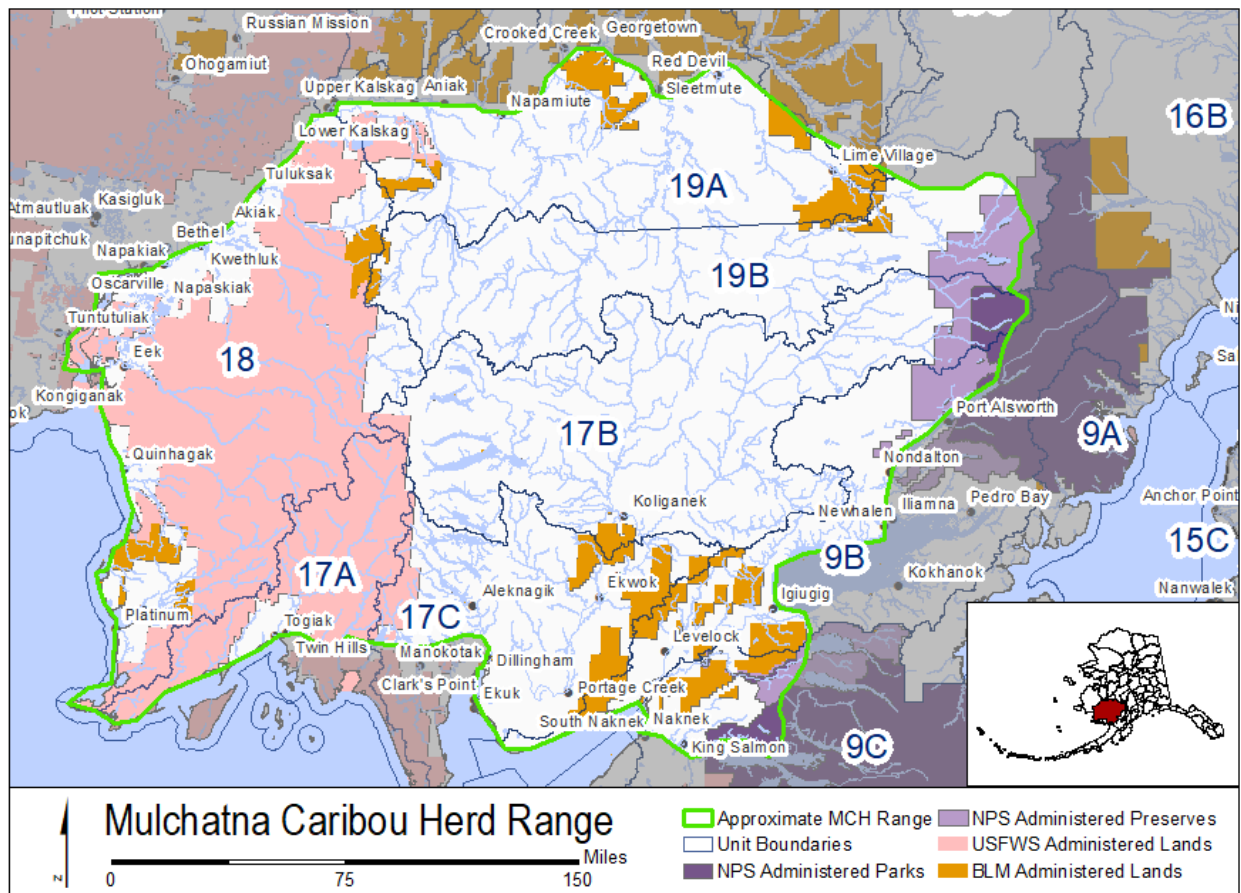


Figure 1. The Mulchatna Caribou Herd range covers ~60,000 square miles, primarily within Units 9B, 9C, 17A, 17B, 17C, 18, 19A and 19B.

Customary and Traditional Use Determinations

Residents of Units 9B, 9C and 17 have a customary and traditional use determination for caribou in Units 9A and Unit 9B.

Residents of Units 9B, 9C, 17, and Egegik have a customary and traditional use determination for caribou in Unit 9C.

Residents of Units 9B, 17, Eek, Goodnews Bay, Lime Village, Napakiak, Platinum, Quinhagak, Stony River, and Tuntutuliak have a customary and traditional use determination for caribou in Unit 17A, that portion west of the Izavieknik River, Upper Togiak Lake, Togiak Lake, and the main course of the Togiak River.

Residents of Units 9B, 17, Akiak, Akiachak, Lime Village, Stony River, and Tuluksak have a customary and traditional use determination for caribou in Unit 17A, that portion north of Togiak Lake that includes Izavieknik River drainages.

Residents of Units 9B, 17, Kwethluk, Lime Village, and Stony River have a customary and traditional use determination for caribou in Units 17A and 17B, those portions north and west of a line beginning from the Unit 18 boundary at the northwestern end of Nenevok Lake, to the southern point of upper Togiak Lake, and northeast to the northern point of Nuyakuk Lake, northeast to the point where the Unit 17 boundary intersects the Shotgun Hills.

Residents of Units 9B, 17, Akiachak, Akiak, Bethel, Eek, Goodnews Bay, Lime Village, Napakiak, Platinum, Quinhagak, Stony River, Tuluksak, and Tuntutuliak have a customary and traditional use determination for caribou in Unit 17B, that portion of Togiak National Wildlife Refuge within Unit 17B.

Residents of Units 9B, 9C, 9E, 17, Lime Village, and Stony River have a customary and traditional use determination for caribou in Unit 17 remainder.

Residents of Unit 18, Lower Kalskag, Manokotak, Stebbins, St. Michael, Togiak, Twin Hills, and Upper Kalskag have a customary and traditional use determination for caribou in Unit 18.

Residents of Unit 19A and 19B, Unit 18 within the Kuskokwim River drainage upstream from, and including, the Johnson River, and residents of St. Mary's, Marshall, Pilot Station, and Russian Mission have a customary and traditional use determination for caribou in Units 19A and 19B.

Regulatory History

As a result of the dramatic population increase the MCH experienced during the 1990s, harvest regulations were liberalized throughout the range of the herd. By 1997, both State and Federal seasons in portions of Units 9, 17, and 19 extended from fall through spring with liberal harvest limits and few restrictions. The subsequent population decline, beginning in 2004, resulted in the implementation of more restrictive regulations. Following is a summary of State and Federal regulatory changes since 2006.

At its spring 2006 meeting, the Alaska Board of Game (BOG) implemented more restrictive regulations for both resident and non-resident hunters. For resident hunters, they established an Aug. 1 – Mar. 15 season throughout the range of the herd. Previously, resident seasons ended on March 31 or April 15. The BOG also reduced the harvest limit throughout much of the range to three caribou, with only one caribou allowed Aug. 1 – Sep. 30. Nonresident seasons, which previously extended fall through spring, were reduced to Aug. 1 – Sep. 30.

The BOG further restricted harvest from the MCH in 2007. At that time, they reduced the resident harvest limit to two caribou with the restriction that no more than one bull could be taken and not more than one caribou could be taken Aug. 1 – Jan. 31. In addition, same day airborne harvest was eliminated for Units 9B, 17B, and 17C. The non-resident seasons were reduced to Sep. 1 – 15 at this time.

The Federal Subsistence Board (Board) considered Proposal WP07-23 in 2007, which requested Federal regulations for caribou in Units 9B and 17 be modified to reflect the recent changes in State regulation. Following the recommendation of several Subsistence Regional Advisory Councils (Councils), the Board adopted this proposal with modification to also include Units 18, 19A and 19B. However, this proposal was submitted prior to the BOG's 2007 regulatory changes and the Board's modification did not accommodate the recent changes in State regulation. Consequently, Federal regulations were aligned with the State's 2006 regulations rather than the 2007 regulations.

Following continued decline of the MCH, the BOG adopted Proposal 57 in 2009, which eliminated the nonresident caribou season throughout the range of the MCH.

The Board considered three proposals in 2010, all of which proposed further restriction on harvest of the MCH. Proposal WP10-51 requested that Federal caribou seasons in Units 9A, 9B, 17B, a portion of 17C, 18, 19A, and 19B be changed to Aug. 1–Mar. 31. The Board adopted this proposal with modification to end the seasons on March 15, as recommended by several Councils. Proposal WP10-53 requested that the harvest limit for caribou be set at two caribou throughout the range of the MCH, with the restriction that no more than one bull may be taken and no more than one caribou may be taken Aug. 1 – Jan. 31. The Board adopted this proposal. Proposal WP10-60 requested that the harvest limit for caribou in Unit 18 be reduced from three caribou to two caribou. This proposal was adopted by the Board with modification to include the restriction that no more than one bull may be taken and no more than one caribou may be taken Aug. 1 – Jan. 31, consistent with action taken on WP10-53. The result of the Board's actions in 2010 was that State and Federal regulations for caribou within the range of the MCH were largely aligned.

The BOG initiated intensive management for predator reduction within the range of the MCH in 2011. At their spring 2011 meeting, they established a predation management area in Units 9B, 17B, and 17C. At their spring 2012 meeting, they added Units 19A and 19C to the predation management area.

In 2012, the Board considered Proposal WP12-42, which requested that, in Unit 18, the harvest limit be reduced from two caribou to one caribou and the season be reduced from Aug. 1 – Mar. 15 to Aug. 1 – Sep. 3- and Dec. 20 – last day of February. The Board adopted the proposal with modification, which resulted in the establishment of two separate hunt areas in Unit 18. For the portion of Unit 18 east and south of the Kuskokwim River, the season was adjusted as proposed while the harvest limit remained at two caribou, with the restriction that not more than one caribou may be taken Aug. 1 – Sep. 30 or Dec. 20 – Jan. 31. For the remainder of Unit 18, there were no changes to regulations.

Shortly after the Board's decision on WP12-42, it received two Special Action Requests to make similar changes for the remainder of the 2011/12 regulatory year. WSA11-10 requested that the caribou season in Unit 18 be shortened by 2 weeks, to end on February 29, rather than March 15. WSA11-11 requested that Federal public lands in the portion of Unit 18 south and east of the Kuskokwim River be closed to the harvest of caribou by all users beginning March 1. The Board rejected both requests on the grounds that it would be detrimental to subsistence users and that there was insufficient evidence that the situation required immediate action.

In February 2013, the BOG adopted Proposal 45A, which required use of a registration permit (RC503) in Units 9A, 9B, portions of 9C, 17, 18, 19A, and 19B. Previously, MCH harvest was allowed with just a harvest ticket. These changes were aimed at improving harvest management and assessment of the MCH's response to the ongoing intensive management program.

The Board considered two Special Action Requests in 2013. The first, Temporary Special Action WSA13-02, requested alignment of Federal permit requirements and season dates with the recently modified State regulations. As a result of the Board's approval of this request, Federally qualified subsistence users hunting under Federal regulations were required to obtain a State registration permit in Units 9A, 9B, 9C, 17A, 17B, 17C, 18, 19A, and 19B. The Board's action also shortened the to-be-announced season in Units 17A remainder and 17C remainder from Aug. 1–Mar. 31 to Aug. 1–Mar. 15. These changes were in effect for the remainder of the 2013/14 regulatory year. The second request, Temporary Special Action WSA13-03, requested the closure of Federal public lands in Units 9A, 9B, 9C, 17A, 17B, 17C, 18, 19A, and 19B to the harvest of caribou, except by Federally qualified subsistence users. The Board rejected WSA13-03 on the grounds that the MCH population was within State management objectives, and composition metrics were showing improvement.

In 2014, the Board adopted Proposal WP14-22 with modification, which resulted in the requirement of a State registration permit for Federally qualified subsistence users hunting under Federal regulations in Units 9A, 9B, 9C, 17A, 17B, 17C, 18, 19A, and 19B. It also resulted in a shortening of the to-be-announced season in Units 17A remainder and 17C remainder, from Aug. 1 – Mar. 31 to Aug. 1 – Mar. 15. Finally, it delegated authority to the Togiak National Wildlife Refuge Manager to take specific in-season management actions in portions of Units 17A and 17C. This included the authority to open and close seasons, establish harvest limits and restrictions, and identify hunt areas. These changes were meant to align Federal and State regulations across the range of the MCH, while providing improved harvest reporting.

In February 2015, the BOG adopted Proposal 47 with an amendment to accommodate the request made in Proposal 48. As a result of this action, caribou seasons in Units 9B and 17 were changed from Aug. 1 – Mar. 15 to Aug. 1 – Mar. 31. This change was made to accommodate hunters who reported that travel conditions often prohibited caribou hunting after the last day of March.

In March 2016, BOG adopted Proposal 134, which resulted in liberalization of the harvest restrictions for caribou harvested within the range of the MCH. Specifically, the harvest limit remained at two caribou, but the restrictions that no more than one bull may be taken and no more than one caribou may be taken from Aug. 1 – Jan. 31 were eliminated. By 2016, the bull:cow ratio had reached the management threshold and conservation of bulls had become less critical compared to 2007, when the restrictions were implemented. Fewer restrictions also resulted in a less complicated regulatory structure and were not expected to result in unsustainable levels of harvest.

The same spring, the Board considered Proposal WP16-29/30, which requested that caribou seasons in Unit 9B and portions of Unit 17 be extended from Aug. 1 – Mar. 15 to Aug. 1 – Mar. 31. This proposal was intended to provide additional subsistence opportunity and to align Federal and State regulations for

caribou hunting within the range of the MCH. The Board adopted this proposal with modification to move in-season management language from unit-specific regulations to a delegation of authority letter. However, this proposal was submitted prior to the BOG's 2016 regulatory changes and the Board's modification did not accommodate the recent changes to State regulation. Consequently, Federal regulations were aligned with the State's 2016/17 regulations rather than the 2017/18 regulations.

In February 2018, the BOG adopted Proposal 127. As a result, the portion of Unit 9C north of the Naknek River and south of the Alagnak River drainage became part of the MCH RC503 permit area, rather than part of the Northern Alaska Peninsula Caribou Herd (NAPCH) TC505 permit area. The BOG's action also established an Aug. 1 – Mar. 31 resident season in the hunt area north of the Naknek River. This action brought State harvest regulations into line with the current distribution of the MCH and NAPCH caribou herds.

In April 2018, the Board considered Proposal WP18-21, which responded to the 2016 and 2018 changes made in State regulation. Specifically, WP18-21 requested that the harvest limit for the MCH be changed to two caribou with no additional restrictions in portions of Units 9, 17 and 19, and that the caribou season in Unit 9C north of the Naknek River be changed from a may-be-announced season to an Aug. 1 – Mar. 15 season with a harvest limit of two caribou. The Board adopted WP18-21 with modification to create a new hunt area, removing the portion of Unit 9C that drains into the Naknek River from the north and Graveyard Creek and Coffee Creek from Unit 9C remainder. This action brought Federal harvest regulations into line with the current distribution of the MCH and NAPCH caribou herds and also aligned the harvest limit throughout the range of the MCH. However, the Board's action did not address the Federal public lands closure within the new hunt area. Originally implemented for the conservation of the NAPCH, this closure is now the only Federal public lands closure within the range of the MCH.

The Board also considered Proposal WP18-31 in April 2018, which requested that the MCH season in Unit 18 be shortened from Aug. 1 – Mar. 15 to Aug. 1 – Feb. 28, due to an observed scarcity of caribou. The Board rejected this proposal on the grounds that it would have a negligible effect on harvest or on the conservation status of the population, given that the State season would continue to be open until March 15. The Board noted that the regulatory complexity this change would introduce was unnecessary in the absence of a conservation benefit.

Current Events

The Office of Subsistence Management (OSM) is currently reviewing the only Federal public lands closure within the range of the MCH with Wildlife Closure Review WCR20-04/06. Currently, Federal public lands in the portion of Unit 9C that drains into the Naknek River from the north, and Graveyard Creek and Coffee Creek are closed to the taking of caribou except by residents of Unit 9C and Egegik. This closure is a vestige of the Board's action on Proposal WP18-21, which shifted the regulatory emphasis within that hunt area from the NAPCH to the MCH, to reflect current distribution patterns of these two herds. However, the Board did not address the existing Federal public lands closure, which was originally implemented for the conservation of the NAPCH. The Bristol Bay Council voted to rescind this closure at their March 2019 meeting, prior to the most recent MCH abundance surveys. The

Council will have the opportunity to revisit this recommendation at their October 2019 meeting, and the Board will consider this closure in April 2020.

In August 2019, the Alaska Department of Fish and Game (ADF&G) issued emergency order 04-16-19, which decreased the harvest limit of the RC503 registration caribou permit from two caribou to one caribou for the 2019/20 regulatory year. The RC503 permit targets the MCH in Units 9A, 9B, 9C, 17A, 17B, 17C, 18, 19A and 19B. ADF&G issued this emergency order to conserve the MCH due to recent survey data indicating the MCH population is 13,500 caribou, which is well below the minimum State objective of 30,000 caribou.

Tribal and ANCSA corporation consultations for WSA19-07 were held on September 24, 2019. Representatives from the Kokhanok Tribe, Curyung (Dillingham) Tribe, Bristol Bay Native Association (BBNA), Orutsaramiut Native Council (ONC), Bristol Bay Council and Yukon-Kuskokwim Delta Council participated. The Kokhanok Tribe representative commented that they hunt caribou in Katmai National Preserve (Katmai) where the caribou are non-migratory. He wondered whether or not these caribou were considered part of the MCH and if Katmai could be excluded from the request. Staff at Katmai confirmed that a small number of caribou (~200) within the Preserve appear cut off from the MCH, but they have never been specifically studied or managed as a separate herd (Hamon 2019, pers. comm.). The Kokhanok Tribe representative further commented that they traditionally use moose as their primary subsistence resource but, due to various factors, have not been able to harvest moose in recent years. Therefore, they are depending more on caribou, and are concerned that approval of WSA19-07 may negatively affect their ability to meet their needs.

A representative for the Curyung Tribe and BBNA supported closure of Federal public lands to non-Federally qualified users, stating that given the 50% population decline, preference should be given to Federally qualified subsistence users. She also inquired about removing the State registration permit requirement, so non-rural residents would not be able to hunt on Federal public lands, if closed. However, OSM staff explained that if Federal public lands were closed, non-Federally qualified users could not legally hunt on those lands regardless of permit requirements.

In regards to unreported harvest, the Chair of the Yukon-Kuskokwim Delta Council reported that since the Chinook salmon crash in 2012, subsistence users in Unit 18 have been harvesting more caribou to replace salmon. She stated many users did not report harvests and advocated for more outreach to educate hunters about the importance of reporting harvests. Discussion and questions also included reasons for the decline, unusual weather events, MCH population surveys, biological metrics, permitting options, and enforcement challenges.

ADF&G submitted written comments in support of WSA19-07 (**Appendix 1**), stating reducing the harvest limit throughout the MCH range would provide the herd with the chance to recover, allow biologists to conduct more activities to understand reasons for the herd's decline, and reduce regulatory confusion among users. ADF&G also noted that the western segment of the MCH population, which has historically contained more caribou, has declined, while the eastern segment of the population has

remained relatively stable. In the future, ADF&G requests that emergency rather than temporary special actions be considered when a rapid management response is needed for conservation.

Public meetings for WSA19-07 were held on October 1, 2019 in Bethel and on October 3, 2019 in Dillingham. Five people testified in support of WSA19-07 during the Bethel meeting, although several testifiers called for more restrictive measures. No one testified in opposition of the request. ADF&G testified in support, echoing their written comments (see above). An ONC representative testified that ONC supported WSA19-07. The Chair of the Western Interior Council stated a 50% population decline warrants more restrictive measures, including a complete cow closure. He also emphasized the importance of knowing what the harvest are, noting reports of high success rates in the Lower Kuskokwim last winter. A member of the public also suggested limiting harvest to one bull, reducing the season to Jan. 1-Mar. 15, and issuing Tier II or Federal registration permits to conserve the herd and provide a Federal subsistence priority. Additionally, she commented on the magnitude of unreported harvests and a possible moratorium. Another public member stated that many local people depend on caribou to get through the winter; caribou is central to meeting subsistence needs.

During the October 3rd public meeting in Dillingham, four comments were received in support of WSA19-07 and none against. ADF&G testified in support, reaffirming earlier comments (see above). ONC testified again in support, but also supported reducing the season to Aug. 1-Oct. 31. ONC further stated that measures to conserve the herd should have been taken sooner, and people are worried about further declines. A public member requested that, if WSA19-07 is approved, the press release include conditions that apply to Federally qualified subsistence users, including designated hunter and permit requirements. Another public member supported closing Federal public lands to non-Federally qualified subsistence users and requested the Federal Subsistence Board consider that alternative.

Because the season for this special action was already open, OSM made the decision to ask for comments on the request from the Chairs of the affected Councils rather than ask for formal Council recommendations, due to it being of a time sensitive nature (50 CFR 100.19(b)(1)(ii)) and the need for the Board to take action as soon as possible. On October 16, 2019, the Council Chairs from the affected regions (Western Interior, Bristol Bay, and Yukon-Kuskokwim Delta) participated in a teleconference to express their opinions and concerns about WSA19-07 and the MCH. The Chairs of the Western Interior and Yukon-Kuskokwim Delta Councils supported an immediate closure of the MCH hunt due to serious conservation concerns. Both Chairs stressed that allowing harvest this winter would exacerbate the herd's decline and substantially delay its recovery. These concerns reflect those brought up by the Western Interior Council when it discussed this issue at its October 8-9, 2019 meeting. The Chair of the Yukon-Kuskokwim Delta Council stated her second choice would be to reduce the harvest limit to one caribou and close the season on Jan. 31. The Chair of the Bristol Bay Council stated that the moose season in the Dillingham area was poor, so people are depending more on caribou this year. She additionally commented that Units 17B and 17C contain little Federal public land. All Chairs agreed on the need for better data, especially harvest estimates that account for unreported harvests.

Biological Background

The MCH has experienced dramatic changes in population size and distribution in the past 40 years. In the early 1980s, the population was estimated to include approximately 20,000 caribou. Its winter range included the north and west side of Iliamna Lake north of the Kvichak River. By the mid-1990s, the herd had grown to its peak size of approximately 200,000 caribou and had increasingly begun wintering in southern Unit 18 and southwestern Unit 19B. Population growth during this time was attributed to mild winters, movement into previously unexploited range, and relatively low predation and harvest rates.

Currently, the MCH range covers ~60,000 square miles, primarily within Units 9B, 9C, 17A, 17B, 17C, 18, 19A and 19B (**Figure 1**). The herd does not move seasonally as a single distinct group. Rather, caribou move from calving areas east of the Tikchik Mountains to either the eastern or western portion of their range for the rut and wintering. In the 2000s, movements of radio-collared caribou indicated that individual caribou had little fidelity to specific calving or wintering areas. Increasingly, however, radio-collared cows that winter in the eastern portion of their range calve in the Tundra Lake or Bonanza Hills areas (western Units 19A, 19B, 17B) while those that winter in the western portion of their range calve in the Kemuk Mountain/Koliganek area (southern Unit 17B, northern Unit 17C) (Barten 2015).

Photocensuses conducted during the summer post-calving aggregations are used to estimate abundance (Barten 2015). These estimates show that in 2013, the MCH was estimated to be 18,308 caribou, the lowest estimate in over 30 years, and well below the State's population objective of 30,000 – 80,000 caribou (**Table 1**). Estimates over the next three years indicated that the population had grown, approximating the lower bound of this population objective in 2015. However, the most recent estimate, obtained in July 2019, shows that the population is less than half of the State's minimum population objective, at 13,500 caribou (ADF&G 2019c).

Estimates of composition are made during October aerial surveys. Given that the eastern and western population segments of the MCH have different seasonal ranges and are therefore subject to differing nutrition, predation, and other factors, composition ratios are summarized both collectively and individually by population segment. This allows for comparison between the eastern and western segments. As a whole, the MCH experienced a steady increase in the bull:cow ratio between 2010 and 2016 (**Table 1**). In 2016, the ratio was 39 bulls:100 cows, which is the highest estimate since the late 1990s. The most recent estimate, in 2018, showed the bull:cow ratio was 32 bulls:100 cows, which is below the State's minimum bull:cow objective of 35 bulls:100 cows. Bull:cow ratios for the western segment have typically been higher than those for the eastern segment, though the difference has diminished in recent years (**Figure 2**). In 2017, this relationship was reversed. At that time, the eastern population segment had 33 bulls:100 cows while the western population segment had 31 bulls:100 cows (Barten 2017).

Calf:cow ratios have been variable for the MCH, ranging from 16 calves:100 cows in 2007 to 30 calves:100 cows in 2011 and 2014 (**Table 1**). In 2018, the most recent estimate, there were 34 calves:100 cows, which is above the State's minimum objective of 30 calves:100 cows and an improvement from 2017 (ADF&G 2019d). The calf:cow ratio has varied significantly between population segments. Between 2007 and 2013, the western population segment had consistently higher calf:cow ratios than the eastern segment. However, that relationship has been reversed since 2014 (**Figure 3**). In 2017, the eastern segment had 28 calves:100 cows while the western segment had 18 calves:100 cows (Barten

2017). Current calf ratios are within the range of variability typical of herds occupying interior and southwest Alaska.

Habitat is not thought to be limiting the MCH based on nutritional indicators, including high pregnancy rates and calf weights (Barten 2015, ADF&G 2019d). Predation may be contributing to the population decline. ADF&G initiated a wolf predation control program for the MCH in southwestern Unit 17 in 2012 and expanded the control area in 2017 to include almost all of Unit 17B and portions of Units 9B and 19B (ADF&G 2019d).

Table 1. Mulchatna Caribou Herd composition counts and population estimates, 1975 – 2019 (Barten 2017, ADF&G 2019c, 2019d).

Year	Bulls: 100 cows	Calves: 100 cows	% of Total bulls			Composition sample size	Population Estimate
			Small bulls	Medium bulls	Large bulls		
1975	55	35	-	-	-	1,846	14,000
1978	50	65	-	-	-	758	7,500
1980	31	57	-	-	-	2,250	-
1981	53	45	-	-	-	1,235	20,600
1986	56	37	-	-	-	2,172	-
1987	68	60	-	-	-	1,858	52,500
1988	66	54	-	-	-	536	-
1993	42	44	-	-	-	5,907	150,000 ^a
1996	42	34	49	29	22	1,727	200,000 ^a
1998	41	34	28	43	29	3,086	-
1999	30	14	60	26	14	4,731	175,000 ^b
2000	38	24	47	33	20	3,894	-
2001	25	20	32	50	18	5,728	-
2002	26	28	57	30	13	5,734	147,000 ^b
2003	17	26	36	45	19	7,821	-
2004	21	20	64	29	7	4,608	85,000 ^b
2005	14	18	55	33	12	5,211	-
2006	15	26	57	34	9	2,971	45,000 ^b
2007	23	16	53	36	11	3,943	-
2008	19	23	47	36	17	3,728	30,000 ^b
2009	19	31	40	44	16	4,595	-
2010	17	20	30	44	26	4,592	-
2011	22	19	32	41	27	5,282	-
2012	23	30	38	38	24	4,853	22,809 ^c
2013	27	19	39	36	25	3,222	18,308 ^c
2014	35	30	44	31	25	4,793	26,275 ^c
2015	35	29	35	43	22	5,414	30,736 ^c
2016	39	22	43	29	28	5,195	27,242 ^c
2017	32	23	44	28	28	5,160	-
2018	32	34	-	-	-	-	-
2019	-	-	-	-	-	-	13,500 ^c

^aEstimate derived from photo-counts, corrected estimates, subjective estimate of number of caribou in areas not surveyed, and interpolation between years when aerial photo surveys were not conducted.

^bEstimate of minimum population size based on July photo census.

^cEstimate based on Rivest et al. (1998) caribou abundance estimator.

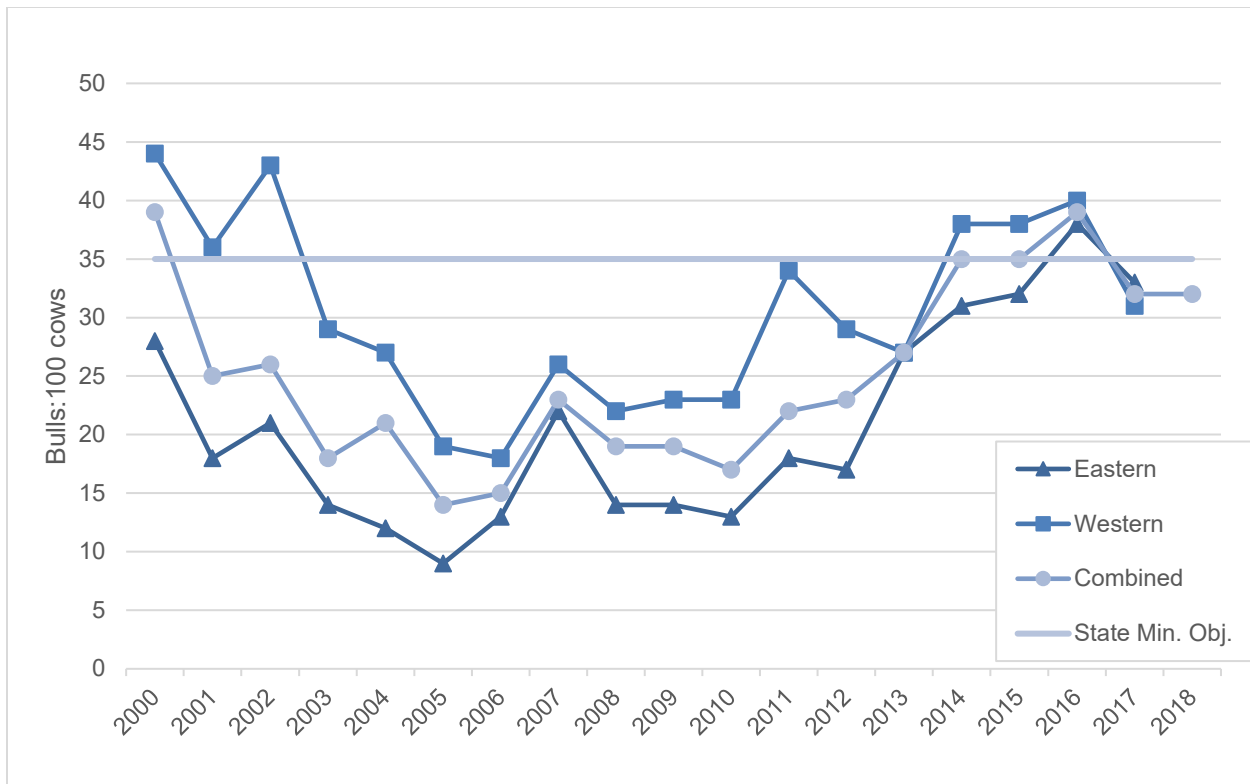


Figure 2. Mulchatna Caribou Herd fall bull:cow ratios, 2000 – 2018. The solid line represents the State’s minimum management objective of 35 bulls:100 cows (Barten 2017, ADF&G 2019d).

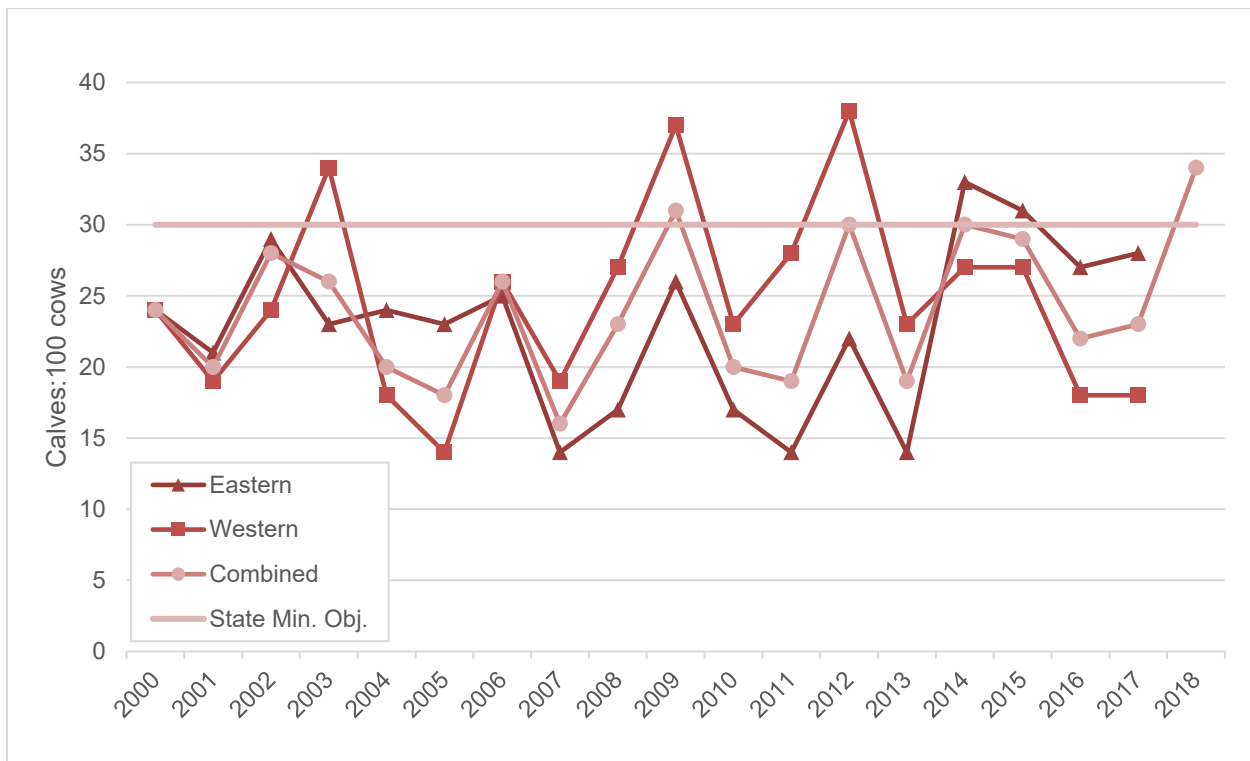


Figure 3. Mulchatna Caribou Herd fall calf:cow ratios, 2000 – 2018. The solid line represents the State’s minimum management objective of 30 calves:100 cows (Barten 2017, ADF&G 2019d).

Cultural Knowledge and Traditional Practices

At least five Alaska Native groups, Alutiiq, Central-Yup'ik, and the Athapaskan subgroups known as the Deg Xinag, Kolchan/Upper Kuskokwim, and Dena'ina, have historically inhabited and hunted in sections of Units 9, 17, and 19. Relationships between these groups varied from intermarriage, trading, and feuding (Snow 1981). All of these groups have a history of hunting caribou in this area and some participated in herding upon the introduction of reindeer in the 1890s (Willis 2006).

Historically, people in Western and Southwestern Alaska hunted caribou in the spring and fall with the occasional summer harvest. Historical accounts suggest that caribou was an important subsistence resource for food and the creation of winter clothing. Caribou were traditionally caught through the use of snares, surrounds, guide fences, bow and arrow, stalking, spears, and the Dena'ina utilized dogs (Clark 1981; Hosley 1981; Snow 1981; Townsend 1981; VanStone 1981). Vanstone mentioned that Central-Yup'ik groups used caribou hides in the creation of winter clothing and Hosley (1981) noted that the Kolchan made a paste out of caribou brains to tan hides for clothing purposes.

Russian fur traders travelled up the Alaskan coast and came into contact with the Alutiiq Koniag after 1760. It was not long after this initial contact that trading posts were established in the area that currently consists of Unit 9 (Clark 1981). As the Russians moved further north along the Alaska coast the fur trade expanded into what is now Units 17 and 19 (Snow 1981; Vanstone 1981). The arrival of the Russians was followed by the creation of missions, boarding schools, canneries, and the arrival of both Russian and European trappers and prospectors (Hosley 1981; Snow 1981; Townsend 1981).

The most recent comprehensive subsistence surveys conducted by the Alaska Department of Fish and Game (ADF&G) have been used to provide examples for each unit in this proposal. ADF&G conducted a survey on the community of Naknek in Unit 9 during 2007, Manokotak in Unit 17 during 2008, and Nikolai in Unit 19 during 2011 (Holen et al. 2011; Holen et al. 2012; Ikuta et al. 2014). Within these communities, large mammal harvest is high and ranged between 12.1% on the low end and 52% on the high end (Holen et al. 2011; Ikuta et al. 2014). The per capita caribou harvest from Naknek, Manokotak, and Nikolai ranged from a low of 2 lbs/person in Nikolai to 21 lbs/person in Naknek (Holen et al. 2011; Ikuta et al. 2014). Even in those communities that reported no harvest for their study year, caribou was widely used, shared, and received. For example, in Manokotak for the 2008 study year, about 50% of the community households used caribou, 44% reported receiving caribou, and about 7% of the households reported sharing caribou with others (Holen et al. 2012).

Harvest History

Reported harvest of the MCH has decreased significantly since the early 2000s, when the herd was very large (**Figure 4**). Total reported caribou harvest declined from 3,949 caribou in 2000 to 238 caribou in 2018. Harvest among all user groups declined during this period, but the decline was especially pronounced among nonlocal residents and nonresidents. Reduction of the State harvest limit in 2006 and elimination of the nonresident season in 2009 were influential in this decline (ADF&G 2017, 2019a).

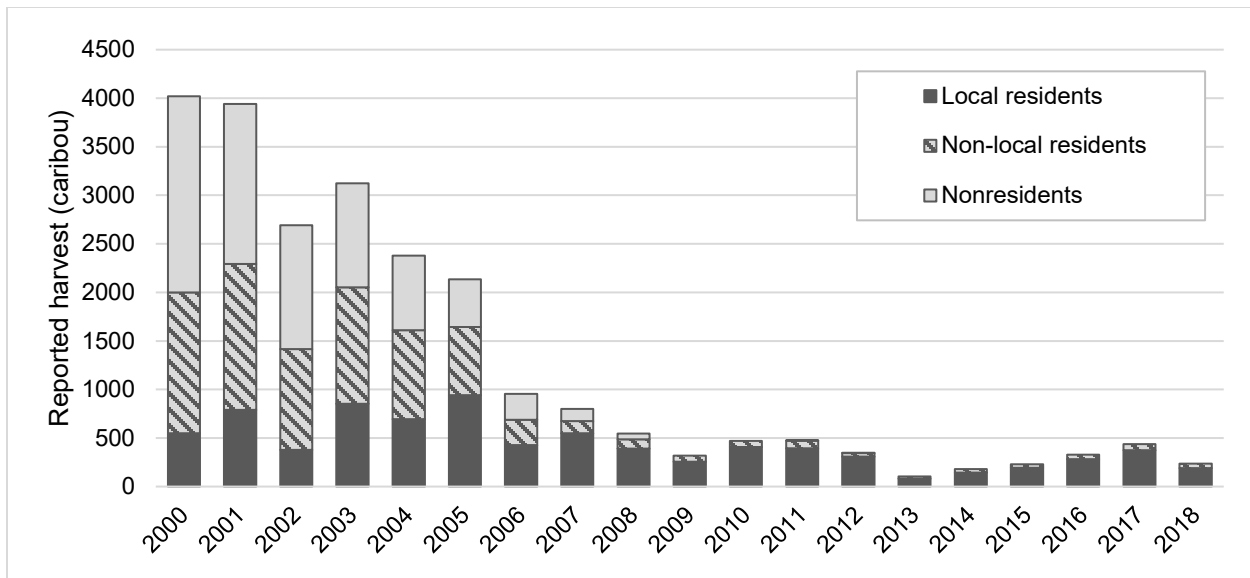


Figure 4. Reported harvest from the Mulchatna Caribou Herd by all users, 2000 – 2018. Nonresidents seasons were eliminated in 2009 (ADF&G 2017, 2019a).

Currently, harvest is dominated by local users, defined here as those with a customary and traditional use determination for caribou anywhere within the MCH range. Since 2009, the year the nonresident season was eliminated, 84% of reported harvest, or 263 caribou annually, can be attributed to local residents. The remainder, 49 caribou annually, were taken by nonlocal residents of Alaska (ADF&G 2017, 2019a). However, reported harvest may underestimate actual harvest. Though the magnitude of unreported harvest is unknown (Barten 2015, ADF&G 2019d), household survey data obtained by the ADF&G Subsistence Division provides some insights (**Table 2**). These surveys represent only a sampling of communities and years, so they cannot be used to quantify total annual harvest. In addition, they estimate an annual range of harvest for each community and are intended to demonstrate community harvest patterns and resource use, rather than precise numbers. However, they indicate that communities within the MCH range harvest more caribou than harvest reports suggest (**Table 2, Figure 4**). ADF&G suspects actual harvest is substantially higher than reported harvest in some years (ADF&G 2019d).

Acknowledging that reported harvest is not an accurate assessment of total harvest, it may provide insights into temporal and geographic harvest patterns. Among local users for the 2009 – 2018 time period, 81% of reported harvest occurred between December and March. March was the busiest month for harvest, accounting for 40% of the reported harvest by local users since 2009. These patterns are broadly similar to longer term averages (ADF&G 2017, 2019a).

Harvest is not evenly distributed across the range of the MCH. Since 2009, among local users, 54% of reported harvest has occurred in Unit 18, and 17% has occurred in Unit 17C. Less than 10% of reported harvest by local users is attributable to any other single unit. Converse trends exist for non-local users. Harvest in Unit 17B accounts for 53% (26 caribou annually), while Unit 18 accounts for 20% (10 caribou annually) of the reported harvest among this user group since 2009. Fewer than 5 caribou, on average, are reported harvested each year by nonlocal users in any other single unit.

Table 2. Use of caribou by communities across the range of the Mulchatna Caribou Herd, 2000 – 2013, based on household surveys (ADF&G 2019b).

Unit	Community	Year	Households using caribou	Households harvesting caribou	Harvest	
					Number of caribou	95% CI
9B	Igiugig	2001	100%	91%	23	0%
		2005	100%	58%	24	22%
	Iliamna	2001	76%	43%	40	34%
		2004	77%	8%	3	62%
	Kokhanok	2001	94%	25%	20	84%
		2005	80%	26%	21	32%
	Levelock	2001	100%	53%	28	37%
		2005	100%	64%	27	33%
	Newhalen	2001	94%	65%	71	14%
		2004	88%	44%	49	9%
	Nondalton	2001	94%	27%	23	30%
		2004	53%	13%	18	9%
	Pedro Bay	2001	21%	0%	0	0%
		2004	28%	6%	1	0%
	Port Alsworth	2001	90%	10%	4	82%
		2004	86%	9%	6	21%
9C	King Salmon	2007	33%	12%	16	11%
	Naknek	2007	49%	21%	74	12%
	South Naknek	2007	62%	5%	2	6%
17A	Togiak	2001			106	27%
	Twin Hills	2001			8	31%
17B	Koliganek	2001	91%	57%	93	41%
		2005	89%	61%	91	28%
17C	Aleknagik	2001	89%	47%	48	23%
		2008	13%	0%	0	0%
	Clarks Point	2001	86%	57%	28	0%
		2008	36%	9%	2	216%
	Dillingham	2001	14%	6%	344	30%
		2010	36%	5%	63	52%
	Ekwok	2001	97%	31%	28	23%
	Manokotak	2001	88%	42%	68	17%
		2008	49%	8%	20	5%
	New Stuyahok	2001	98%	66%	260	13%
		2005	92%	59%	178	20%
	Portage Creek	2001	71%	29%	10	0%
18	Akiak	2010	78%	37%	55	21%
	Bethel	2011	55%	16%	446	20%
		2012	55%	13%	374	27%
	Eek	2013	61%	27%	47	28%

Unit	Community	Year	Households using caribou	Households harvesting caribou	Harvest	
					Number of caribou	95% CI
	Kwethluk	2010	87%	39%	111	21%
	Marshall	2010	7%	2%	6	136%
	Mountain Village	2010	6%	0%	0	
	Napakiak	2011	75%	32%	45	27%
	Napaskiak	2011	86%	41%	60	24%
	Oscarville	2010	92%	50%	10	28%
	Pilot Station	2013	6%	1%	3	102%
	Quinhagak	2013	65%	29%	125	21%
	Russian Mission	2011	11%	4%	5	96%
	Scammon Bay	2013	20%	4%	10	64%
	Tuluksak	2010	68%	22%	29	26%
	Tuntutuliak	2013	19%	8%	12	54%
19A	Red Devil	2005	0%	0%	0	0%
		2009	36%	18%	1	244%
	Sleetmute	2003	24%	10%	8	41%
		2004	18%	0%	0	0%
		2005	16%	0%	0	0%
		2009	3%	3%	2	75%
	Stony River	2003	53%	29%	14	22%
		2004	60%	20%	6	439%
		2005	33%	0%	0	0%
		2009	42%	8%	2	423%
	Upper Kalskag	2003	53%	35%	42	49%
		2004	30%	6%	4	24%
		2005	26%	15%	16	98%
		2009	15%	2%	1	605%

Other Alternatives Considered

One alternative considered was to close Federal public lands within the range of the MCH to non-Federally qualified users due to substantial conservation concerns as authorized by §815(3) of ANILCA. However, nonlocal users harvest < 50 caribou per year on average, and most of the nonlocal harvest (53%) occurs in Unit 17B, which has little Federal public land. As National Parks are closed to non-Federally qualified users, < 8% of Unit 17B is comprised of Federal public lands open to non-Federally qualified users. While 20% of nonlocal harvest occurs in Unit 18, which is 67% Federal public lands, this translates to only 10 caribou. Additionally, nonlocal harvest is already expected to decrease due to the harvest limit reduction under State regulations for the 2019/20 regulatory year. Due to the small amount of nonlocal harvest and Federal public land where most of the nonlocal harvest occurs, closure to non-Federally qualified users would not be biologically meaningful and possibly an unnecessary restriction. Therefore, OSM did not further consider this alternative.

Effects of the Proposal

If this request is approved, the harvest limit for Mulchatna caribou on Federal public lands in all or portions of Units 9A, 9B, 9C, 17A, 17B, 17C, 18, 19A, and 19B would decrease from two caribou to one caribou for the 2019/20 regulatory year. While this change would decrease harvest opportunity for Federally qualified subsistence users for the 2019/20 regulatory year, it may also help conserve the MCH to ensure future harvest opportunities. Approving this request would also reduce user confusion and regulatory complexity by aligning with 2019/20 State regulations, established by emergency order in August 2019.

Given the recent, substantial decline in the MCH population, conservation measures are warranted. Low 2016 and 2017 calf:cow ratios in the western segment of the MCH population, where most of the harvest occurs, further contribute to conservation concerns (**Figure 3**). Furthermore, bull:cow ratios, which have been depressed since 2001, are hovering around the State's minimum objective of 35 bulls:100 cows (**Table 1**).

However, the effects of harvest on the population decline are unclear. In 2017 and 2018, reported harvest (440 and 238 caribou, respectively) only accounted for 3.3% and 1.8% of the estimated MCH population (13,500 caribou), respectively, which are very conservative harvest rates. Additionally, the magnitude of unreported harvest is unknown with unknown effects on the MCH population. Therefore, the conservation benefits of approving WSA19-07 are ill defined. However, when the BOG decreased the Mulchatna caribou harvest limit from 5 caribou to 3 caribou in 2006, reported harvest substantially decreased, indicating users were harvesting their limit and that decreasing harvest limits had a measurable effect (**Figure 4**).

While the 2019/20 caribou season has already opened, 81% of reported harvest occurs after November. Therefore, even though Board action on this request may occur after some users have already harvested two caribou, the vast majority of reported harvest will occur after a decision is made.

OSM CONCLUSION

Support Special Action Request WSA19-07.

Justification

Conservation concerns exist for the MCH due to a substantial decline in abundance coupled with poor composition metrics. While the impact of harvest on the MCH is unclear, measures to conserve the herd and aid recovery are warranted.

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INTERAGENCY STAFF COMMITTEE RECOMMENDATION

The Interagency Staff Committee (ISC) recommendation is to **support** Temporary Special Action Request WSA19-07 **with modification** to close Federal Public lands in Units 9A, 9B, 9C, 17A, 17B, 17C, 18, 19A, and 19B to the harvest of caribou except by Federally qualified subsistence users (FQSU) hunting under these regulations and to shorten the season to August 1 – December 31. The modified regulation is below.

Unit 9–Caribou

Unit 9A—~~2~~ 1 caribou by State registration permit *Aug. 1 – ~~Mar. 15~~ Dec. 31.*

Federal public lands are closed to the harvest of caribou except by Federally qualified subsistence users hunting under these regulations.

Unit 9B—~~2~~ 1 caribou by State registration permit *Aug. 1 – ~~Mar. 31~~ Dec. 31*

Federal public lands are closed to the harvest of caribou except by Federally qualified subsistence users hunting under these regulations.

Unit 9C, that portion within the Alagnak River drainage—~~2~~ 1 caribou by State registration permit *Aug. 1 – ~~Mar. 15~~ Dec. 31*

Federal public lands are closed to the harvest of caribou except by Federally qualified subsistence users hunting under these regulations.

Unit 9C, that portion draining into the Naknek River from the north, and Graveyard Creek and Coffee Creek—~~2~~ 1 caribou by State registration permit. Public lands are closed to the taking of caribou except by residents of Unit 9C and Egegik *Aug. 1 – ~~Mar. 15~~ Dec. 31*

Federal public lands are closed to the harvest of caribou except by Federally qualified subsistence users hunting under these regulations.

Unit 17–Caribou

Unit 17A-all drainages west of Right Hand Point—~~2~~ 1 caribou by State registration permit *Aug. 1 – ~~Mar. 31~~ Dec. 31*

Federal public lands are closed to the harvest of caribou except by Federally qualified subsistence users hunting under these regulations.

Units 17B and 17C—that portion of 17C east of the Wood River and Wood River Lakes—~~2~~ **1** caribou by State registration permit Aug. 1 – ~~Mar. 31~~ **Dec. 31**

Federal public lands are closed to the harvest of caribou except by Federally qualified subsistence users hunting under these regulations.

Unit 18—Caribou

Unit 18—that portion to the east and south of the Kuskokwim River—~~2~~ **1** caribou by State registration permit Aug. 1 – ~~Mar. 15~~ **Dec. 31**

Federal public lands are closed to the harvest of caribou except by Federally qualified subsistence users hunting under these regulations.

Unit 18, remainder—~~2~~ **1** caribou by State registration permit Aug. 1 – ~~Mar. 15~~ **Dec. 31**

Federal public lands are closed to the harvest of caribou except by Federally qualified subsistence users hunting under these regulations.

Unit 19—Caribou

Units 19A and 19B (excluding rural Alaska residents of Lime Village)—~~2~~ **1** caribou by State registration permit Aug. 1 – ~~Mar. 15~~ **Dec. 31**

Federal public lands are closed to the harvest of caribou except by Federally qualified subsistence users hunting under these regulations.

Justification

The ISC has serious concerns about the conservation of the Mulchatna Caribou Herd (MCH). As indicated in the analysis, the herd is less than half way (13,500) towards meeting the State’s minimum population objective of 30,000 animals and has declined 50% from five years ago (2014; 27,000 animals). Federal Subsistence Board (Board) actions taken since 2014 have primarily been to align with Alaska State (State) regulations and have actually liberalized take and seasons, as estimates through 2016 indicated a stable population at or near 30,000 animals.

The cause for the MCH’s decline remains unclear as indicated in the analysis. Habitat is not identified as a limiting factor. Predation may be an issue, although active wolf control programs started in 2012 are

ongoing in Units 17, 9B, and 19B. The bull:cow ratio (32:100) has been stable the past two years but below the States objective of 35:100. The calf:cow ratio has varied from 16:100 to 30:100 and Eastern and Western population segments have differed significantly over time. The combined calf:cow ratio for 2019 is 34:100, which is an improvement from 2017-2018 estimates that were below 25:100 (**Figure 3** in the analysis). Unreported harvest was identified as a concern by the State, public, tribes, Western Interior Regional Advisory Council (WIRAC), Yukon-Kuskokwim Delta Regional Advisory Council Chair, and Office of Subsistence Management (OSM) analysis. The ISC agrees with comments that increased outreach and enforcement activities would likely improve harvest reporting. The ISC encourages the Board to emphasize and support the need for better outreach, reporting and enforcement within the region.

Public, tribal, and WIRAC comments expressed a clear concern for the conservation of the MCH and all commenters supported WSA19-07. Several commenters and the WIRAC identified the need for more restrictive actions given the seriousness of the decline.

Although the ISC agrees that closing Federal public lands except to FQSUs may have minimal impact, it seems appropriate to restrict harvest to FQSUs given the severity of the decline in this herd. The OSM analysis identified that non-locals may take only 50 caribou per year, but this may equate to 11-22% of the recent reported harvests that have ranged from 228 - 438 caribou (2015-2018). The OSM analysis also notes that harvest is not evenly distributed across the range with 54% and 17% of locals harvesting in Unit 18 (67% Federal lands) or Unit 17C (25% Federal lands), respectively. Conversely, 53% of non-local user harvest came from Unit 17B (8% Federal Lands). Thus, restricting harvest to only FQSUs on Federal lands may have fewer impacts to non-local users who tend to harvest in Unit 17B that is predominantly non-Federal lands.

Restricting the season length to eliminate the major winter harvest period would likely reduce harvest, and may provide the greatest conservation benefit to this vulnerable population. The majority of reported local harvest happens between December and March (81%), and the majority of reported caribou harvest is by locals (84%). The WIRAC commented that the population is currently so small that predation levels and/or a severe winter could seriously jeopardize this population into the future. A precautionary approach seems appropriate given the low population estimate, uncertainties surrounding the herd's decline, and unknown future weather patterns.

This modification will differ from State regulations that will continue to allow harvest of one caribou from August 1 to March 15 or 30. Federally qualified subsistence users could still hunt caribou on State lands under State regulations after December 31.

This modification provides a subsistence priority in accordance with ANILCA 815(3) by restricting caribou harvest to only FQSUs on Federal lands due to a substantial conservation concern. This modification also seriously restricts the harvest season on Federal lands by shortening the season by three months and eliminates harvest of caribou by all users on Federal lands after December 31. Although this recommendation will result in a reduced opportunity for FQSUs to harvest caribou, this action should provide meaningful conservation measures to increase and protect this vulnerable and declining population into the future. The ISC noted that harvest of fish resources was good in 2019 for many areas affected by this

action, and harvest of moose remains an option in most units. These alternate subsistence resources will hopefully reduce the potential hardship for FQSUs.

This restriction is likely the first step towards recovering this herd given the seriousness of its decline, and the uncertainty surrounding the decline. Future special actions, education, outreach, and coordination with the State will be required in 2020 and beyond to ensure the conservation of the herd and the continuance of subsistence uses.

Other Board alternatives that could aid in recovery of the MCH include an immediate ANILCA 816 closure of the hunt, modifying take to bulls only, or further modifying season dates. The ISC did not recommend closing harvest to bulls only because of the low bull:cow ratio and concerns identified by the WIRAC regarding the age structure of the bull population. An immediate closure may be appropriate, but closing the winter period, when most harvest occurs, was considered essential by the WIRAC and by the ISC. The closure date of December 31 may allow some winter harvest and allows more time to coordinate outreach and enforcement of this new restriction and likely, future restrictions.

Appendix 1



THE STATE
of **ALASKA**
GOVERNOR MICHAEL J. DUNLEAVY

Department of Fish and Game

OFFICE OF THE COMMISSIONER
Headquarters Office

1255 West 8th Street
P.O. Box 115526
Juneau, Alaska 99811-5526
Main: 907.465.6136
Fax: 907.465.2332

MEMORANDUM

TO: Anthony Christianson, Chair
Federal Subsistence Board

DATE: October 1, 2019

PHONE: 267-2190

FROM: Ben Mulligan *BSM*
Deputy Commissioner

SUBJECT: Wildlife Special
Action Request 19-07

The Alaska Department of Fish and Game (ADF&G) has reviewed Wildlife Special Action Request (WSA) 19-07 and because of the conservation concerns for the Mulchatna Caribou Herd (MCH) is in support of the proposal. WSA 19-07 was co-submitted by the Togiak National Wildlife Refuge (TNWR) and Yukon Delta National Wildlife Refuge (YDNWR) to align the RC503 bag limit on the MCH with the state's recent in-season bag limit change to one caribou. Recent updated population information from summer 2019 places the estimate at 13,500 animals, which is well below the minimum population objective of 30,000 and is approximately half of the estimated herd size from the previous 5 years.

In the mid-1990's, the MCH population increased to ~200,000 animals, followed by a rapid decline over the following 10 years. The population appeared to stabilize in the late 2000s and has hovered near 20,000–28,000 animals from 2012–2016. Since 2011, the MCH has been under intensive management (IM) to promote an increase in herd size and harvest by humans. The management approach has been to limit predation by wolves on caribou calves by specifically targeting core calving areas for wolf removal. This wolf control area was expanded to encompass all core calving areas in Unit 17 (i.e., the current 10,000 square mile area designated by the Board of Game) in 2017.

Following the adoption of an IM plan for the MCH, ADF&G has followed the herd's population trend by conducting a post-calving population survey in June/July. The MCH pattern of aggregation during these surveys has not changed much from 2012–2019. However, the general trend from 2012–2019 was one of a dynamic population on a general decline, despite the management efforts in place. In 2019 the department has been able to update the population estimate through direct surveys; 2016 was the last estimate calculated... Our data from 2012–2019 show that historically the western part of the MCH range holds more animals than the eastern portion of their range. As the population of western animals has declined, the eastern population has remained relatively constant.

Given the declining population trend over the last 5 years, a population much smaller than objectives, and that the population is well below its historic size in non-irruptive years (i.e., ~20,000 animals), it is more likely that additional harvest could be detrimental to the long-term sustainability of this herd. Reducing the bag-limit throughout the MCH range would 1) provide the herd with the chance to recover and 2) allow biologists to conduct more activities to understand some of the reasons for the herd's decline. By investigating the MCH's parturition history; composition data; population estimates; and survival information, the herd's overall decline is most appreciable in the western part of its range (i.e., the area comprising YDNWR and north/western TNWR), making the reduction of the bag-limit on these lands crucial for herd recovery.

The ADF&G supports the two Refuges and recommends the Federal Subsistence Board align federal subsistence bag limits with state changes to the harvest regulations of the MCH. Adoption of WSA 19-07 would result in a necessary step towards conserving the MCH throughout its range and serves to further reduce regulatory confusion among users. In the future ADF&G requests that when information comes to light that necessitates a rapid response for the conservation of a managed species that an emergency special action is considered instead of a temporary special action as an emergency special action can be immediately acted upon by the Board or the in-season manager after consultation with ADF&G.

cc: Eddie Grasser, Director, ADF&G, Division of Wildlife Conservation
Lisa Olson, Assistant Director, ADF&G, Subsistence
Cheryl Brooking, Assistant Attorney General, Department of Law
George Pappas, State Liaison, Office of Subsistence Management