# Federal Subsistence Board Work Session

August 4-5, 2021
via Teleconference

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# What's Inside…

**FEDERAL SUBSISTENCE BOARD**
**PUBLIC WORK SESSION**

August 4 – 5, 2021
9:00AM – until finished (each day)
Teleconference Call-In Number: 1-877-918-6316
Passcode: 7801139

**WORK SESSION AGENDA**
*** Indicates Action Item**

1. Review Agenda
2. Information Exchange
3. Wildlife Special Action WSA21-03*
4. Individual Customary and Traditional Use Determination Proposal ICTP21-01*
5. Regional Advisory Council Annual Report Replies*
6. Regional Advisory Council Charter Change Requests*
7. Forty Mile Caribou Herd Delegation of Authority Letter*
8. Nonrural Policy Regulatory Cycle Review & Update
9. Board Poll for January Work Session
10. Adjourn

**DRAFT STAFF ANALYSIS**
**TEMPORARY SPECIAL ACTION**
**WSA21-03**

## ISSUES

Temporary Wildlife Special Action Request WSA21-03, submitted by the Yukon Delta National Wildlife Refuge, requests that the fall moose season in the Kuskokwim hunt area of Unit 18 be extended from Sept. 1 – 30 to Sept. 1 – Oct. 15 for the 2021/22 regulatory year.

## DISCUSSION

The proponent states that the average moose harvest since 2017 for the RM615 hunt within Zone 2 has been 78 moose, which is below the quota of a 110 moose. The proponent further states that extending the season in Zone 2, which is predominantly Federal public lands, will allow for additional hunting opportunity for Federally qualified subsistence users, while also allowing the Federal manager to assess how much harvest increases during the requested two week long extension. The proponent concludes by stating that if harvest does not increase as a result of this extension, further management action may be considered.

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 18—Moose**

| | |
|---|---|
| *Unit 18 – that portion east of a line running from the mouth of the Ishkowik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60°59.41' Latitude; W162°22.14' Longitude), continuing upriver along a line 1/2 mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet at Arhymot Lake, then following the south bank east of the Unit 18 border and then north of and including the Eek River drainage[1]—1 antlered bull by State registration permit; quotas will be announced annually by the Yukon Delta National Wildlife Refuge Manager Federal public lands are closed to the taking of moose except by residents of Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk,* | *Sept. 1 – 30* |

*Atmautlauk, Oscarville, Bethel, Kwethluk, Akiachak, Akiak, Tuluksak, Lower Kalskag, and Kalskag*

[1]Referred to as the Kuskokwim hunt area throughout the analysis.

**Proposed Federal Regulation**

**Unit 18—Moose**

| | |
|---|---|
| *Unit 18 – that portion east of a line running from the mouth of the Ishkowik River to the closest point of Dall Lake, then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake (N 60°59.41' Latitude; W162°22.14' Longitude), continuing upriver along a line 1/2 mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet at Arhymot Lake, then following the south bank east of the Unit 18 border and then north of and including the Eek River drainage[1]—1 antlered bull by State registration permit; quotas will be announced annually by the Yukon Delta National Wildlife Refuge Manager* | *Sept. 1 – ~~30~~* **Oct. 15** |

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

[1]Referred to as the Kuskokwim hunt area throughout the analysis.

**Existing State Regulation**

**Unit 18—Moose**

| | | | |
|---|---|---|---|
| *Zone 1: Unit 18 – all Kuskokwim River drainages north and west of a line beginning at the confluence of Whitefish Lake and Ophir Cree k at the Unit 18 boundary and continuing south west to the confluence of Tuluksak and Fog Rivers, then southerly to the lower Kisaralik River-Kasigluk River cutoff of the Kisaralik River, then south westerly to the lower Kisaralik River-Kasigluk River cutoff of the Kasigluk River, then south westerly to the Akulikutak River where the snowmachine trail crosses the river from the east side of Three Step Mountain, then westerly to the confluence of Kwethluk Rive r and Magic Creek, then southwesterly to the confluence of Eek Rive r and Middle Fork Eek River, then southwesterly to the Unit 18 boundary at 60° 4.983' N, 161° 37.140' W; and all drainages easterly of a line* | *1 bull excluding male calves by permit available in person in Bethel and villages within the hunt area Aug. 1-25 and online at http://hunt.alaska.gov Aug. 1-Oct. 7* | *RM615* | *Sept. 1 – 9[1]* |

| | | | |
|---|---|---|---|
| *from the mouth of the Ishkowik River to the closest point of Dall Lake , then to the east bank of the Johnson River at its entrance into Nunavakanukakslak Lake at 60° 59.41' N, 162° 22.14' W, continuing upriver along a line ½ mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver along the east bank of Crooked Creek to the outlet at Arhymot Lake , then following the south bank of Arhymot Lake easterly to the Unit 18 boundary.* | | | |
| *Zone 2: Unit 18 – all Kuskokwim River drainages south and east of a line beginning at the confluence of Whitefish Lake and Ophir Creek at the Unit 18 boundary and continuing southwest to the confluence of Tuluksak and Fog Rivers, then southerly to the lower Kisaralik River-Kasigluk River cutoff of the Kasigluk River, then southwesterly to the lower Kisaralik River-Kasigluk River cutoff of the Kasigluk River, then southwesterly to the Akulikutak River where the snowmachine trail crosses the river from the east side of Three Step Mountain, then westerly to the confluence of Kwethluk River and Magic Creek, then southwesterly to the confluence of Eek River and Middle Fork Eek River, then southwesterly to the Unit 18 boundary at 60° 4.983' N, 161° 37.140'.* | *1 bull excluding male calves by permit available in person in Bethel and villages within the hunt area Aug. 1-25 and online at http://hunt.alaska.gov Aug. 1-Oct. 7* | *RM615* | *Sept. 1 – Oct. 15* |
| *Nonresidents:* | *No open season* | | |

[1]full season is Sept. 1-Oct. 15, but ADF&G uses discretionary authority to set dates in Zone one each year

**Extent of Federal Public Lands**

Unit 18 is comprised of 67% Federal public lands and consists of 64% U.S. Fish and Wildlife Service (USFWS) managed lands and 3% Bureau of Land Management (BLM) managed lands.

The Unit 18 Kuskokwim moose hunt area is comprised of 57% Federal public lands and consists of 56% USFWS managed lands and 1% BLM managed lands (**Figure 1**).

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

**Customary and Traditional Use Determinations**

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

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

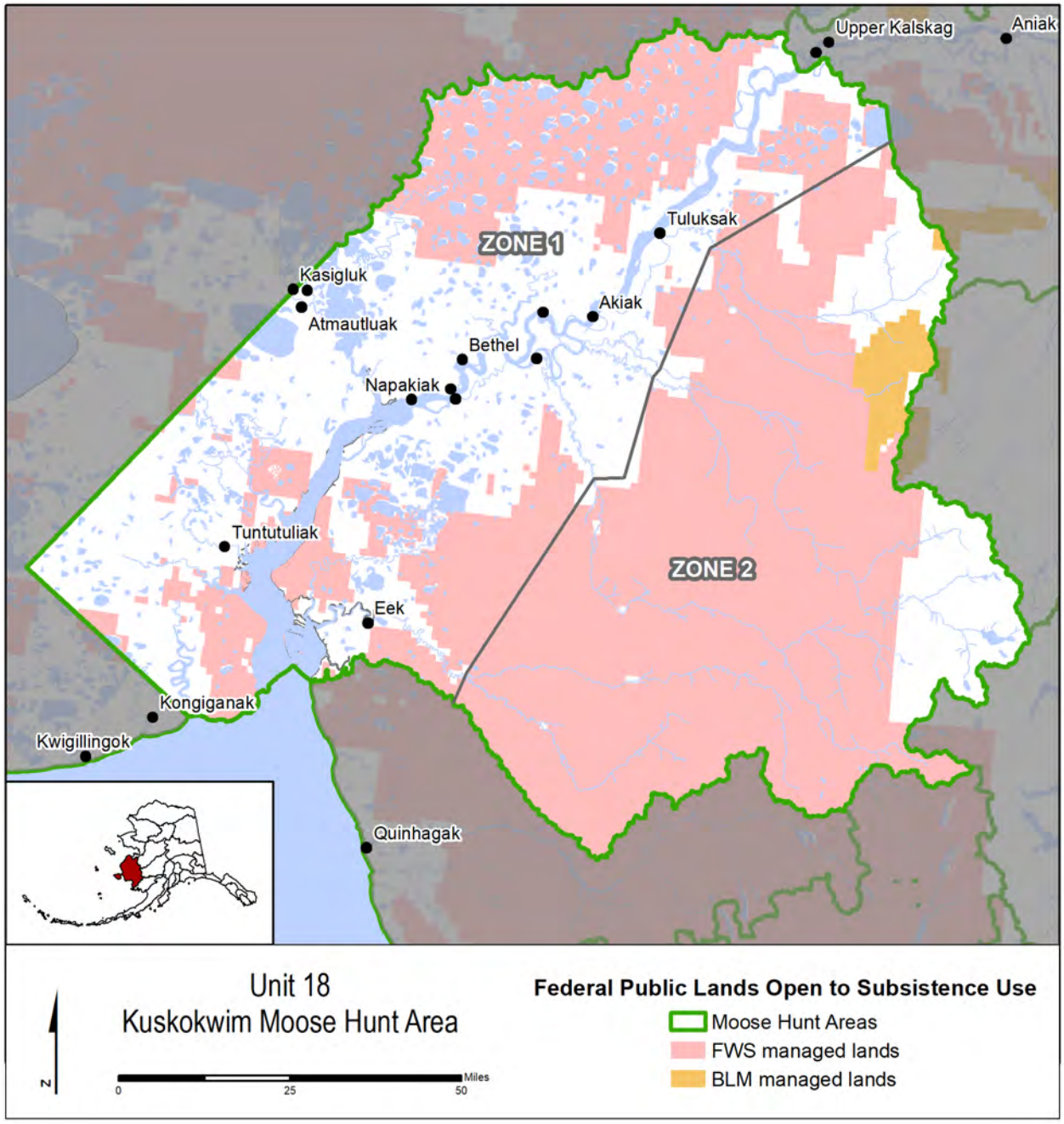


**Figure 1**. Federal public lands and hunt zones within the Kuskokwim moose hunt area, Unit 18.

**Regulatory History**

Federal public lands in the Kuskokwim area have been closed to non-Federally qualified users since 1991, when the Federal Subsistence Board (Board) acted on Proposal P91-124. Submitted by the Togiak National Wildlife Refuge, P91-124 requested that the moose season in the southern portion of

Unit 18, including the Kanektok and Goodnews River drainages, be closed to allow establishment of a harvestable population. The Board adopted this proposal with modification to close Federal public lands throughout Unit 18 to moose harvest, except by Federally qualified subsistence users, given low moose densities throughout Unit 18.

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

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

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

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

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

In April 2014, the Board adopted WP14-27 with modification, establishing a Federal moose season in the Kuskokwim hunt area. The Sept. 1 – 30 season harvest limit was one antlered bull by State registration permit. The Yukon Delta National Wildlife Refuge manager was delegated the authority to establish an annual quota and close the season once the quota was met.

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

In 2020, the BOG adopted Proposal 7 as amended to change the State season dates for the RM615 moose hunt to Sept. 1- Oct.15 with a harvest limit of one bull, excluding the take of male calves. ADF&G manages the Kuskokwim hunt area in two zones. As the quota continues to increase due to increasing moose population, the season length to reach that quota in Zone 1 has decreased. In 2018 and 2019, Zone 2 did not reach the quota. The first amendment to Proposal 7 was to extend the season from Sept. 1 – Sept. 30 to Sept. 1 – Oct. 15. Consideration was made to accommodate the holiday and teacher inservice days by keeping the season opening date the same to allow continued opportunity for youth hunts. The second amendment to Proposal 7 changed the harvest limit from one antlered bull to one bull excluding the take of male calves. This was done to allow for a proxy hunt but continued to prohibit the potential harvest of calves or incidental harvest of cows (ADF&G. 2020).

In April 2020, the Board considered Proposal WP20-35 and Closure Review WCR20-38 for moose in the Kuskokwim hunt area. Proposal WP20-35 requested the addition of a may be announced season between Dec. 1 – Jan. 31. The Board rejected this proposal as part of the consensus agenda because of conservation concerns. The Board voted to maintain the status quo on Federal lands closure reviewed by WCR20-38 because demand for moose by Federally qualified subsistence users exceeds sustainable harvest levels.

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

ADF&G and the Yukon Delta NWR cooperatively manage the Kuskokwim hunt area in two zones (**Figure 1**). Zone 1 is primarily non-Federal lands, and quotas are set by ADF&G. Local subsistence users can easily access Zone 1 by boat along the Kuskokwim River. Therefore, quotas are quickly met, and seasons close early by emergency order. Zone 2 is primarily Federal public lands, and the Yukon Delta NWR sets quotas. Zone 2 is much more difficult to access, and quotas are not usually met.

**Current Events**

The Yukon-Kuskokwim Delta Subsistence Regional Advisory Council (Council) submitted Proposal WP22-43, which requests delegating authority to the Federal in-season manager to increase the moose harvest quota in Zone 1 if the water levels are too low to access Zone 2.

The Yukon Delta NWR submitted Proposal WP22-44, which requests the same extension to the fall moose season as this special action request. Proposal WP22-44 also requests establishing a may-be-announced winter season from Dec. 1- Jan. 31 with a harvest limit of one antlered bull by Federal registration permit.

A public hearing was held via teleconference on June 23, 2021 to receive comments on WSA21-03. Five people testified in support of the request. The Chairman of Kwethluk Incorporated, two public members, and an Organized Village of Kwethluk Tribal representative who is also a Yukon-Kuskokwim Delta Council member testified that this request would be great for local subsistence communities. Access into Zone 2 during the September season is difficult in some years because of unpredictable and shallow water levels in all the tributary rivers used to access the hunt area by boat. This request would increase opportunity for Federally qualified subsistence users who were not lucky enough to harvest a moose in Zone 1 and/or could not access Zone 2 during September because of low water levels. Additionally, warmer fall weather in recent years has delayed moose movement as they are not as active earlier in the hunt season when the temperatures are warmer. A Council member further testified that the extended moose hunting opportunity is especially needed because people are not likely to harvest enough salmon this year to meet their subsistence needs due to low returns of Chinook and Chum salmon. ADF&G expressed support for this request during the public hearing in addition to submitting written comments, which are included at the end of this analysis.

**Biological Background**

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

Prior to 2020, the most recent population survey of the lower Kuskokwim survey area, which includes the mainstem riparian corridor between Kalskag and Kwethluk, occurred in 2015. At that time, the population was estimated to be 1,378 moose, or 1.6 moose/mile$^2$ in Zone 1 (**Figure 2**). This represents an annual growth rate of 20% between 2011 and 2015. The population estimate for Zone 2 was 508 moose (YKDRAC 2019). At that time, the Kuskokwim moose population remained below the State's population objective of at least 2,000 moose in this area (Perry 2014).

Lack of snow cover in recent years precluded conducting population surveys from 2015 to 2019. The 2020 survey showed an increase in the moose populations in both zones. The mid-point of the population in Zone 1 was 3220 moose and Zone 2 had a minimum count of 789 moose, which exceeds State population objectives (Jones 2021, pers. comm, YKDRAC 2019). Browse surveys indicate that the population in Zone 1 may be reaching carrying capacity and will limit or stop growth, and the moose population in Zone 2 is about one-half of what it could be (Jones 2021, pers. comm).

Composition estimates for the main stem were last obtained in 2020, when there were 25 bulls:100 cows (ADF&G 2020). Bull:cow ratios, which were quite high during the harvest moratorium, declined when harvest resumed in 2009, but remained consistently above the minimum objective of 30 bulls:100 cows until 2020 (**Table 1**). The recent decline in the bull:cow ratio follows an increase in reported harvest and a liberal hunting season in 2019. Unreported harvest, increased winter mortality, and misclassification of young bulls with small antlers during surveys may also have contributed to the lower ratio in 2020. Bull:cow ratios in the Kuskokwim tributaries (Zone 2) are high, although surveys have been conducted infrequently. In 2015 and 2020, ratios in the Kuskokwim tributaries (Zone 2) were 83 and 42 bulls:100 cows, respectively (Oster 2020, Jones 2021, pers. comm).

Fall calf:cow ratios of < 20 calves:100 cows, 20-30 calves:100 cows, and > 30-40 calves:100 cows may indicate declining, stable, and growing moose populations, respectively (Stout 2010). Between 2007 and 2020, calf:cow ratios in the main stem survey area (Zone 1) ranged from 45-73 calves:100 cows (**Table 1**; Jones 2018, pers. comm., ADF&G 2020, Oster 2020). In 2015 and 2020, calf:cow ratios in the Kuskokwim tributaries (Zone 2) were 62 and 40 calves:100 cows, respectively (Oster 2020). These high calf:cow ratios indicate a growing moose population. Twinning rates, which provide an index of nutrition, are also high, averaging 43% between 2015 and 2019 (YKDRAC 2019, ADF&G 2020).

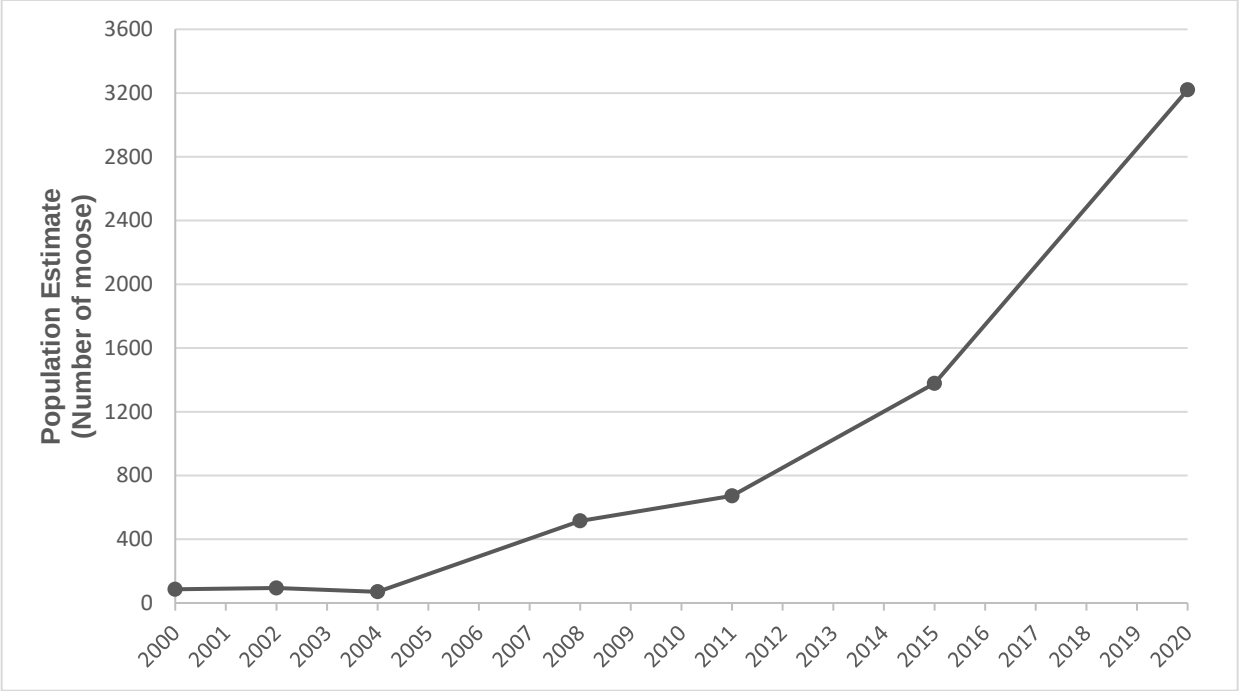


**Figure 2.** Estimated moose population size along the main stem of the Kuskokwim River, 2000 – 2020 (Perry 2014; Jones 2018, pers. comm., Jones 2021, pers. comm.).

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

| Year | Bulls:100 cows | Calves:100 cows |
|---|---|---|
| 2007 | 98 | 73 |
| 2009 | 52 | 49 |
| 2010 | 51 | 49 |
| 2011 | 50 | 49 |
| 2013 | 41 | 72 |
| 2015 | 73 | 53 |
| 2016 | 70 | 56 |
| 2019 | 43 | 49 |
| 2020 | 25 | 45 |

**Harvest History**

Following the harvest moratorium, moose harvest on non-Federal lands was allowed under State regulation beginning in 2009. In 2010, harvest on Federal public lands was opened to a subset of Federally qualified subsistence users, including residents of Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk, Atmautluak, Oscarville, Bethel, Kwethluk, Akiachak, Akiak, Tuluksak, Lower Kalskag, and Kalskag. In this analysis, this user group will be referred to as local users.

Since 2009, reported harvest has averaged 159 moose annually (ADF&G 2019a). Notably, reported harvest has increased, doubling between 2014 and 2017 (**Figure 3**). Local users have taken 95% of the reported moose harvest in the Kuskokwim hunt area since 2009, with 30% of the harvest attributable to residents of Bethel. However, non-local use is increasing, from two harvest reports in 2013 to 16 in 2017 (**Figure 3**). Non-local users that report harvesting moose are primarily Federally qualified subsistence users from coastal communities of Unit 18, but also include a few users from southcentral Alaska (ADF&G 2019a). About 30 moose, including around 20 cows are harvested each year for funerals and potlatches in Zone 1 (YKDRAC 2019; Moses 2020, pers. comm.).

Despite increases in quotas and harvest, demand still outweighs moose availability. Since 2009, an average of approximately 1,450 hunters have obtained permits to harvest moose in the Kuskokwim hunt area each year, but only 10% of permit holders have successfully harvested moose (ADF&G 2019a). The disparity between demand and the relatively small quotas routinely resulted in emergency closure of the State season within days of its opening (**Table 2**). This resulted in frustration among locals, who note that short unpredictable seasons make planning difficult. In response to this, ADF&G no longer uses quotas or closes Zone 1 with emergency closures. Fixed dates determined by estimated time needed to reach the set harvest objective is released prior to the start of each season (Jones 2021, pers. comm.). Local residents have also commented on the challenges of hunting in early September in recent years, given warm conditions that make proper meat care difficult. To this end, many subsistence users have advocated for a later moose season (YKDRAC 2017b).

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

There is more demand for moose in Zone 1, along the mainstem, compared to Zone 2, in the tributaries. This is evidenced by the rate at which the quota is met within each zone, and the corresponding season length. On average, the mainstem hunt has been open fewer than six days annually from 2011 through 2018, and the quota has been met or exceeded most years. Since ADF&G changed to the fixed season using the harvest objective method, the Zone 1 hunt was open for 11 days in 2020 and will be open 9 days in 2021 (Jones 2021, pers. comm.). For the hunt in the tributaries, the quota has only been met one time, in 2014, despite increasing season lengths (**Tables 2 and 3**). Local managers report that hunting in the tributaries is difficult, requiring specialized boats, longer travel times, and more fuel. Heavy vegetation along the banks contributes to the difficulty. It is believed that the unmet quota is a function of these difficulties, rather than lack of need for moose meat (YKDRAC 2017a, YKDRAC 2017b, Rearden 2018, pers. comm.).

ADF&G is currently managing the Kuskokwim moose population for continued growth and advises maintaining harvests within quotas and for bulls-only. However, ADF&G expects regulations in the Kuskokwim hunt area will be liberalized over the next five years if the moose population approaches carrying capacity as indicated by browse removal surveys (YKDRAC 2019).

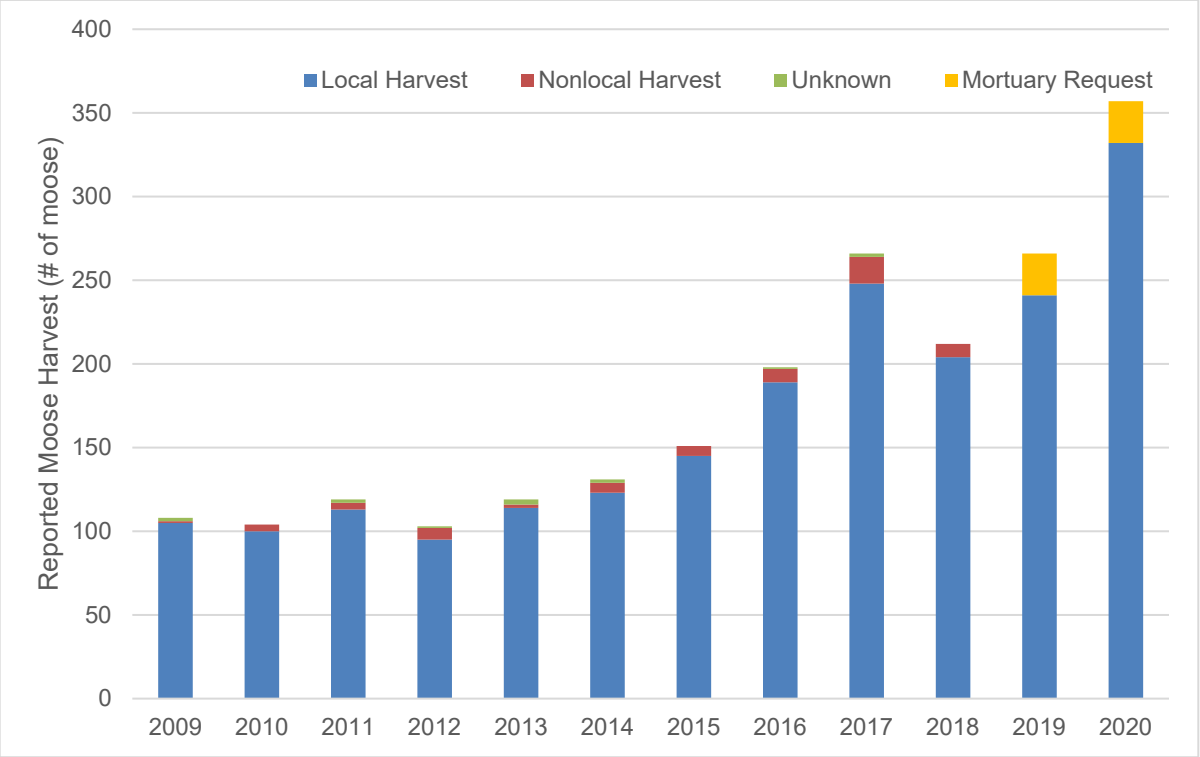


**Figure 3.** Reported moose harvest by RM615 in the Kuskokwim hunt area, 2009 – 2020 (ADF&G 2019a, Oster 2020, Jones 2021, pers. comm.). Note: 2019 and 2020 data does not distinguish between local and nonlocal harvest.

**Table 2.** State and Federal moose seasons, 2011 – 2021 (Rearden 2018, pers. comm.; ADF&G 2019b; Jones 2019, pers. comm.; Jones 2021, pers. comm.; YKDRAC 2019).

| | | Scheduled season dates | | | Actual season dates | | | Actual season length (number of days) | |
|---|---|---|---|---|---|---|---|---|---|
| **Year** | | **State** | **Federal** | | **State** | **Federal** | | **State** | **Federal** |
| 2011 | | Sept. 1 - 10 | Sept. 1 - 5 | | Sep 1 - 6 | Sep 1 - 6 | | 6 | 6 |
| 2012 | | Sept. 1 - 10 | Sept. 1 - 10 | | Sept. 1 - 8 | Sept. 1 - 8 | | 8 | 8 |
| 2013 | | Sept. 1 - 10 | Sept. 1 - 10 | | Sept. 1 - 6 | Sept. 1 - 6 | | 6 | 6 |
| 2014 | | Sept. 1 - 10 | Sept. 1 - 10 | | Sept. 1 - 4 | Sept. 1 - 4 | | 4 | 4 |
| 2015 | | Sept. 1 - 10 | Sept. 1 - 8 | | Sept. 1 - 4 | Sept. 1 - 8 | | 4 | 8 |
| 2016 | | Sept. 1 - 10 | Sept. 1 - 15 | | Sept. 1 - 5 | Sept. 1 - 15 | | 5 | 15 |
| 2017[a] | | Sept. 1 - 10 | Sept. 1 - 25 | | Sept. 1 - 5 | Sept. 1 - 25 | | 5 | 25 |
| 2018[a] | | Sept. 1 - 10 | Sept. 1 - 30 | | Sept. 1 - 7 | Sept. 1 - 30 | | 7 | 30 |
| 2019[a] | | Sept. 1 - 7 | Sept. 1 – 30 | | Sept. 1 - 7 | Sept. 1 - 30 | | 7 | 30 |
| 2020 [a] | | Sept. 1 - 11 | Sept. 1-Oct. 7 | | Sept. 1 - 11 | Sept. 1-Oct. 7 | | 11 | 37 |
| 2021[a] | | Sept. 1 - 9 | Sept. 1 – 30 | | Sept. 1 - 9 | | | 9 | |

[a] The State season corresponds to Zone 1 and the Federal season corresponds to Zone 2.

**Table 3.** State and Federal moose quotas and harvest, 2011 – 2018 (Rearden 2018, pers. comm.; ADF&G 2019b; Jones 2019, pers. comm.; Moses 2020, pers. comm.; ADF&G 2020; Oster 2020).

| | Quota (number of moose) | | | Harvest (number of moose) | | | |
|---|---|---|---|---|---|---|---|
| **Year** | **State** | **Federal** | **Total** | **State** | **Federal** | **Unknown** | **Total** |
| 2011 | 81 | 19 | 100 | 93 | 11 | 15 | 119 |
| 2012 | 81 | 19 | 100 | 82 | 17 | 4 | 103 |
| 2013 | 81 | 19 | 100 | 89 | 21 | 9 | 119 |
| 2014 | 81 | 19 | 100 | 93 | 15 | 23 | 131 |
| 2015 | 110 | 45 | 155 | 105 | 31 | 15 | 151 |
| 2016 | 150 | 90 | 240 | 136 | 44 | 14 | 194 |
| 2017[a] | 170 | 110 | 280 | 186 | 80 | 0 | 266 |
| 2018[a] | 170 | 110 | 280 | 142 | 70 | 0 | 212 |
| 2019[a] | 180-200 | 110 | 290-310 | 160 | 72 | - | 232 |
| 2020[a] | 170 | 110 | 280 | 215 | 90 | | 305 |

[a] The State quota corresponds to Zone 1 and the Federal quota corresponds to Zone 2.

**Effects of the Proposal**

If this request is approved, the moose season in Zone 2 of the Kuskokwim hunt area of Unit 18 would be extended fifteen days, closing October 15 instead of September 30 for the 2021/22 regulatory year. This would increase hunting opportunity for Federally qualified subsistence users and could increase total moose harvest in this area.

While the Federal season applies to the entire Kuskokwim hunt area, the Federal hunt requires use of a State registration permit, which divides the area into Zones 1 and 2. Harvest quota in Zone 1 is generally met in less than one week, and the season closes. Therefore, this season extension functionally only applies to Zone 2, where harvest quotas are not being met due to the difficulty accessing the area. Since 2017, the Federal in-season manager has announced the Zone 2 harvest quota of 110 moose; however, an annual average of only 78 moose have been reported harvested. Extending the season by two weeks could help meet harvest quotas. In 2020, the Board extended the fall season by one week to October 7 via special action, resulting in an increased harvest of 90 moose (**Table 3**). Extending the season by two weeks may help provide additional harvest opportunity and may help achieve harvest quotas.

State seasons in Zone 2 is Sept. 1-Oct. 7. Approval of this request would misalign State and Federal seasons. The Board would need approval from ADF&G to use a State permit under Federal regulations when the State season closes.

During the Council's deliberation of Proposal WP20-35 at their Fall 2019 meeting, ADF&G suggested increasing harvest opportunity by extending the fall season into mid-October instead of establishing a winter to-be-announced season. ADF&G stated that extending the season into October would likely achieve harvest quotas at a manageable pace (YKDRAC 2019).

**OSM CONCLUSION**

**Support** Special Action Request WSA21-03.

**Justification**

This request provides additional opportunity for Federally qualified subsistence users. No conservation concerns exist as harvest is managed through quotas, which are not being met. The in-season manager would close the season if quotas are met. Approval is needed from ADF&G to use a State permit to hunt under Federal regulations when State seasons are closed.

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**ALASKA DEPARTMENT OF FISH AND GAME COMMENTS**

THE STATE of ALASKA
GOVERNOR MICHAEL J. DUNLEAVY

**Department of Fish and Game**

OFFICE OF THE COMMISSIONER
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# MEMORANDUM

| | | | |
|---|---|---|---|
| TO: | Anthony Christianson, Chair<br>Federal Subsistence Board | DATE: | June 23, 2021 |
| | | PHONE: | 267-2190 |
| FROM: | Ben Mulligan BJM<br>Deputy Commissioner | SUBJECT: | Temporary Special Action WSA21-03 |

The Alaska Department of Fish and Game (ADF&G) has reviewed Wildlife Special Action 21-03 submitted by the Yukon Delta National Wildlife Refuge, requesting the fall moose season in the Kuskokwim hunt area within Unit 18 be extended from September 30 to October 15, and has no concerns with the special action request. The upper end of the federal harvest objective in Zone 2 has not been met since 2014, and they almost achieved the harvest objective last year with a September 1-October 7 season. ADF&G supports changes made that align state and federal regulations. Zone two season has already been announced in the state's hunting regulations book for 2021 as September 1 through October 15th.

**Background**

In 2003 the Alaska Board of Game (BOG) established a five-year moratorium on moose hunting under state regulations on the Kuskokwim River in GMU 18. The Federal Subsistence Board (FSB) also adopted identical language for Federal lands in 2004. The goal of the moratorium was to promote colonization and expansion of moose along the Kuskokwim River and its tributaries in GMU 18. With support from the public along with state and federal advisory committees, it was agreed the season would remain closed for 5 years or when a population of 1,000 moose was counted in the lower Kuskokwim survey area. Considerable outreach efforts were made by both state and federal managers of the potential of the moratorium on the growth potential of the moose population and future hunting opportunities.

In 2009, the BOG established a registration hunt (RM615), in preparation for ending the 5-year moratorium. A September 1 – 10 season was established, with a bag limit of one antlered bull. The FSB extended their moratorium one additional year on federal public land. In September 2009, the first post-moratorium hunt was held on state-managed land. In September 2010 both state and federal lands were open to hunting. Separate quotas for state and federal lands within the hunt area were established in 2011 with the bulk of harvest allocated to state lands.

The Kuskokwim hunt area is comprised of approximately 43% state-managed land and 57% federally-managed lands. Land ownership is checkerboarded across most of the hunt area. This checkerboarding caused confusion to the public and was a problem for law enforcement and hunt managers. In 2017 the hunt area was split into two zones in order to reduce confusion among hunters. The creation of zones allowed state and federal managers to better distribute harvest over the landscape and provided a clear boundary for hunters and law enforcement. Functionally, Zone 1 is mostly comprised of state-managed lands along the mainstem of the Kuskokwim River, and Zone 2 is comprised of mostly federally-managed lands to the southeast of Zone 1. State managers set the season and quota/harvest objective for Zone 1, and the federal manager sets the season and quota/harvest objective for Zone 2. A joint state/federal registration permit is used and is valid in both zones, permit RM615.

After the moratorium, state and federal lands were managed by harvest quota. If the quota was reached before the season dates were over, the hunt was closed by Emergency Order (EO). The harvest quota is typically achieved in Zone 1 in 4-7 days. The Zone 2 harvest quota has not been achieved since 2014. In 2015 federal managers started to manage for a harvest objective and set a fixed season date to open and close. This harvest objective has increased with the population growth, and season length in Zone 2 has been lengthened over time. As of the 2019 hunting season, Zone 2 utilized a fixed 30-day season with a harvest objective. In 2020 that was extended to September 1- October 7th with a special action request for that season. From 2009-2018 the state used a quota to manage state lands in (Zone 1) in the hunt. In 2019 the state similarly switched to a fixed season with an advertised start and end day, and a harvest objective, to simplify regulations for the public.

At Board of Game Advisory Committee meetings for the Yukon Kuskokwim Area, federal managers requested a friendly amendment to Proposal 7 for the Arctic/Western Region Board of Game meeting in January 2020, which was to extend the hunting season in Zone 2. The Board of Game approved the requested amendment and changed the closing date in Zone 2 to from September 30 to October 15. In 2020 the Zone 2 season was open from September 1 through October 7th. Hunters reported harvesting 90 moose in Zone 2.

Harvesting 90-100 bull moose in Zone 2 in 2021 would bring the Bull to cow ratio in Zone 2 down to about 30 Bulls:100 Cows.

Cc: Eddie Grasser, Director, Division of Wildlife Conservation
Ryan Scott, Assistant Director, Division of Wildlife Conservation
Lisa Olson, Operations Manager, Subsistence Section
Cheryl Brooking, Assistant Attorney General, Department of Law

| ICTP21-01 Executive Summary | |
|---|---|
| **General Description** | Proposal ICTP21-01 requests an individual customary and traditional use determination for moose and in Unit 13E. In areas managed by the National Park Service where subsistence uses are allowed, customary and traditional use determinations may be made on an individual basis. *Submitted by Blaine Mayo, Tracy Mayo, Owen Mayo, Adelynn Mayo, and Ryland Mayo.* |
| **Proposed Regulation** | **Federal Regulation Regarding Individual Customary and Traditional Use Determinations for National Parks and Monuments**<br>*§ .16 Customary and traditional use process*<br>*(a) The Board shall determine which fish stocks and wildlife populations that have been customarily and traditionally used for subsistence. These determinations shall identify the specific community's or area's use of specific fish stocks and wildlife populations. For areas managed by the national Park Service, where subsistence uses are allowed, the determinations may be made on an individual basis.*<br>**Customary and Traditional UseDetermination**<br>**Unit 13E—Moose**<br>*Rural residents of Unit 13, Chickaloon, McKinley Village, Slana and the area between mileposts 216-239 of the Parks Highway and Kevin Mayo,* ***Blaine Mayo, Tracy Mayo, Owen Mayo, Adelynn Mayo, and Ryland Mayo****. No Federal subsistence priority for the residents of Denali National Park headquarters.*<br>*Note: Names of individuals do not appear in regulation booklets, they are on a list maintained by the respective National Park Service subsistence manager. |
| **National Park Service Recommendation** | **Support** |
| **Southcentral Subsistence Regional Advisory Council Recommendation** | **Support** |
| **Eastern Interior Subsistence Regional Advisory Council Recommendation** | **Support** |
| **Denali National Park Subsistence Resource Commission Recommendation** | **Support** |
| **Public Comments** | **No Comments** |

**DRAFT STAFF ANALYSIS**
**ICTP21-01**

## Issues

Proposal ICTP21-01, submitted by Blaine Mayo of Healy, requests an individual customary and traditional use determination for moose in Unit 13E in areas managed by the National Park Service where subsistence uses are allowed. This request also includes the following members of the Mayo household: Tracy Mayo, Owen Mayo, Adelynn Mayo, and Ryland Mayo. Mr. Mayo intends to continue his family's traditional subsistence lifestyle with his wife and children.

## Discussion

The proponent has described a history of customary and traditional use of moose in Unit 13E within Denali National Park. Mr. Mayo holds a National Park Service subsistence use permit (13.440 permit, 36 CFR §13.440).[1] He and his family are from Cantwell, which is a resident zone community of Denali National Park. Mr. Mayo is currently ineligible to harvest moose in this area because he now resides in a rural community (Healy) which does not have a customary and traditional use determination for moose in Unit 13E.

According to National Park Service regulations, if a person has a 13.440 subsistence eligibility permit, lives within the boundaries of the Park or lives in a resident zone community, that person must also live in a community or area that has a customary and traditional use determination for the desired species and harvest area (NPS 2010a:3). If a person has a 13.440 permit and lives in a community or area without a customary and traditional use determination for the species they wish to hunt, they may submit a proposal to the Federal Subsistence Board for an individual customary and traditional use determination.

Federal subsistence regulations allow the Board to make individual customary and traditional use determinations in NPS-managed National Park and National Monument areas where subsistence is authorized, but not in Preserves. National Park Service

[1] Individuals residing outside of Denali National Park and Preserve's resident zone communities who have a personal or family history of using the Park additions established by ANILCA in 1980 for subsistence purposes at the time ANILCA was passed, may obtain a special subsistence use permit (36 CFR 13.440). They must provide documentation of their traditional subsistence use, without the use of aircraft for access. Eligible subsistence users for Denali National Park and Preserve must also comply with the Federal Subsistence Management Regulations regarding the harvest of fish and wildlife (NPS 2010b).

regulations include unique subsistence eligibility requirements for National Park Service lands. Fewer people have subsistence eligibility in National Parks and National Monuments as compared to other Federal public lands. Requests for individual customary and traditional use determinations are analyzed in the same way that a community or area request for a customary and traditional use determination is analyzed (FSB 1999: 224). Subsistence harvests are authorized only in the ANILCA additions to Denali National Park.

**Existing Federal Regulation**

Federal Regulation Regarding Individual Customary and Traditional Use Determinations for National Parks and Monuments

*§__.16 Customary and traditional use process*

*(a) The Board shall determine which fish stocks and wildlife populations that have been customarily and traditionally used for subsistence. These determinations shall identify the specific community's or area's use of specific fish stocks and wildlife populations. For areas managed by the national Park Service, where subsistence uses are allowed, the determinations may be made on an individual basis.*

**Customary and Traditional Use Determination**

Unit 13E-Moose:

*Rural residents of Unit 13, Chickaloon, McKinley Village, Slana and the area between mileposts 216-239 of the Parks Highway and Kevin Mayo*[2]*. No Federal subsistence priority for the residents of Denali National Park headquarters.*

**Proposed Federal Regulation**

Federal Regulation Regarding Individual Customary and Traditional Use Determinations for National Parks and Monuments

§__.16 Customary and traditional use process:

*(a) The Board shall determine which fish stocks and wildlife populations that have been customarily and traditionally used for subsistence. These determinations shall identify the specific community's or area's use of specific fish stocks and wildlife*

[2] Names of individuals do not appear in regulation booklets, they are on a list maintained by the respective National Park Service subsistence manager.

*populations. For areas managed by the national Park Service, where subsistence uses are allowed, the determinations may be made on an individual basis.*

**Customary and Traditional Use Determination**

Unit 13E-Moose:

*Rural residents of Unit 13, Chickaloon, McKinley Village, Slana and the area between mileposts 216-239 of the Parks Highway and Kevin Mayo**, Blaine Mayo, Tracy Mayo, Owen Mayo, Adelynn Mayo, and Ryland Mayo***[3]*. No Federal subsistence priority for the residents of Denali National Park headquarters.*

**Other Relevant Federal/National Park Service Subsistence Regulations**

Federal Regulation Regarding Individual Customary and Traditional Use Determinations for National Parks and Monuments

36CFR§ 13.41 Applicability:

*Subsistence uses by local rural residents are allowed pursuant to the regulations of this Subpart in the following park areas:*

*(a) In national preserves;*

*(b) In Cape Krusenstern National Monument and Kobuk Valley National Park;*

*(c) Where such uses are traditional (as may be further designated for each park or monument in Subpart C of this part) in Aniakchak National Monument, Gates of the Arctic National Park, Lake Clark National Park, Wrangell-St. Elias National Park, and the Denali National Park addition.*

36CFR§ 13.440 Subsistence permits for persons whose primary, permanent home is outside a resident zone:

*(a) Any rural resident whose primary, permanent home is outside the boundaries of a resident zone of a national park or monument may apply to the appropriate Superintendent pursuant to the procedures set forth in Sec. 13.51 for a subsistence permit authorizing the permit applicant to engage in subsistence uses within the national park or monument. The Superintendent shall grant the permit if the permit applicant demonstrates that,*

*(1) Without using aircraft as a means of access for purposes of*

[3] Names of individuals do not appear in regulation booklets, they are on a list maintained by the respective National Park Service subsistence manager.

*taking fish and wildlife for subsistence uses, the applicant has (or is a member of a family which has) customarily and traditionally engaged in subsistence uses within a national park or monument; or*

*(2) The applicant is a local rural resident within a resident zone for another national park or monument, or meets the requirements of paragraph (a)(1) of this section for another national park or monument, and there exists a pattern of subsistence uses (without use of an aircraft as a means of access for purposes of taking fish and wildlife for subsistence uses) between the national park or monument previously utilized by the permit applicant and the national park or monument for which the permit applicant seeks a subsistence permit.*

**Extent of Federal Public Lands/Waters**

Federal public lands comprise approximately 23% of Unit 13E; 19.4% managed by the National Park Service and 3.9% managed by the Bureau of Land Management.

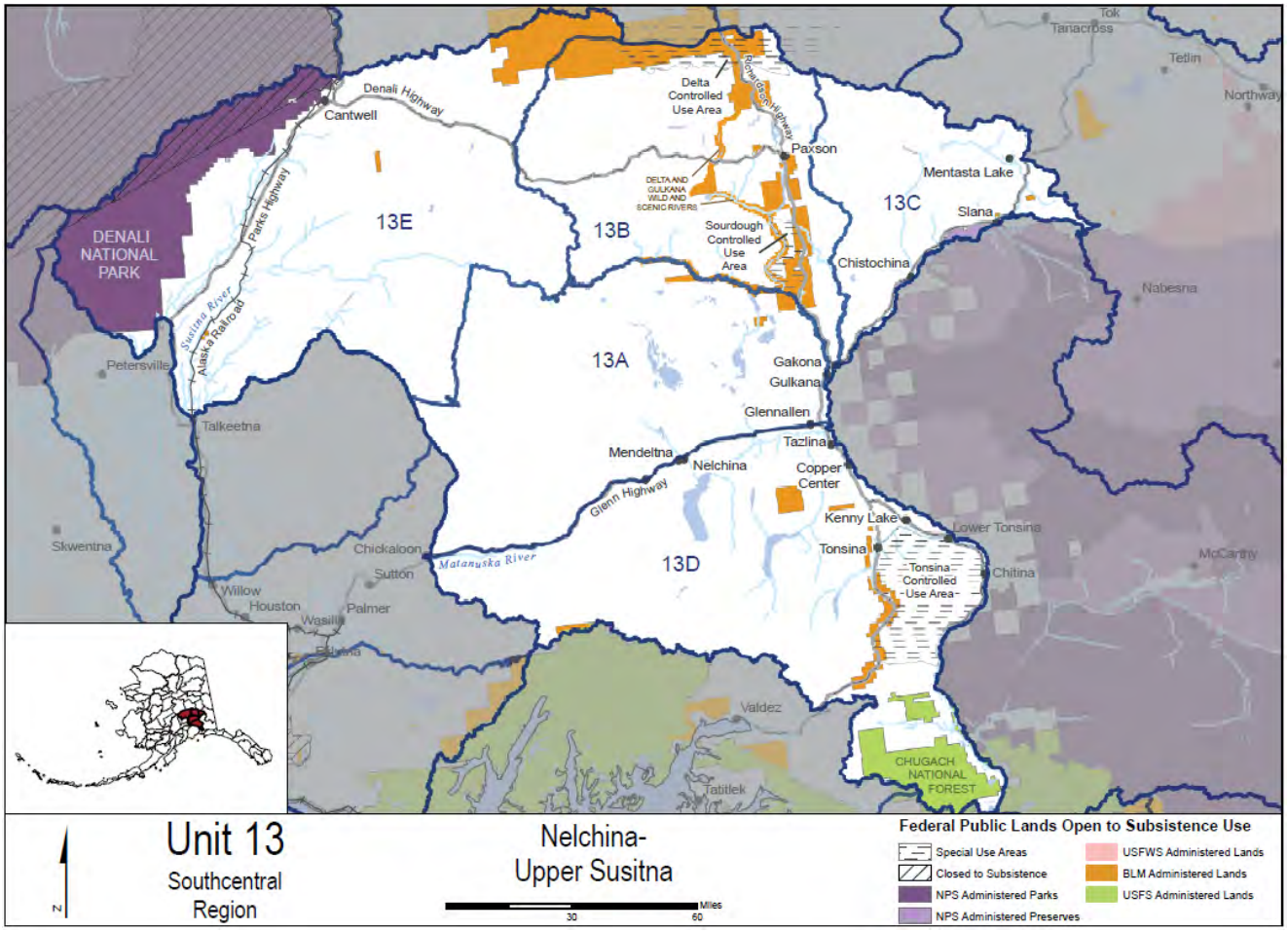


Figure 1. Map of Unit 13E and surrounding area (U.S. Fish and Wildlife Service 2021)

**Regulatory History**

Requests for individual customary and traditional use determinations began almost as soon as the Federal Subsistence Board assumed management authority for subsistence on Federal public lands in 1990. Because of the proximity of the Parks Highway to Denali National Park, many of the first requests came from residents of this area (Norris 2002: 229). Cantwell is the only resident zone community on the highway, yet there are many people who have conducted subsistence harvests in the Park who also live along the highway outside of Cantwell (Norris 2002: 229). Many of the initial individual customary and traditional use proposals were held up for years because of a huge backlog of proposals for community customary and traditional use determinations and lack of clarity as to whether or not individual customary and traditional use determinations were within the purview of the Federal Subsistence Board (Norris 2002: 229-232). In 1999, the Board finally addressed several proposals for individual customary and traditional use determinations. The Department of the Interior's Office of the Solicitor affirmed that the Board "had sufficient legal authority under ANILCA to make customary and traditional use determinations for NPS administered lands on an individual basis" (Norris 2002: 232). Later in 1999 the Board recognized one individual customary and traditional use determination for Denali National Park and several from Wrangell St. Elias National Park (Norris 2002: 232, FSB 1999: 222-243). The Board also denied some of these proposals due to lack of sufficient information exemplifying the eight factors (Norris 2002: 232; FSB 1999: 222-243).

Mr. Blaine Mayo submitted a proposal to the Office of Subsistence Management in 2019 seeking an individual Customary and Traditional Use Determination for moose in Unit 13E. Family members were not included in this proposal. The proposal was deemed invalid because the proponent did not possess a 13.440 subsistence eligibility permit, a requirement stipulated in the Federal Subsistence Board's policy for Individual Customary and Traditional Use Determinations. In January of 2021 the Federal Subsistence Board adopted a revised policy to follow the procedures described in the "Standard Operating Procedures for Issuance of Subsistence Eligibility Permits and Individual Customary and Traditional Use Determinations." The new policy allows for proposals to be submitted on a continuous basis, and also provides for concurrent application for 13.440 Subsistence Eligibility Permits.

**Eight Factors for Determining Individual C&T Use Determination**

For an Individual C&T use determination, the analysis should address the following questions:

1. Does the applicant have a long-term, consistent pattern of use of these resources, excluding interruptions beyond their control? Please explain.

2. Does the applicant have a pattern of use for these resources recurring in specific seasons for many years? Please explain.

3. Does the applicant have a pattern of use of these resources consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics? Please explain.

4. Does the applicant exhibit consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the park unit? Please explain.

5. Does the applicant exhibit a means of handling, preparing, preserving, and storing fish or wildlife which has been traditionally used by past generations, including consideration of alteration of past practices due to recent technological advances, where appropriate? Please explain.

6. Does the applicant exhibit a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation? Please explain.

7. Does the applicant exhibit a pattern of use in which the harvest is shared or distributed within a definable community of persons? Please explain.

8. Does the applicant exhibit a pattern of use which relates to reliance upon a wide diversity of fish and wildlife resources of the area and which provides substantial cultural, economic, social, and nutritional elements to your household? Please explain.

The Board makes customary and traditional use determinations based on a holistic application of the above eight factors (50 CFR 100.16(b) and 36 CFR 242.16(b)). In addition, the Board takes into consideration the reports and recommendations of any appropriate Regional Advisory Council regarding customary and traditional use of subsistence resources (50 CFR 100.16(b) and 36 CFR 242.16(b)). The Board makes customary and traditional use determinations for the sole purpose of recognizing the pool of users who generally exhibit the eight factors. The Board does not use such determinations for resource management or restricting harvest. If a conservation concern exists for a particular population, the Board addresses that concern through the

imposition of harvest limits or season restrictions rather than by limiting the customary and traditional use finding.

Specific information on each of the eight factors is not required because an individual seeking a customary and traditional use determination only must "generally exhibit" the eight factors (50 CFR 100.16(b) and 36 CFR 242.16(b)).

**Integrated Discussion of the Eight Factors**

To address the eight factors listed above, NPS staff conducted multiple interviews with Blaine Mayo, his brother, Kevin Mayo, and father Scott Mayo. Below is historic and contemporary analysis of the subsistence activities conducted by Blaine Mayo's family:

*Do the applicants have a long-term, consistent pattern of use of these resources, excluding interruptions beyond their control? Please explain.*
The Cotter/Smith/Mayo extended families have depended upon moose in the Cantwell area as their primary source of sustenance for four generations and have regularly and consistently hunted in Unit 13 for 55 years. Blaine Mayo's great grandfather, Alywn Smith, came to Alaska in 1937 on a steamship, initially settled in Anchorage, left the state during World War II, and then returned to Anchorage after the war. In 1964, he moved to Cantwell and married into a local Native family (Nellie Norton, sister of Bud Carlson). Soon after he arrived in Cantwell Herman began hunting and trapping on a regular basis in the Cantwell Creek area. Immediately after arriving in Cantwell, Herman, his brothers, and his father formed a corporation and invested in business opportunities within the community of Cantwell. Herman continued his subsistence hunting, fishing, and trapping activities near the Denali Park boundary for many years (Mayo 2009).

As a young child Blaine, accompanied his father, mother, and other relative's moose hunting, long before he was old enough to hunt himself. Blaine Mayo started hunting moose when he was fourteen years old and continues to hunt with his father, brother, wife, Tracy Mayo, and children: Owen Mayo, Adelynn Mayo, and Ryland Mayo (Mayo 2021).

Blaine Mayo moved to Healy in 2018. Prior to 2004 Blaine Mayo lived in Cantwell and routinely received Federal subsistence moose permits for GMU 13E. Blaine did not apply for a permit hunt in 2005-2018 because he was living part time in Wasilla and Healy while he worked at the Usibelli Coal Mine in Healy. Although Blaine was not qualified for a Federal subsistence moose permit between 2005-2018, he continued to actively participate in his family's traditional moose hunting traditions by helping with the butchering, packing, and processing of the moose (Mayo 2021).

*Do the applicants have a pattern of use for these resources recurring in specific seasons for many years? Please explain.*
The family typically harvests moose in September after the weather cools. This pattern of use has recurred since 1964 (Mayo 2021).

*Do the applicants have a pattern of use of these resources consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics? Please explain.*
The Cotter/Smith/Mayo travel to their hunting area to hunt moose by foot and off-road vehicles (ORV) and all-terrain vehicles (ATV) such as Coots and Weasels. The Cotter/Smith/Mayo family continues to maintain a reoccurring pattern of use within the area using traditional methods and means which are characterized by efficiency and economy of effort. According to Mayo, one of the main benefits for using a Coot and a trailer is that the Mayo family can haul all their family and gear to camp in one load. Once the family sets up their camp, they walk about two miles to a hill where they sit and spot for a moose with binoculars. Once they spot moose, they walk to within shooting distance of the moose. After they shoot the moose (generally located within the traditional use area), they pack out the moose by foot to a designated ORV trail to camp and then return with the Coot to haul out the moose. Once the moose is at camp, they hang sections of meat from a meat pole and cover it with a tarp (Mayo 2009).

Blaine Mayo's grandfather, Herman Cotter, started using a Bombardier around '68/ '69, which is a beefed-up snow machine like vehicle with an open cab and skies that run on an elaborate track. Herman also used Snow Tracs, which looks like a miniature Bombardier with metal cleated tracks. In the '70s Cotter started using a Swamp Buggy. The benefit of a track vehicle is that it is easier on the environment than 4-wheelers. Historically, and to this day, subsistence hunters use motorized vehicles to pack out their meat (Mayo 2009).

In the past, the Mayo family used to put their tent up and take it down after every hunting season; however, fifteen years ago, they built a tent platform. Generally, the extended family prefers to hunt close to their camp. If they hunt a distance from camp it is difficult to salvage the moose and the likelihood of bears getting into the moose meat increases. Typically, the Cotter/Smith/Mayo families remain at their camp until they get their moose. This is partially because the weasel vehicles require a lot of maintenance and it is better to use them as little as possible and the family enjoys the social aspects related to spending extended time at hunting camp (Mayo 2009).

*Do the applicants exhibit a means of handling, preparing, preserving, and storing fish or*

*wildlife which has been traditionally used by past generations, including consideration of alteration of past practices due to recent technological advances, where appropriate? Please explain.*
The Mayo's use all edible parts of the moose. Much of the meat is canned or stored in the freezer to preserve it and some portions of the moose are processed by drying. Mr. Mayo uses the same handling techniques that he was taught by his father, grandfather, and great grandfather.

*Do the applicants exhibit a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation? Please explain.*
Knowledge, skills, and the use of hunting areas are passed from generation to generation. Blaine Mayo's grandparents learned how to hunt in the Cantwell areas and passed this knowledge on to their extended family. Blaine has hunted moose every year since he turned 14 years old. Blaine continues these traditions with his family and is passing them on to his wife and children. Hunting, trapping, berry picking, and fishing are significant values upon which the Mayo family is dependent upon. Moose hunting is a family event, participated and shared by all the family members within and between households. Typically, the extended family harvests one moose per hunting season. The family never take more than one moose as a family per hunting season (Mayo 2009).

Blaine's great grandparents passed down their traditional subsistence lifestyle to their extended multi-generational family. It is this traditional subsistence lifestyle that wants to continue to pass down to his wife and children.
According to Blaine,

> *"I have learned a lot over the years of hunting with my parents, brother and friends. I'm never one to push the knowledge that I have onto anyone saying my way is the only way but I'm always one for sharing whatever knowledge I have. There are literally a thousand different ways skin an animal. Whenever we harvest an animal, we all know our places and go from there, it's like clockwork. If there's any questions, I'll step in or someone will suggest something different to me. I'll explain verbally to people on how I skin and break down an animal then in the field I can demonstrate. Bird hunting is another huge part of my life. Ptarmigan and spruce hens were always part of moose and caribou hunting. When we went out to moose camp or caribou hunting, we always had a .22 to harvest birds. Hunting is more than just going out and shooting an animal, it's a huge part of our lives. It's amazing family time, camping, making of memories and showing our kids what we grew up doing. I have*

*three amazing kids; the twins are 5 and our youngest is almost 4. They love to go out to hunting. Moose camp and our winter camp is always on their minds. We've showed them how to call moose, to look for paddles in the brush, how to fish the creeks, lakes and how to ice fish. It's truly a blessing to be able to pass down what I've learned from my parents and family down to my kids. And they still learn from my parents and family, it's a beautiful thing (Mayo 2021)!*

*As far as fishing goes, again, I've learned a lot from my parents, brother, sister and my grandparents. One of my more favorite fish to break down are burbot. I learned that specifically from my dad. I try to pass on my knowledge with breaking down burbot to my friends, but they would rather me just do it, which I'm fine with. Grayling, lake trout, salmon and other fish are always a blessing to have in the freezer or better yet on the plate. Explaining on how to catch fish in the summer, fall and winter are always an interesting topic. I'll go over depths, bait and what to look for in a lake, creek, or river to where to catch fish. Hunting, fishing, cutting down trees for firewood, being out in the wilderness are ingrained into our lives, it's what we do! Wouldn't change a thing (Mayo 2021).*

The Mayo family hunts together as a family event, often including several generations who participate together in the hunts, establishing camps, and processing harvested meat.

*Do the applicants exhibit a pattern of use in which the harvest is shared or distributed within a definable community of persons? Please explain.*
It is the Mayo's family lifestyle to share moose and equipment. If a family member or friend does not get enough meat for the season it is expected that the Mayo family will share their harvest with that person or household. For example, Blaine's mom always shares moose meat with her sister, mother, and elders (Mayo 2009).

**Effects of the Proposal**

If adopted, this proposal would recognize Blaine Mayo, Tracy Mayo, Owen Mayo, Adelynn Mayo, and Ryland Mayo's customary and traditional uses of moose in Unit 13E and would allow Mr. Mayo to share his traditional subsistence lifestyle with his wife and children. As described above, there is a documented history of the Cotter/Smith/Mayo extended family sharing in the traditional subsistence lifestyle, including the harvest, use, and preservation of moose from Federal Public Lands in Unit 13E. To facilitate preservation of these family traditions, this determination request includes the next generation of the Mayo family. Because this customary and traditional use determination

is for members of a single household who have a history of moose harvests in this area, the effects on other users should be minimal.

## NPS PRELIMINARY CONCLUSION

**Support** Proposal ICTP21-01.

**Justification**

Mr. Mayo and his household possesses a National Park Service subsistence eligibility permit (13.440 permit) for Denali National Park. Mr. Mayo and the members of his household provided substantial information regarding their family's customary and traditional use of moose that exemplify the eight factors for customary and traditional use determinations. As evidenced in the analysis, the proponents exhibit a clear long-term and consistent pattern of use of moose in Unit 13E. This pattern has been repeated for many years and through several generations. Methods and means are characterized by efficiency of economy of effort and cost based on local characteristics. The pattern is consistent with past methods and means of harvest at or near the family's hunting camp within the Unit in question. Knowledge of handling, preparing, preserving, and storing moose meat is shared among and between generations, as is knowledge of the skills, values, and lore associated with hunting moose in the area. Moose meat is regularly shared within the family and within the broader Cantwell and Healy communities. The proponents demonstrate a pattern of use that relates to reliance on a wide diversity of wild foods that provides the family with cultural, economic, social, and nutritional benefits. Furthermore, this family's pattern of use is also evidenced through the Federal Subsistence Board's previous determination for Blaine Mayo's brother, Kevin Mayo, in 2010. For these reasons, there is substantial evidence to support the issuance of an Individual Customary and Traditional Use Determination for the proponents, all members of the same household and nuclear family unit.

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**U.S. DEPARTMENT OF THE INTERIOR**
**NATIONAL PARK SERVICE**
**ALASKA REGION**

## NATIONAL PARK/MONUMENT SUBSISTENCE ELIGIBILITY PERMIT* & INDIVIDUAL CUSTOMARY AND TRADITIONAL USE DETERMINATION ANALYSIS

*(*For determination of subsistence eligibility under the provisions of 36 CFR 13.440.)*

To be completed by the relevant Subsistence Coordinator:

Date: February 4, 2021

Applicant Name: Blaine Mayo, Tracy Mayo, Owen Mayo, Adelyn Mayo, Ryland Mayo

Analyst Name: Amy Craver

This analysis is in response to the following request (Choose One):

- ○ Subsistence Eligibility Permit ONLY
- ⊗ Individual Customary and Traditional Use Determination ONLY
- ○ Subsistence Eligibility Permit AND Individual Customary and Traditional Use Determination

Please type a brief summary of the applicant's reported subsistence use pertaining to the request, as determined from information provided on the application and during the interview:

For a National Park/Monument Subsistence Eligibility Permit, the analysis should address the following topics:

1. Synopsis of the applicant's pattern of use[4] specifically in the national park or monument for which the permit is requested, including the following:
   a. Species harvested,
   b. Specific locations where the use occurred,
   c. Years during which the subsistence uses took place, and
   d. Whether aircraft was used for access.
2. Does the pattern of use begin prior to the signing of the Alaska National Interest Lands Conservation Act (ANILCA)?

[4] There may be variation by region and/or park on what constitutes a "pattern of use." Generally, there should exist evidence of repeated past attempts to access and harvest subsistence resources within the boundaries of the park or monument. SRCs may be consulted in defining a "pattern of use" for their region.

3. Does the applicant have a pattern of use established while as a resident of a resident zone community after the passage of ANILCA?

For an Individual C&T use determination, the analysis should address the following questions:

1. Does the applicant have a long-term, consistent pattern of use of these resources, excluding interruptions beyond their control? Please explain.
2. Does the applicant have a pattern of use for these resources recurring in specific seasons for many years? Please explain.
3. Does the applicant have a pattern of use of these resources consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics? Please explain.
4. Does the applicant exhibit consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the park unit? Please explain.
5. Does the applicant exhibit a means of handling, preparing, preserving, and storing fish or wildlife which has been traditionally used by past generations, including consideration of alteration of past practices due to recent technological advances, where appropriate? Please explain.
6. Does the applicant exhibit a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation? Please explain.
7. Does the applicant exhibit a pattern of use in which the harvest is shared or distributed within a definable community of persons? Please explain.
8. Does the applicant exhibit a pattern of use which relates to reliance upon a wide diversity of fish and wildlife resources of the area and which provides substantial cultural, economic, social, and nutritional elements to your household? Please explain.

The analysis should include an integrated discussion of the eight factors. A factor-by-factor discussion is not required in the analysis and it is also not necessary that all eight factors be addressed to demonstrate a pattern of use. The eight factors provide a framework for examining the pattern of use of a resource. There are regional, cultural and temporal variations and the application of the eight factors will likely vary by region and by resource depending on actual patterns of use. The goal of customary and traditional use determination analyses is to recognize customary and traditional uses in the most inclusive manner possible.

As a result of this analysis (Select All that Apply):

○ There is substantial evidence to support the issuance of a Subsistence Eligibility Permit

⊗ There is substantial evidence to support the issuance of an Individual Customary and Traditional Use Determination for moose in Unit 13E.

○ There is **NOT** substantial evidence to support the issuance a Subsistence Eligibility Permit

○ There is **NOT** substantial evidence to support the issuance an Individual Customary and Traditional Use Determination for (species and location) _____

Brief Justification:

As is evidenced in the analysis, the proponents exhibit a clear long-term and consistent pattern of use of moose in Unit 13E. This pattern has been repeated for many years and through several generations. Methods and means are charachterized by efficiency of economy of effort and cost based on local characteristics. The pattern is consistent with past methods and means of harvest at or near the family's hunting camp within the Unit in question. Knowledge of handling, preparing, preserving, and storing moose meat is shared among and between generations, as is knowledge of the skills, values, and lore associated with hunting moose in the area. Moose meat is regularly shared within the family and within the broader Cantwell and Healy communities. The proponents demonstrate a pattern of use that relates to reliance on a wide diversity of wild foods that provide this family with cultural, economic, social, and nutritional benefits. All eight of the factors associated with determining Customary and Traditional Uses are evident. Furthermore, this family's pattern of use is also evidenced through the Federal Subsistence Board's previous determination for Blaine Mayo's brother, Kevin Mayo. For these reasons I believe that there is substantial evidence to support the issuance of an Individual Customary and Traditional Use Determination for the proponents, all members of the same household and nuclear family unit.

Signature of Analyst: _____ Date: 2/4/2021

**U.S. DEPARTMENT OF THE INTERIOR**
**NATIONAL PARK SERVICE**
**ALASKA REGION**

## INDIVIDUAL CUSTOMARY AND TRADITIONAL USE DETERMINATION

## RAC RECOMMENDATION

To be completed by the relevant Subsistence Coordinator:

Date of Formal Action: **February 24, 2021**

| | |
|---|---|
| Proponent Name: | **Blaine Mayo, Tracy Mao, Owen Mayo, Adelynn Mayo, and Ryland Mayo** |
| Proponent Request: | **Individual customary and traditional use determination for moose and in Unit 13E, in areas managed by the National Park Service where subsistence uses are allowed, customary and traditional use determinations may be made on an individual basis.** |
| Affected RAC: | **Southcentral Subsistence Regional Advisory Council** |

This RAC has determined that (select all that apply):

- ✓ There is sufficient evidence to support an individual customary and traditional use determination for (name) for (species) in (unit(s)/subunit(s))
- ○ There is NOT sufficient evidence to support an individual customary and traditional use determination for (name) for (species) in (unit(s)/subunit(s))

Brief justification for above decision:

The Council finds that this application meets the criteria for an individual customary and traditional use determined based on the evidence presented at its Winter 2021 meeting and there is no reason to deny such a determination for the proponents listed.

Signature of RAC Chair or Designee 
**Richard (Greg) Encelewski, SC RAC Chair**

Date **March 1, 2021**

**U.S. DEPARTMENT OF THE INTERIOR**
**NATIONAL PARK SERVICE**
**ALASKA REGION**

## INDIVIDUAL CUSTOMARY AND TRADITIONAL USE DETERMINATION

## RAC RECOMMENDATION

To be completed by the relevant Subsistence Coordinator:

Date of Formal Action: March 4, 2021

Proponent Name: Blaine Mayo, Tracy Mao, Owen Mayo, Adelynn Mayo, and Ryland Mayo

Proponent Request: Individual customary and traditional use determination for moose and in Unit 13E, in areas managed by the National Park Service where subsistence uses are allowed, customary and traditional use determinations may be made on an individual basis.

Affected RAC: Eastern Interior Regional Advisory Council

This RAC has determined that (select all that apply):

☒ There is sufficient evidence to support an individual customary and traditional use determination for (name) for (species) in (unit(s)/subunit(s))

☐ There is NOT sufficient evidence to support an individual customary and traditional use determination for (name) for (species) in (unit(s)/subunit(s))

Brief justification for above decision: The Council finds that this application meets the criteria for an individual customary and traditional use determined based on the evidence presented at its Winter 2021 meeting and there is no reason to deny such a determination for the proponents listed.

Signature of RAC Chair or Designee

Date March 4, 2021

**U.S. DEPARTMENT OF THE INTERIOR**
**NATIONAL PARK SERVICE**
**ALASKA REGION**

## INDIVIDUAL CUSTOMARY AND TRADITIONAL USE DETERMINATION

## SRC RECOMMENDATION

To be completed by the relevant Subsistence Coordinator: Amy Craver

Date of Formal Action: 2/23/2021

Proponent Name: Blaine Mayo

Proponent Request: Blaine Mayo's Individual Customary and Traditional Use Determination Request

Affected SRC: Denali National Park SRC

This SRC has determined that (select all that apply):

- ⓧ There is sufficient evidence to support an individual customary and traditional use determination for (name) for (species) in (unit(s)/subunit(s))
- ○ There is NOT sufficient evidence to support an individual customary and traditional use determination for (name) for (species) in (unit(s)/subunit(s))

Brief justification for above decision: The Denali National Park SRC concurred unanimously with the NPS conclusion associated with ICT21-01, and with the recommendation made by Amy Craver, Subsistence Coordinator for the park. Members of the Mayo household appear to exhibit a clear pattern of subsistence use of Moose in Unit 13E, as is evidenced through our review of the eight criteria used to make these determinations.

Signature of SRC Chair or Designee_____
Date__2/23/2021____

# Federal Subsistence Board

**1011 East Tudor Road, MS 121**
**Anchorage, Alaska 99503-6199**

U.S. Fish and Wildlife Service
Bureau of Land Management
National Park Service
Bureau of Indian Affairs

Forest Service

OSM 21035.KW

Donald Hernandez, Chair
Southeast Alaska Subsistence
Regional Advisory Council
c/o Office of Subsistence Management
1011 East Tudor Road, MS 121
Anchorage, Alaska 99503-6199

Dear Chairman Hernandez:

This letter responds to the Southeast Alaska Subsistence Regional Advisory Council's (Council) fiscal year 2020 Annual Report. The Secretaries of the Interior and Agriculture have delegated to the Federal Subsistence Board (Board) the responsibility to respond to these reports. The Board appreciates your effort in developing the Annual Report. Annual Reports allow the Board to become aware of the issues outside of the regulatory process that affect subsistence users in your region. We value this opportunity to review the issues concerning your region.

## 1. Information Sharing

### *a. Public participation provided for in ANILCA*

*The Council has been concerned with certain public processes over the last few years. Specifically, during the Alaska Roadless Rulemaking (AKRR), the Council has spent a substantial amount of time advocating for the requirements set forth in the National Environmental Protection Act (NEPA) process and ANILCA and requesting that they be followed. The Council wrote several letters to the USDA Forest Service (Forest Service) providing public comment on various stages of AKRR (with copies sent to Board members) and would like to take this opportunity to remind the Board of its attempts to ensure opportunities for public participation during this rulemaking process. The Council addressed these concerns:*

- *Timing of public comment periods*
- *The conduct of subsistence (810) hearings*

- *The obstacles during the rulemaking process that prevent optimum public participation*
- *Participation by local Tribes offering expertise and knowledge of impacts within their traditional territories being disregarded*

*The Council appreciates that the Board helped convey these concerns to the Secretary of Agriculture. In addition to letters, three Council members also requested a hearing on this matter before the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB). At this hearing they provided testimony and presented copies of the Council's public comment letters as supporting materials. A copy of that testimony to OMB is attached for the Board's reference. The Council is dedicated to supporting subsistence users in Southeast by expressing concerns when appropriate and helping the public voice be heard.*

***b. Restrictions on Federally Qualified Subsistence Users***

*The Council is concerned about Federal fishing proposals that suggest more restrictions than those that exist under State regulations. The Council appreciates this Board follows the requirements in ANILCA that provide a preference for harvest opportunity to the Federally qualified subsistence user and that the Board acknowledges that subsistence regulations cannot be more restrictive than other regulated uses of the resource.*
*The Council continues to support the Board in its decisions on the taking of fish and wildlife and is confident that the Board will continue to preserve the Federally qualified subsistence user's priority and protect those users in the future from being the sole group burdened with sacrificing any harvest to conserve fish or wildlife species.*

***c. Lack of Current Data***

*The Council must receive relevant and current information to make appropriate recommendations to the Board. Without current data, the Council is handicapped in making educated decisions. The Council is concerned that some recent analyses feature years-old data and it would like reassurance that the most up-to-date research is being explored for these analyses. The Council requests that all agencies involved in preparing analyses for proposals ensure that the latest scientific data and studies available are being used.*

***d. Individual National Park Service (NPS) Customary and Traditional Use Process***

*The Council appreciated that the Board deferred its action on the proposed delegation of authority to NPS in determining Individual Customary and Traditional (C&T) uses to allow the Regional Advisory Council the opportunity to provide input on this matter. The*

*Council received the information on this proposed process at its fall 2020 meeting.*

*The Council felt that the existing process for determining Individual C&T use is working and does not need to be changed. The area available for individual C&T permits in the Southeast is limited; however, the Council is concerned that the initial proposed changes may enable the NPS to take land use out of the jurisdiction of the Board. Under the existing process, the Regional Advisory Councils and the Board play a role for the approval of C&T use in national parks. If the delegation of authority is granted to the NPS Alaska Regional Director, the Council is concerned that this would narrow authority and reduce advisory capacity. The Council does not wish to see access to subsistence areas denied and subsistence activities further limited or eliminated in national park areas for Federally qualified subsistence users.*

*The Council is pleased to learn that the Board considered the comments received from the Regional Advisory Councils and took action to retain final decision making authority on these determinations and to include a formal recommendation from both the affected Regional Advisory Councils and the affected Subsistence Resource Commissions in this process.*

**Response**:

**a.** Members of the Board uniformly appreciate and thank Council members for their tremendous work to support subsistence users throughout Southeast Alaska. The Board believes the Subsistence Regional Advisory Councils have contributed significantly towards protection of the cultural and traditional uses of subsistence resources for Federally qualified subsistence users since ANILCA was implemented in 1980. The Council's work on the Alaska Roadless Rule Draft Environmental Impact Statement (DEIS) was especially thorough, insightful, and well researched. We recognize the importance and significance of the efforts by all Councils and their members and congratulate you with heartfelt sincerity.

**b.** Thank you for your confidence in the Board and for supporting our decisions. We do the best we can to protect and conserve the fish and wildlife resources in Alaska and to support the ANILCA-mandated subsistence priority for Federally qualified subsistence users who depend on these resources. The Board is committed to continuing to follow ANILCA and to prioritize the needs of Federally qualified subsistence users.

**c.** The Board agrees that up-to-date research, and inventory and monitoring information are essential to managing fish and wildlife resources in Alaska. The Board encourages its members to direct their agencies' staff to conduct essential studies, surveys and monitoring activities,

partner whenever and wherever possible, and for staff to use the most up to date information when analyzing proposals that affect subsistence uses and Federally qualified subsistence users.

**d.** The Board appreciates the Council's comments regarding the individual customary and traditional use determination (individual C&T) process and the complexity of this issue. The goal in proposing modifications to the policy on individual C&T was to provide transparency, expediency, and continuity in making determinations for those with existing patterns of use.

The Board adopted a revised version of the proposed individual C&T process at its January 2021 meeting, after carefully considering feedback that was offered by several Councils and incorporating the recommended modifications. The revised process includes two critical recommendations made by the Councils and Subsistence Resource Commissions (SRC). First, as your Council supported, there is no delegation of authority to the National Park Service (NPS) to make individual C&T determinations. The Board will retain the final decision-making authority. Second, the process now includes a formal recommendation from both the affected Councils and the affected SRC. We are happy to hear your Council is in support of this decision. Perhaps the biggest change is the process is no longer tied to the lengthy biennial regulatory proposal cycle. Instead, the application window is open continuously and once the Councils and SRC have weighed in, the Board will act on the request at its next public meeting. We do not believe there will be more requests resulting from these changes, only that those who do apply will have their requests addressed in a more timely fashion and be able to navigate the intricacies of the application process more easily.

Enclosed are two documents that we hope will better inform your Council on the individual C&T process, and how it has been modified. The first is a one-page overview that compares the former and the newly modified process. The second is the longer Standard Operating Procedure that will be used in making all subsequent individual C&T determinations, until such time that the policy is further modified. Also included in the second document are the procedures that NPS will use in responding to requests for 13.440 subsistence eligibility permits. That process is fully within the purview of NPS, not the Board, though NPS thought that it would be useful to simultaneously clarify and streamline it as well. Though tangentially related, 13.440 permits are not germane to this reply. We invite you to reach out to NPS staff if you have clarifying questions.

In conclusion, the Board believes that it has taken strides to improve the individual C&T process to be transparent, responsive, and consistent. We have incorporated the valuable recommendations and insights of the Councils and SRCs. We hope that the Councils, yours included, will continue to provide recommendations to further improve the policy over time.

## 2. Council supports the community of Hoonah's ability to access Glacier Bay

*During the Council's discussion on the proposed delegation of authority to NPS (Individual C&T uses) issue, additional discussion took place on the concerns for land management in Glacier Bay. Access to the Glacier Bay National Park (NP) resources for subsistence purposes has been prevented. The local residents are denied the ability to individually harvest gull eggs or gumboots in Glacier Bay NP. In addition, there are no longer any goat or seal subsistence harvests allowed. Many cannot partake in these activities because they cannot produce the required documents showing their historical use of the land, even though many have done so for their entire lives. These activities are a cultural and traditional use of the resources and the Council would like to explore options available to provide access to subsistence users so that they may continue these practices. The Council would like to know what mechanisms are in place or that could be initiated to provide a subsistence opportunity to harvest resources in Glacier Bay NP.*

*Additionally, some subsistence gathering opportunities are prevented by the current regulations that restrict firearms in the NP. Firearms are necessary for subsistence users to harvest and gather in bear-dense areas. Subsistence users no longer utilize some of the most productive areas in Glacier Bay because they are prohibited from carrying firearms for their safety and protection.*

*The Council supports the community of Hoonah's ability to access Glacier Bay NP to harvest subsistence resources. Denying the Huna Tlingit people the ability to practice customary and traditional activities in their traditional territory diminishes or removes their identity. The Council would like to assist the Hoonah community in retaining their cultural identity and asks the Board to identify options for the Council to pursue or share with the Hoonah community. The Council would also like a comprehensive presentation on the permitted subsistence activities in Glacier Bay NP at a future meeting.*

**Response**:

The Board appreciates the opportunity to respond to the concerns expressed by the Council about the management of resources in Glacier Bay National Park, the traditional Homeland of the Huna Tlingit.

We recognize that Glacier Bay National Park is encompassed by the traditional territory of the clans now represented by the Hoonah Indian Association (HIA, a Federally recognized tribe) and the area's rich abundance supported the Huna Tlingit for generations. Although certain laws and

regulations do not allow for all traditional harvest activities to occur, the NPS and HIA are committed to working collaboratively to explore options that support a range of traditional uses.

Glacier Bay National Monument was established in 1925 under the Antiquities Act and later expanded in 1980 under the Alaska National Interest Lands Conservation Act (ANILCA). ANILCA's Title VIII provisions for subsistence do not apply to those parks, or portions of parks, established prior to the Act's passage. Thus, subsistence is not authorized in Glacier Bay National Park, although it is allowed in the Preserve, Dry Bay. The NPS does not have the prerogative of allowing subsistence activities in pre-ANILCA parks, including Glacier Bay; an Act of Congress would be required to alter ANILCA regulations. Of note, the Hoonah Indian Association submitted written opposition to congressional efforts in 1999 and 2000 aimed at authorizing subsistence in Glacier Bay, expressing concerns that it would diminish the Tribe's exclusive rights to traditional resources in Homeland. To our knowledge, the Hoonah Indian Association has not altered their position regarding subsistence.

Given that subsistence is not authorized in Glacier Bay, the HIA has worked collaboratively with the NPS to identify and address a wide range of traditional needs using other mechanisms. Beginning in 1997, following a meeting with Tribal elders, NPS and HIA agreed to prioritize critical traditional resource harvest needs and seek creative solutions where feasible.

For example, elders prioritized the harvest of glaucous-winged gull eggs as a critical traditional food source. The Tribe and NPS partnered to collect biological and ethnographic information which informed planning efforts. Tribal members now harvest gull eggs in the park through a Tribal harvest plan following legislation (Public Law 113-142, The Huna Tlingit Traditional Gull Egg Use Act) and required NEPA analysis. Similarly, NPS conducted an ethnographic study of traditional seal harvest in the park to document the practice and inform any future discussions about potential seal harvest.

Berry picking[1], an important cultural tradition for Huna Tlingit, occurs throughout the park during the summer months, often jointly sponsored through NPS and HIA Journey to Homeland trips. Families also harvest berries and other resources on their own. Tribal members continue to

1 36 CFR § 13.35 Preservation of natural features.
**(c)** Gathering or collecting, by hand and for personal use only, of the following renewable resources is permitted -
**(1)** Natural plant food items, including fruits, berries and mushrooms, but not including threatened or endangered species;
**(2)** Driftwood and uninhabited seashells;
**(3)** Such plant materials and minerals as are essential to the conduct of traditional ceremonies by Native Americans; and
**(4)** Dead wood on the ground for use as fuel for campfires within the park area.

harvest intertidal species (primarily chiton), seaweed, and some species of salmon under State of Alaska sport fishing regulations. Tribal members also harvest salmon and halibut under personal use fishery permits issued by the State of Alaska. To facilitate these activities, the NPS issues local vessel entry permits to Hoonah residents. NPS and HIA are also currently pursuing cultural fisheries options for various traditional fishing locations including Chookanhéeni (Berg Bay), where partners are planning a culture camp. Importantly, the NPS and HIA are also consulting on vegetation gathering needs, now permitted under the 2016 authorized rule (Gathering of Certain Plants or Plant Parts by Federally Recognized Indian Tribes for Traditional Purposes).

NPS does not require that Tribal members visiting Homeland or participating in traditional activities within the Park provide documentation of historical use. The only instance where historical documentation was required was for those individuals applying for lifetime access permits for commercial fishing within Park waters.

Since 2010, Individuals have been authorized to possess firearms in NPS areas in accordance with applicable State and Federal law although the laws regarding discharge of firearms remain unchanged. The NPS understands that many Tlingit prefer to carry firearms for protection against bears while harvesting; they are free to do so. Should a firearm be discharged in the Park, the incident would be investigated, but if the discharge was associated with protecting life, no legal action would be taken. There is no exemption for protection of property. Importantly, studies by the NPS and others have shown that bear spray is often more effective in preventing bear attacks than firearms. All Glacier Bay field employees utilize bear spray or tasers rather than firearms and many younger Hoonah residents appear to be comfortable doing the same. The NPS understands that the enduring connection between the Huna Tlingit and their Homeland in Glacier Bay is vital not only to the cultural identity of the Huna Tlingit, but also to the resources and values of the Park. The NPS incorporates Homeland concepts in all its planning efforts including the recently completed Frontcountry Management Plan and the pending Backcountry Management Plan. The NPS must manage the Park in accordance with ANILCA, and an array of other Federal laws, regulations, and policy, but remains committed to partnering with the Tribal government and other Tribal entities to develop creative approaches which provide meaningful opportunities for Homeland connections. The NPS would be pleased to present more detailed information about the traditional activities that occur in the Park and would be happy to answer any questions the Council might have.

**3. <u>Council Vacancies</u>**

*The Council remains extremely disappointed that there are vacant seats on the Council in recent years. These vacancies have detracted from the Council's ability to perform its work effectively.*

*During the 2020 appointment cycle, the Council received appointments approximately one week before its winter 2021 meeting (these appointments should have been made prior to the expiration of terms on December 2, 2020). By the time appointments were received a substantial amount of preparatory work and effort had already gone into mitigating the difficulties created by the lack of Council appointments. An Acting Chair needed to be acclimated to leading a meeting with complex and sensitive issues. A lot of strategizing needed to be done to ensure that a group of five Council members could do the work of a 13-member Council.*

*The Council is now almost fully seated (12 of 13 seats filled); however, based on the last few years' appointment process experiences, the Council is concerned that this vacancy trend could continue. The Council also continues to be concerned with the June 14, 2019 Executive Order Evaluating and Improving the Utility of Federal Advisory Committees, and its impacts on the Federal Subsistence Management Program (Program) and Regional Advisory Councils. For these reasons, the Council reiterates its concern for the loss of crucial representation in past years across the Southeast Alaska Region as noted in its FY 2019 Annual Report. The lack of appropriate diversity on the Council created significant challenges for the Council members who were asked to make decisions affecting areas and groups in the absence of a local member who can best represent the citizenry of their community.*

*All vacant seats must be filled, every year, for the Council to function properly and efficiently. Applicants to Regional Advisory Councils are screened and vetted with specific criteria to ensure that well-informed residents of the regions are appointed. Individuals selected have significant knowledge of ANILCA, regional experiences with a wide range of subsistence resources, and share their traditional ecological knowledge about fish and wildlife resources. Experienced members have institutional knowledge of subsistence uses in their local area, which is vital to fully comprehend issues that arise. The lack of Council member appointments and the resulting loss of useful and historical knowledge have detrimentally affected the Program and vacant seats on any Regional Advisory Council are contrary to the Program's objectives.*

*In the Board's FY 2019 Annual Report reply regarding Council vacancies subject, the Board encouraged the Council to "expand its outreach effort in its communities and throughout the Region to attract a wider pool of applicants, if the Council wishes to see all seats filled." The Council does not believe that outreach is the issue. Twelve applications were received to fill 7 vacancies for the December 2019 appointments, yet four seats remained unfilled. Ten applications were received to fill 8 vacant seats for the December 2020 appointments, yet no appointments were made for months, leaving only four members and an Acting Chair to cover the Council's business (including the January 2021 Board regulatory meeting).*

*The Council respectfully makes a second request that the Board send a letter to the newly*

*appointed Secretaries of Interior and Agriculture advising them of the substantial impacts these Council membership reductions have had on the work of the Councils; that these Councils are provided for under ANILCA; and that a lack of representation on the Councils is detrimental to the intent of ANILCA.*

*Lastly, the Council requests a legal analysis of the failure to appoint Council members to the Subsistence Regional Advisory Councils for the last three years and whether provisions of the Federal Advisory Committee Act or ANILCA have been violated. The Council wants to be prepared. It appreciates the recent appointments to its Council; however, the Council does not want to be complacent and assume that this issue will not be suffered for yet another appointment cycle.*

**Response**:

The Board fully understands the Council's concerns regarding the need to have diverse and wide regional representation on the Council, and to have all of the vacant seats filled in as timely a manner as possible. The Board wants to point out to the Council that the current administration already is aware of the significance and magnitude of the appointment issues. When in 2021 the lack of appointments was brought to this administration's attention, it acted promptly to resolve the issue by appointing additional members to the Councils out-of-cycle. The Board believes that since the issue was resolved so expeditiously it is not necessary at this point to write a letter to the Secretaries of the Interior and Agriculture on the Councils' appointments concerns.

Additionally, the Board wants to alleviate the Council's concerns regarding Executive Order #13875 on *Evaluating and Improving the Utility of Federal Advisory Committees*, dated June 14, 2019. On January 20, 2021, President Biden revoked Executive Order #13875 by issuing new Executive Order #13992. Here is a link to the new Executive Order #13992: https://www.federalregister.gov/documents/2021/01/25/2021-01767/revocation-of-certain-executive-orders-concerning-federal-regulation. Specifically, Executive Order #13992 states, "It is the policy of my Administration to use available tools to confront the urgent challenges facing the Nation, including the coronavirus disease 2019 (COVID-19) pandemic, economic recovery, racial justice, and climate change. To tackle these challenges effectively, executive departments and agencies (agencies) must be equipped with the flexibility to use robust regulatory action to address national priorities. This order revokes harmful policies and directives that threaten to frustrate the Federal Government's ability to confront these problems, and empowers agencies to use appropriate regulatory tools to achieve these goals."

The Board continues to encourage the Council to assist the Office of Subsistence Management (OSM) with outreach efforts in its communities and throughout the Region to attract a wider

pool of applicants for the future appointment cycles. Having a wider pool of applicants allows the Board to choose the most qualified individuals for appointment recommendations and to ensure that most or all seats are filled. However, it is important to remind the Council that the Board does not have final authority over which recommended applicants are appointed to the Councils. After the Board submits its annual appointment recommendations, the final appointment authority rests with the Secretary of the Interior.

The Board wants to assure the Council that OSM will continue working with the Department of the Interior to ensure that the 2021 cycle appointments stay on schedule and that the work is done in the most efficient manner possible. The Board has a high level of confidence that in the future the Council's appointments will be made in a timely manner.

**4. Staff Support for Regional Advisory Council Meetings**

*This Council has expressed its concern regarding the limited participation by staff in its annual report to the Board for the last two years. The Council has routinely experienced negative impacts on its ability to effectively conduct its business because of the absence of in-person participation by staff (pre-COVID-19). The Council would like a commitment to have its previous level of staff support restored. Due to the complexity of land management in Southeast, especially given the amount of Forest Service projects that have the propensity to substantially impact subsistence resources, it is imperative that the biologists situated in these geographic areas of interest, be permitted to attend meetings and fully engage with Council members.*

*The Council understands the need for virtual meetings at present, due to COVID-19, but would like to express its frustration for the lack of in-person support these past few years. Some area biologists have not been able to participate or even listen to the Council meetings. The Council has customarily relied on local biologists in the past for their insight and knowledge of fish and wildlife species and land uses. During the meetings and through individual conversations with these biologists, Council members receive important, detailed information. The Council finds this expert information invaluable when recommending effective solutions to problems facing subsistence users. The strength of the program's support is how the staff understand the people, places, and animals of their local areas and share that knowledge with the Council.*

*This Council tackles a large volume of information at each meeting and the Council was most effective when it received* ***in-person*** *assistance. When all staff are in the room, they can quickly delegate crucial tasks to one another while the Council discusses issues. For instance, it is key to have someone help navigate regulations while another staff member presents information to the Council and another staff member is capturing notes and follow-up requests, and maybe yet another is looking at State regulations for comparison purposes. This coordination of real-time*

*support is invaluable to the Council and this level of service is very important to efficiently conduct business. Therefore, when conditions allow, the Council respectfully asks that the quantity of in-person staff support at its meetings be restored to at or near a level experienced prior to 2017 to ensure that the Council timely meets its obligations to provide well-informed recommendations.*

**Response**:

The Board recognizes that in-person meetings are preferred by and are more effective for everyone involved in the management of subsistence resources and for providing a priority to Federally qualified subsistence users to be able to continue to practice a subsistence way of life. We will encourage leadership and field staff alike to participate in the Council meetings as much as possible. Specifically, in reference to the Southeast Region, Alaska Regional Forester Dave Schmid understands the Council's desire for additional staff support to be present at future Council meetings. All Board members hope the pandemic will be under control by this fall and that it will be possible for everyone to meet together again in person.

## 5. Reasonable Access to Resources in an Emergency

*The Council would like to be advised on the status of the current 'food security special action request' protocol which was developed in 2020 to process requests from communities attempting to secure local food resources in difficult times. It is understood that the steps previously used to process these requests are, or have been, modified. It is important to know what options are available for relief, should another food security emergency take place in the future.*

*In addition, the Council would like to receive the information on the following:*

a. ***What options are available for allowing access to resources in a reasonable manner in times of emergency?*** *When an emergency is declared, reasonable access should be granted to local subsistence resources to make food security a priority. Needs must be met during a time where the availability of food is uncertain.*
b. ***Is there a mechanism available or that can be created that would be implemented when an emergency is declared for subsistence users who do not have access to substantial food resources?*** *A defined method should be in place that would provide timely access to resources in rural communities where the population does not have access to grocery store food sources. In Southeast Alaska, if ferries stop running between islands, the communities are plunged into a dire situation to obtain food. There should be a quicker procedure than the current special action request process to provide emergency nourishment relief.*

**Response**:

In 2020, the Interagency Staff Committee began developing a draft white paper on Food Security as a Threat to Public Safety and a draft Framework to Evaluate Special Action Requests Related to Public Safety/Food Security. Once these drafts are finalized, they will be presented to the Board for further discussion and direction. If the framework is approved by the Board, it could serve as a mechanism available to allow access to subsistence food resources during emergencies in the future.

The Federal Subsistence Management Program can support adaptation to changing conditions by using the various tools available that enable the program to be responsive to subsistence users' needs as conditions change. For example, the Special Action process enables the Board to respond quickly to out-of-cycle needs for regulatory actions. The Board has also used its authority to delegate authority to local land managers to enable managers to respond quickly to unforeseen circumstances such as unpredictable seasons and fluctuations in resource availability.

More persistent changes to the availability and seasonality of resources due to climate change can be accommodated through the regulatory process. When species become less abundant due to climate change, closures to non-Federally qualified subsistence users, or ANILCA section 804 prioritizations among Federally qualified subsistence users, may become necessary.[2] Other species may become more abundant with shifts in environmental conditions, or new species may expand into the Southeast Alaska region. In this case, the Federal Subsistence Management Program can assist communities in delineating seasons, harvest limits, and methods and means for these newly available resources.

As you may know, the Board's decision in 2020 to delegate its authority to local land managers so as to allow them to respond quickly to Covid-19 related food security issues is currently the subject of a legal challenge in Federal District Court. The case, which is entitled *State of Alaska v. Federal Subsistence Board et al.*, 3:20-cv-00195-SLG (D. Alaska), remains unresolved at this time. Briefing will be complete later this summer, which means that we expect a decision sometime in the fall. If the Board ultimately prevails in the litigation, then its authority to issue such delegations and the Federal program's ability to respond quickly during crises that potentially impact the health and safety of rural Alaskans will remain unchanged.

2 "Such priority shall be implemented through appropriate limitations based on the application of the following criteria: (1) customary and direct dependence upon the populations as the mainstay of livelihood; (2) local residency; and (3) the availability of alternative resources." (ANILCA, Section 804).

**6. <u>Status of Fish and Wildlife Resources in Southeast</u>**

*Pursuant to ANILCA Title VIII Section 805, this Council recognizes the importance of providing the Board with regional information so that it can make informed regulatory decisions. This Council hereby continues to routinely report on the status of fish and wildlife populations and the harvests within the region by enclosing the reported harvest of subsistence resources in southeast Alaska. (Please see attached population and harvest information on fish and wildlife resources.)*

**Response**:

Thank you very much for providing us with the most current demographic information on fish and wildlife populations and subsistence harvest in Southeast Alaska. As your Council indicated in topic number 4 of your FY-20 Annual Report, having up-to-date research, and inventory and monitoring information is crucial for successful fish and wildlife conservation and management, as well as to continue meeting the ANILCA-mandated priority for subsistence uses by Federally qualified subsistence users on Federal public lands and waters of Alaska.

In closing, I want to thank you and your Council for your continued involvement and diligence dedication in matters regarding the Federal Subsistence Management Program. I speak for the entire Board in expressing our appreciation for your efforts and am confident that the Federally qualified subsistence users of the Southeast Alaska Region are well represented through your work.

Sincerely,

Anthony Christianson
Chair

Enclosures

cc: Southeast Alaska Subsistence Regional Advisory Council
Federal Subsistence Board
Sue Detwiler, Assistant Regional Director, Office of Subsistence Management
Amee Howard, Deputy Assistant Regional Director, Office of Subsistence Management
Robbin La Vine, Subsistence Policy Coordinator, Office of Subsistence Management
Katerina Wessels, Council Coordination Division Supervisor
Office of Subsistence Management

Lisa Grediagin, Wildlife Division Supervisor, Office of Subsistence Management
George Pappas, State Subsistence Liaison and Acting Fisheries Division Supervisor
Office of Subsistence Management
Jonathan Vickers, Anthropology Division Supervisor, Office of Subsistence Management
DeAnna Perry, Council Coordinator, U.S. Forest Service
Interagency Staff Committee
Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and Game
Mark Burch, Special Project Coordinator, Alaska Department of Fish and Game
Administrative Record

## Standard Operating Procedures for Issuance of Subsistence Eligibility Permits and Individual Customary and Traditional Use Determinations[1]

The Alaska Region of the National Park Service (NPS) issues National Park/Monument Subsistence Eligibility Permits (sometimes referred to as 13.440 Permits) and Individual Customary and Traditional Use Determinations using the protocol established in this document. A Subsistence Eligibility Permit may be requested for use in conjunction with an existing community or area customary and traditional (C&T) use determination within the relevant park unit, or in combination with a new request for one or more individual C&T use determinations.

National Park/Monument Subsistence Eligibility Permits are issued pursuant to 36 Code of Federal Regulations (CFR) 13.440:

> Any rural resident whose primary, permanent home is outside the boundaries of a resident zone of a national park or monument may apply to the appropriate Superintendent pursuant to the procedures set forth in §13.495 for a subsistence permit authorizing the permit applicant to engage in subsistence uses within the national park or monument.

Application procedures for Subsistence Eligibility Permits are specified in 36 CFR 13.495:

> (a) Any person applying for the subsistence permit required by §13.440(a), or the exception to the prohibition on aircraft use provided by §13.450(b)(2), shall submit his/her application to the Superintendent of the appropriate national park or monument. If the applicant is unable or does not wish to submit the application in written form, the Superintendent shall provide the applicant an opportunity to present the application orally and shall keep a record of such oral application. Each application must include a statement which acknowledges that providing false information in support of the application is a violation of Section 1001 of Title 18 of the United States Code, and additional statements or documentation which demonstrates that the applicant satisfies the criteria set forth in §13.440(a) for a subsistence permit or §13.450(b)(2) for the aircraft exception, as appropriate. Except in extraordinary cases for good cause shown, the Superintendent shall decide whether to grant or deny the application in a timely manner not to exceed forty-five (45) days following the receipt of the completed application. Should the Superintendent deny the application, he/she shall include in the decision a statement of the reasons for the denial and shall promptly forward a copy to the applicant.
>
> (b) An applicant whose application has been denied by the Superintendent has the right to have his/her application reconsidered by the Alaska Regional Director by contacting the Regional Director within 180 days of the issuance of the denial. The Regional Director may extend the

[1] To comply with requirements of the National Environmental Policy Act (NEPA), parks should consider covering the federal action of determining individual eligibility for subsistence activities with categorical exclusion 3.2(N): Issuance of individual hunting and/or fishing licenses in accordance with state and federal regulations. This CE does not require documentation.

180-day time limit to initiate a reconsideration for good cause shown by the applicant. For purposes of reconsideration, the applicant shall present the following information:

(1) Any statement or documentation, in addition to that included in the initial application, which demonstrates that the applicant satisfies the criteria set forth in paragraph (a) of this section;

(2) The basis for the applicant's disagreement with the Superintendent's findings and conclusions; and

(3) Whether or not the applicant requests an informal hearing before the Regional Director.

(c) The Regional Director shall provide a hearing if requested by the applicant. After consideration of the written materials and oral hearing, if any, and within a reasonable period of time, the Regional Director shall affirm, reverse, or modify the denial of the Superintendent and shall set forth in writing the basis for the decision. A copy of the decision shall be forwarded promptly to the applicant and shall constitute final agency action.

Individual Customary and Traditional Use Determinations are made pursuant to 50 CFR 100.16:

(a) The Board shall determine which fish stocks and wildlife populations have been customarily and traditionally used for subsistence. These determinations shall identify the specific community's or area's use of specific fish stocks and wildlife populations. For areas managed by the National Park Service, where subsistence uses are allowed, the determinations may be made on an individual basis.

and 50 CFR 100. 24:

The Federal Subsistence Board has determined that rural Alaska residents of the listed communities, areas, and individuals have customary and traditional use of the specified species on Federal public land in the specified areas. Persons granted individual customary and traditional use determinations will be notified in writing by the Board. The Fish & Wildlife Service and the local NPS Superintendent will maintain the list of individuals having customary and traditional use on National Parks and Monuments. A copy of the list is available upon request. When there is a determination for specific communities or areas of residence in a Unit, all other communities not listed for that species in that Unit have no Federal subsistence priority for that species in that Unit. If no determination has been made for a species in a Unit, all rural Alaska residents are eligible to harvest fish or wildlife under this part.

**Request for a National Park/Monument Subsistence Eligibility Permit**

1. Applicants may request applications from the relevant park Subsistence Coordinator verbally, in-person, or in writing. The applicant may choose to complete the application with the assistance of the Subsistence Coordinator. Applicants shall acknowledge to the Subsistence Coordinator, either by signing and returning the application, verbally, or both, that he/she understands that providing false information in support of the application is a violation of Section 1001 of Title 18 of the United States Code.
2. The Subsistence Coordinator shall forward a copy of completed applications to the Alaska Region Subsistence Program Manager for archival purposes and entry in the Subsistence Eligibility Permit / Individual C&T tracking log.
3. Upon receiving the completed application, the relevant park Subsistence Coordinator shall schedule an interview with the applicant, either in-person or by phone, to obtain additional information regarding applicant eligibility and existing patterns of subsistence use.
4. Upon completing the interview, the relevant Subsistence Coordinator shall produce a brief written analysis (see attached form) and formulate a recommendation on the request, with justification.
5. The application, analysis, and recommendation shall be forwarded by the relevant Subsistence Coordinator to the Superintendent for review and decision. The Superintendent shall complete the decision form (see attached).
6. A signed copy of the decision form shall be sent to the applicant within 45 days of the receipt of the application[2] (36 CFR 13.495). The Subsistence Coordinator will coordinate with the applicant and the Superintendent to issue an approved permit with requisite signatures and he/she shall retain a copy. Permits shall follow the standard format for NPS Special Use Permits. The following permit stipulations are recommended, as applicable to the specific park unit, in addition to the standard Special Use Permit stipulations:
    a. This permit establishes eligibility only for subsistence uses within (National Park or Monument Name). Specific subsistence activities (i.e. house logs, green firewood, cabins, subsistence registration hunts, caches, etc.) may require separate authorization or permits.
    b. The Permittee must contact the Superintendent if permittee changes his/her permanent residence. The permit may need to be amended to show the current physical address of the permanent residence.
    c. This permit is void if the Permittee's permanent residence is determined to be "non-rural" by federal regulation.
    d. The Permittee is subject to other regulatory requirements including, but not limited to, seasons and harvest limits, community and individual customary and traditional determinations, methods and means, etc.
    e. Only those family members living within the Permittee's household are authorized by this permit for subsistence uses in (National Park or Monument Name). It is the responsibility of the Permittee to notify the Superintendent of changes in the

[2] Except in extraordinary cases for good cause shown (36 CFR 13.495), including the need to collect additional information.

composition of the household, including additions (through birth, adoption or marriage) or deletions (a family member moving out of the household).

f. The Permittee is prohibited by federal regulations (36 CFR 13.450) from using aircraft to access the park for the purpose of engaging in subsistence activities. Aircraft access is prohibited for any portion of the access. The regulatory prohibition on aircraft access for subsistence uses in the park does not apply to aircraft access to the Permittee's primary permanent residence.

7. The recommendation, Superintendent decision, and a digital copy of the signed permit (when applicable) shall be forwarded to the Alaska Region Subsistence Program Manager for entry into the Subsistence Eligibility Permit / Individual C&T tracking log.
8. Pursuant to 36 CFR 13.495 (b) an applicant whose application has been denied by the Superintendent has the right to have his/her application reconsidered by the Alaska Regional Director by contacting the Regional Director within 180 days of the issuance of the denial. The Regional Director may extend the 180-day time limit to initiate a reconsideration for good cause shown by the applicant.

Note: Permits will be issued for the lifetime of the applicant so long as they retain their eligibility as a Federally qualified subsistence user. Reviews of permit eligibility shall be made periodically by the Subsistence Coordinator, at least every five years.

**Request for an Individual C&T Use Determination**

1. Applicants may request applications from the relevant park Subsistence Coordinator verbally, in-person, or in writing. The applicant may choose to complete the application with the assistance of the Subsistence Coordinator. Applicants shall acknowledge to the Subsistence Coordinator, either by signing and returning the application, verbally, or both, that he/she understands that providing false information in support of the application is a violation of Section 1001 of Title 18 of the United States Code.
2. The Subsistence Coordinator shall forward a copy of completed applications to the Alaska Region Subsistence Program Manager for archival purposes and entry in the Subsistence Eligibility Permit / Individual C&T tracking log.
3. Upon receiving the completed application, the relevant park Subsistence Coordinator shall schedule an interview, either in-person or by phone, to obtain additional information regarding applicant eligibility and existing patterns of subsistence use.
4. The relevant Subsistence Coordinator will analyze responses on the application and in the interview to assess eligibility and to formulate a recommendation on an existing pattern of use of species requested for an individual C&T use determination.
5. The written analysis and recommendation, with justification (see attached form), shall be sent to the Alaska Region Subsistence Program Manager for archival purposes and entry in the Subsistence Eligibility Permit / individual C&T tracking log. Analyses shall follow the guidance for C&T use determination analyses in the most recent revision of the Federal Subsistence Management Program's Technical Writing Guide, as applicable to individual C&T use determinations.
6. A summary of the request and analysis will be provided by the relevant NPS Subsistence Coordinator to the affected Subsistence Regional Advisory Council (RAC) or Councils and the affected Subsistence Resource Commission (SRC) at their first meeting following completion of the interview. The RAC(s) and SRC will make recommendations, with justification, on issuance of the individual C&T use determination (see attached decision form).
7. The Regional Council Coordinator(s) and park Subsistence Coordinator shall forward the RAC and SRC recommendations and justifications to the Alaska Region Subsistence Program Manager for archival purposes and entry into the Subsistence Eligibility Permit / Individual C&T tracking log.
8. The Alaska Region Subsistence Program Manager will provide the individual C&T use determination application, analysis, and recommendations to the Office of Subsistence Management to facilitate Board deliberation at the Board's next public meeting.
9. The Office of Subsistence Management will draft a decision letter on behalf of the Federal Subsistence Board. The Board Chair will review and sign the letter, which will be digitized, archived, and forwarded to the applicant, with copies to the NPS Alaska Region Subsistence Program Manager, the relevant park Subsistence Coordinator, and the park Superintendent.
10. The Office of Subsistence Management will forward the decision letter to the chairs of the affected Regional Advisory Councils. Councils will be informed of any changes to individual C&Ts at the council's next regularly scheduled public meeting. The park Subsistence Coordinator will inform the SRC of the decision.

**U.S. DEPARTMENT OF THE INTERIOR**
**NATIONAL PARK SERVICE**
**ALASKA REGION**

## NATIONAL PARK/MONUMENT SUBSISTENCE ELIGIBILITY PERMIT* & INDIVIDUAL CUSTOMARY AND TRADITIONAL USE DETERMINATION APPLICATION

*(*For determination of subsistence eligibility under the provisions of 36 CFR 13.440.)*

I am requesting (Choose One):

O National Park/Monument Subsistence Eligibility Permit ONLY

O Individual Customary and Traditional Use Determination ONLY[3]

O National Park/Monument Subsistence Eligibility Permit AND Individual Customary and Traditional Use Determination

If requesting a National Park/Monument Subsistence Eligibility Permit, my eligibility is based on:

O A pattern of subsistence use in the park unit for which I am seeking a permit

O A pattern of subsistence use in a park OTHER THAN the park unit for which I am seeking a permit

- Please explain: _____

If requesting an individual customary and traditional use determination, for what species and areas (units or subunits)?

_____

Name of National Park or Monument: _____

1. Name of applicant (First, Middle, Last):

_____

[3] The Federal Subsistence Board (FSB) policy requires applicants for Individual Customary and Traditional Use Determinations to either reside in a resident zone community or hold a 13.440 Subsistence Eligibility Permit. This permit can be applied for concurrently.

2. Mailing address:

_____

_____

_____

3. Location/physical address of primary permanent residence:

_____

_____

_____

- Phone number: _____

-Email address: _____

- What month and year did your residence at this location start?

Month_____Year _____

- During what part of the year do you reside at this residence (give dates)? _____

_____

4. Location/physical address of other residences, if any:

_____

_____

_____

- During what part of the year do you reside at these residences (give dates)?

_____

5. What physical address is currently indicated on your:

- Alaska hunting and/or fishing license

_____

- Driver's license

_____

- Tax returns

_____

- Voter registration

_____

- Alaska Permanent Fund Dividend application

_____

6. Have you, or any persons living in your household on a permanent basis, engaged in subsistence within this park or monument? Yes_____No _____

- Specific location of use? _____

_____

- Was aircraft used as a means of access to conduct such activities? Yes_____No _____

- Type of subsistence use (hunting, trapping, fishing, gathering, etc.)? _____

_____

_____

- Specific resources harvested (caribou, moose, salmon, furbearers, timber, etc.)? _____

_____

_____

- Name of permanent member(s) of household who has hunted, trapped, fished, gathered, etc. in the park or monument? _____

- Relationship of permanent member(s) of household noted above to you (self, father, mother, brother, etc.)? _____

- Earliest year in which use took place? _____

- Most recent year in which use took place? _____

- Frequency of use (yearly, every other year, etc.)? _____

7. Other comments/additional pertinent information in support of your permit application:

_____

_____

_____

_____

_____

_____

_____

_____

_____

**COMPLETE THE FOLLOWING ONLY IF REQUESTING INDIVIDUAL CUSTOMARY AND TRADITIONAL USE DETERMINATION(S)**

1. For what species are you requesting an individual customary and traditional use determination?

2. Please describe your pattern of subsistence use of the species listed above. What years have you harvested or attempted to harvest them? In which months or seasons do you harvest them?

3. What methods and means of harvest do you use for these species?

4. Where do you harvest these resources? Please provide locations, as specifically as possible, including identifiable landmarks or geographic descriptions. How do you access these harvest locations? What means of transportation do you use?

5. How do you process these resources and preserve them for future use?

6. How have you learned about hunting, trapping and fishing – both skills and the values associated with the uses?

7. Do you share what you know about hunting, trapping and fishing with others? If so, how?

8. Do you share the resources that you harvest with others in your community or family? Please describe any sharing networks in which you are involved.

9. Please describe your pattern of subsistence use more generally – which resources to you harvest or seek to harvest on a regular basis? What role do these resources and activities play in your way of life – economically, nutritionally, culturally, socially?

**TO BE COMPLETED BY ALL APPLICANTS**

1. Please provide the name, address and telephone number of another person, other than a member of your household, who can verify this information:

   Name: _____

   Address: _____

   Telephone Number: _____

I certify that the statements made herein are true, complete, and correct to the best of my knowledge and belief and are made in good faith. I also understand that Title 18 U.S.C § 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.

Signature of applicant: _____

Date: _____

**U.S. DEPARTMENT OF THE INTERIOR**
**NATIONAL PARK SERVICE**
**ALASKA REGION**

## NATIONAL PARK/MONUMENT SUBSISTENCE ELIGIBILITY PERMIT* & INDIVIDUAL CUSTOMARY AND TRADITIONAL USE DETERMINATION ANALYSIS

*(*For determination of subsistence eligibility under the provisions of 36 CFR 13.440.)*

To be completed by the relevant Subsistence Coordinator:

Date:

Applicant Name:

Analyst Name:

This analysis is in response to the following request (Choose One):

O Subsistence Eligibility Permit ONLY

O Individual Customary and Traditional Use Determination ONLY

O Subsistence Eligibility Permit AND Individual Customary and Traditional Use Determination

Please type a brief summary of the applicant's reported subsistence use pertaining to the request, as determined from information provided on the application and during the interview:

For a National Park/Monument Subsistence Eligibility Permit, the analysis should address the following topics:

1. Synopsis of the applicant's pattern of use[4] specifically in the national park or monument for which the permit is requested, including the following:
    a. Species harvested,
    b. Specific locations where the use occurred,
    c. Years during which the subsistence uses took place, and
    d. Whether aircraft was used for access.
2. Does the pattern of use begin prior to the signing of the Alaska National Interest Lands Conservation Act (ANILCA)?

[4] There may be variation by region and/or park on what constitutes a "pattern of use." Generally, there should exist evidence of repeated past attempts to access and harvest subsistence resources within the boundaries of the park or monument. SRCs may be consulted in defining a "pattern of use" for their region.

3. Does the applicant have a pattern of use established while as a resident of a resident zone community after the passage of ANILCA?

For an Individual C&T use determination, the analysis should address the following questions:

1. Does the applicant have a long-term, consistent pattern of use of these resources, excluding interruptions beyond their control? Please explain.
2. Does the applicant have a pattern of use for these resources recurring in specific seasons for many years? Please explain.
3. Does the applicant have a pattern of use of these resources consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics? Please explain.
4. Does the applicant exhibit consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the park unit? Please explain.
5. Does the applicant exhibit a means of handling, preparing, preserving, and storing fish or wildlife which has been traditionally used by past generations, including consideration of alteration of past practices due to recent technological advances, where appropriate? Please explain.
6. Does the applicant exhibit a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation? Please explain.
7. Does the applicant exhibit a pattern of use in which the harvest is shared or distributed within a definable community of persons? Please explain.
8. Does the applicant exhibit a pattern of use which relates to reliance upon a wide diversity of fish and wildlife resources of the area and which provides substantial cultural, economic, social, and nutritional elements to your household? Please explain.

The analysis should include an integrated discussion of the eight factors. A factor-by-factor discussion is not required in the analysis and it is also not necessary that all eight factors be addressed to demonstrate a pattern of use. The eight factors provide a framework for examining the pattern of use of a resource. There are regional, cultural and temporal variations and the application of the eight factors will likely vary by region and by resource depending on actual patterns of use. The goal of customary and traditional use determination analyses is to recognize customary and traditional uses in the most inclusive manner possible.

As a result of this analysis (Select All that Apply):

O There is substantial evidence to support the issuance of a Subsistence Eligibility Permit

O There is substantial evidence to support the issuance of an Individual Customary and Traditional Use Determination for (species and location) _____

O There is **NOT** substantial evidence to support the issuance a Subsistence Eligibility Permit

O There is **NOT** substantial evidence to support the issuance an Individual Customary and Traditional Use Determination for (species and location) _____

Brief Justification:

Signature of Analyst:_____Date: _____

## U.S. DEPARTMENT OF THE INTERIOR

## NATIONAL PARK SERVICE
## ALASKA REGION

## SUBSISTENCE ELIGIBILITY PERMIT* DECISION

*(*For determination of subsistence eligibility under the provisions of 36 CFR 13.440.)*

To be completed by the relevant Superintendent:

Applicant Name:

Name of Park or Monument for which permit is requested:

Request Date:

After reviewing the request, evaluation form, staff analysis and recommendation, I have decided to (select one):

O Issue a Subsistence Eligibility Permit to the applicant

O Deny a Subsistence Eligibility Permit to the applicant

Superintendent Signature:_____Date:_____

NOTE: Pursuant to 36 CFR 13.495 (b) an applicant whose application has been denied by the Superintendent has the right to have his/her application reconsidered by the Alaska Regional Director by contacting the Regional Director within 180 days of the issuance of the denial. The Regional Director may extend the 180-day time limit to initiate a reconsideration for good cause shown by the applicant.

**U.S. DEPARTMENT OF THE INTERIOR**
**NATIONAL PARK SERVICE**
**ALASKA REGION**

## INDIVIDUAL CUSTOMARY AND TRADITIONAL USE DETERMINATION

## RAC RECOMMENDATION

To be completed by the relevant Subsistence Coordinator:

Date of Formal Action:

Proponent Name:

Proponent Request:

Affected RAC:

This RAC has determined that (select all that apply):

O There is sufficient evidence to support an individual customary and traditional use determination for (name) for (species) in (unit(s)/subunit(s))

O There is NOT sufficient evidence to support an individual customary and traditional use determination for (name) for (species) in (unit(s)/subunit(s))

Brief justification for above decision:

Signature of RAC Chair or Designee_____
Date_____

**U.S. DEPARTMENT OF THE INTERIOR**
**NATIONAL PARK SERVICE**
**ALASKA REGION**

## INDIVIDUAL CUSTOMARY AND TRADITIONAL USE DETERMINATION

## SRC RECOMMENDATION

To be completed by the relevant Subsistence Coordinator:

Date of Formal Action:

Proponent Name:

Proponent Request:

Affected SRC:

This SRC has determined that (select all that apply):

O There is sufficient evidence to support an individual customary and traditional use determination for (name) for (species) in (unit(s)/subunit(s))

O There is NOT sufficient evidence to support an individual customary and traditional use determination for (name) for (species) in (unit(s)/subunit(s))

Brief justification for above decision:

Signature of SRC Chair or Designee_____
Date_____

# Changes to the Individual Customary and Traditional (C&T) Process (01/2021)

### What is C&T Use?

C&T Use is a long-established, consistent pattern of use, incorporating practices and customs which have been transmitted from generation to generation that play an important role in the community.

### What is a C&T Use Determination?

- C&T Use Determinations are made for areas and species through the Federal regulatory process.
- Only residents of areas specified in the C&T determination are considered "Federally qualified subsistence users" for that species and area.

### What is an Individual C&T?

Per 50 CFR 100.16, individual C&T use only applies to National Park Service (NPS) managed parks and monuments where subsistence is authorized. To hunt or trap in a national park or monument, a person must:

- Be a Federally qualified subsistence user
- Have a C&T determination
- EITHER live in a resident zone community OR have a 13.440 subsistence eligibility permit

## The Federal Subsistence Board has made changes to streamline the Individual C&T process:

| Step | Application Window | Application Review | Proposed Analysis | Advisory Committee Review | Decisionmaker | Decision Timeline |
|---|---|---|---|---|---|---|
| Previous Process | Every two years | May be invalidated if application is incomplete or 13.440 subsistence eligibility permit is needed | Standard 8 factor format for C&T proposals. Analysis is prepared by NPS and Office of Subsistence Management (OSM) staff | Federal Subsistence Regional Advisory Council(s) (RAC) | Federal Subsistence Board (FSB) | Fixed schedule: at annual FSB regulatory meeting |
| New Process | Open continuously | NPS staff collaborates with applicant and helps process 13.440 subsistence eligibility permits, if needed | Standard 8 factor format for C&T proposals. Analysis is prepared by NPS staff | Federal Subsistence RAC(s) AND National Park Service Subsistence Resource Commission (SRC) | Federal Subsistence Board (FSB) | Flexible schedule: at next public FSB meeting following RAC and SRC recommendations |

**More collaboration between Park staff and subsistence users**

**Both RACs and SRC review and comment**

**Potential application errors are immediately resolved**

**Faster application processing times**

# Federal Subsistence Board

**1011 East Tudor Road, MS 121**
**Anchorage, Alaska 99503 - 6199**

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

**FOREST SERVICE**

OSM 21023.KW

Richard Greg Encelewski, Chair
Southcentral Alaska Subsistence
Regional Advisory Council
c/o Office of Subsistence Management
1011 East Tudor Road, MS 121
Anchorage, Alaska 99503-6199

Dear Chairman Encelewski:

This letter responds to the Southcentral Alaska Subsistence Regional Advisory Council's (Council) fiscal year 2020 Annual Report. The Secretaries of the Interior and Agriculture have delegated to the Federal Subsistence Board (Board) the responsibility to respond to these reports. The Board appreciates your effort in developing the Annual Report. Annual Reports allow the Board to become aware of the issues outside of the regulatory process that affect subsistence users in your region. The Board values this opportunity to review the issues concerning your region.

## 1. Council Vacancies

*For yet another year, there are vacancies on this 13-seat Council. The Council held its fall meeting with nine seated members. On December 2, 2020, four incumbent Council members' terms expired. Three new appointments for the Council were received on January 15, 2021, just five weeks prior to its winter meeting. Two incumbent members were not re-appointed and the Council currently still has three vacancies*[1].

*The Council reiterates its concern for the loss of crucial representation across the Southcentral*

[1] *Two incumbents and one previous member were appointed after the Council finalized the wording for this Annual Report, seating a full Council.*

*Region as noted in its FY-2019 Annual Report. The lack of appropriate diversity and wide regional representation on the Council creates challenges for the Council members who must often make decisions affecting areas and groups in the absence of a local member who can best represent the users of his or her community. The Council continues to be concerned with the Executive Order on Evaluating and Improving the Utility of Federal Advisory Committees, dated June 14, 2019, and the impacts of this Executive Order on the Federal Subsistence Management Program and Regional Advisory Councils.*

*In its FY-2019 Annual Report Reply, the Board encouraged the Council to "expand its outreach effort in its communities and throughout the Region to attract a wider pool of applicants, if the Council wishes to see all seats filled." The Council does not believe that outreach is the issue. Twelve applications were received to fill seven vacancies for the anticipated December 2019 appointments and ten applications were received to fill eight vacant seats for the anticipated December, 2020 appointment. In the last two years, only one applicant was found to be ineligible for Council membership, yet four and three seats remained unfilled on this Council, respectively.*

*The Council asked the Board to send a letter to Secretaries of Agriculture and the Interior regarding its concern on this matter in its FY-2019 Annual Report. Although the Council was advised that the Office of Subsistence Management (OSM) responded to an information request from the Department of the Interior, it appears that no letter was sent from the Board to the Secretaries conveying this Council's concern that all Regional Advisory Councils across the State experienced a significant decrease in representation. The Council feels that, especially with new administration personnel changes, it is necessary to send this letter to advise the Secretaries of the substantial impacts these Council membership reductions have on the work of the Councils. The Council respectfully makes a second request that the Board send the requested letter to the Secretaries to remind them that these Councils are provided for under ANILCA and that a lack of representation on the Regional Advisory Councils is detrimental to the intent of ANILCA.*

**Response:**

The Board fully understands the Council's concerns regarding the need to have a diverse and wide regional representation on the Council and have all of the vacant seats filled in as timely a manner as possible. The Board wants to point out to the Council that the current administration already is aware of the significance and magnitude of the appointment issue. When, in 2021, the lack of appointments was brought to this administration's attention, it acted promptly to resolve the issue by appointing additional members to the Councils out-of-cycle. The Board believes that

since the issue was resolved so expeditiously, it is not necessary at this point to write a letter to the Secretaries of the Interior and Agriculture on the Councils' appointments concerns.

Additionally, the Board wants to alleviate the Council's concerns regarding Executive Order #13875, titled Evaluating and Improving the Utility of Federal Advisory Committees, dated June 14, 2019. On January 20, 2021, President Biden revoked Executive Order #13875 by issuing new Executive Order #13992. The following is a link to the new Executive Order #13992: https://www.federalregister.gov/documents/2021/01/25/2021-01767/revocation-of-certain-executive-orders-concerning-federal-regulation.

Specifically, Executive Order #13992 states, "It is the policy of my Administration to use available tools to confront the urgent challenges facing the Nation, including the coronavirus disease 2019 (COVID-19) pandemic, economic recovery, racial justice, and climate change. To tackle these challenges effectively, executive departments and agencies (agencies) must be equipped with the flexibility to use robust regulatory action to address national priorities. This order revokes harmful policies and directives that threaten to frustrate the Federal Government's ability to confront these problems, and empowers agencies to use appropriate regulatory tools to achieve these goals."

The Council members have a direct connection to and communicate on regular bases with the communities and user groups they represent. The Board thanks the Council members for continuing assisting OSM with outreach efforts in your communities and throughout the Region to attract a wider pool of applicants for future appointment cycles. Having a wider pool of applicants allows the Board to choose the most qualified individuals for appointment recommendations and ensure that most or all seats are filled. However, it is important to remind the Council that the Board does not have final authority over which recommended applicants are appointed to the Councils. After the Board submits its annual appointment recommendations, the Secretary of the Interior has the final appointment authority.

The Board wants to assure the Council that OSM will continue working with the Department of the Interior to ensure that the 2021 cycle appointments stay on schedule and that the work is done in the most efficient manner possible. The Board has a high level of confidence that in the future the Councils' appointments will be made in a timely manner.

**2. <u>Changing Climate Effects</u>**

*Under Title VIII of ANILCA, this Council is mandated to review and evaluate proposed regulatory changes that allow priority for taking on public lands of fish and wildlife for non-wasteful subsistence uses. Changes in the Southcentral climate affect the ability of this Council*

*to support or oppose seasons and bag limits and otherwise make knowledgeable recommendations. Previous actions by the Council have been made based on the traditional ecological knowledge of what was roughly a regular 20-year cycle pattern. Now, with influences such as changing wind patterns, migratory patterns, and travel conditions, the ability to predict the condition of the various subsistence resources is extremely difficult and therefore, it is problematic to recommend changes for harvesting these resources.*

*The performance of the fisheries across Southcentral Region was poor in 2020. A number of fisheries were closed to different user groups because of conservation concerns. The Council is concerned that this trend will continue and that it will be harder for subsistence users to maintain critical food supplies for their communities. There is an obvious need for extra resources to be utilized to maintain salmon runs on the Kenai and Kasilof rivers, the Copper River, and elsewhere across the Region.*

*The Board informed the Council of research being conducted by the U.S. Fish and Wildlife Service, Anchorage Fish and Wildlife Conservation Office, and the University of Alaska Anchorage, regarding stream temperature monitoring. In its FY-2019 Annual Report Reply, the Board stated that this research was expected to include work in the Gulkana River in 2020. The Council requests the results of any research, including fine-scale mapping of stream temperatures and the use of various parts of the drainage system by juvenile and adult salmon in the Gulkana River area to be shared with the Council.*

*The Council will continue to express its concerns regarding changes in the environment observed and noted by its members, the public, and subsistence users across the region to the Board. Council members recognize the need to stay vigilant in monitoring these effects to make informed recommendations to effectively adapt Federal regulations to the dynamic parameters of climate change in Southcentral Alaska.*

**Response:**

The Board shares the Council's concern over the impact of climate change on the fish, wildlife, and habitat essential to continuation of the subsistence way of life. As the Council notes, over the last ten years, weather and environmental conditions affecting animals have become highly unpredictable and have deviated from historical conditions. Unfortunately, the U.S. Fish and Wildlife Service and its collaborators have no current data from Gulkana River, as COVID-19 restrictions delayed research to the summer of 2022. However, the Council through your Council Coordinator, can invite representatives from State, Federal, non-governmental, and other research organizations to give presentations on climate change effects and mitigation at its regular meetings. Some organizations to consider include:

- Alaska Center for Climate Assessment and Policy
- Alaska Climate Adaptation Science Center
- Alaska Department of Environmental Conservation: Climate Change in Alaska
- Experts identified through the U.S. Climate Resilience Toolkit
- Scenarios Network for Alaska + Arctic Planning
- The Alaska Native Tribal Health Consortium
- Conservation of Arctic Flora and Fauna (CAFF)
- Exchange for Local Observations and Knowledge in the Arctic (ELOKA)

Through the Fisheries Resource Monitoring Program, the Board has continued to seek research proposals and fund projects addressing changes in subsistence fishery resources within the context of climate change. The Board requests the Council take this into account during the development of their Priority Information Needs for the next call for proposals.

The Board appreciates the Council's comments and testimonies on recent changes in fish and wildlife behaviors. The Council members are a source of traditional ecological knowledge and local observations of climate change. Therefore, the Council should continue to document its own observations of changes through annual reports and testimony at meetings of the Council and the Board. Documenting local observations are part of most Harvest Monitoring and Traditional Ecological Knowledge reports submitted through the Fisheries Resource Monitoring Program and are often included in research and resource management reports by State and Federal agencies.

**3. Individual National Park Service (NPS) Customary and Traditional Use Process**

*The Council appreciates that this Board deferred its action on the proposed delegation of authority to the NPS in determining Individual Customary and Traditional uses to allow the Regional Advisory Councils to provide input on this matter. The Council received information on the proposed process at its fall 2020 meeting and learned that the Wrangell-St. Elias Subsistence Resource Commission (WRST SRC) requested more information from the NPS. The Council had many questions and chose to take no action based on the information presented.*

*The Council would like to consider the additional information coming from the NPS to the WRST SRC before it makes any recommendation. It is imperative that the possibilities and ramifications of such a delegation of authority from this Board are fully explored. It is the Council's understanding that many other Regional Advisory Councils had questions and wanted additional information on this matter. It seems that overall, this issue is not well understood by the Regional Advisory Councils, nor by the subsistence users they represent. For these reasons,*

*the Council respectfully requests that this Board postpone any action on this issue until critical questions are answered and vital information, needed to make an informed recommendation, is known.*

**Response:**

The Board appreciates the Council's concerns regarding the individual customary and traditional use determination (individual C&T) process and the complexity of this issue. Several of the other Councils and the Subsistence Resource Commissions (SRCs) delayed action on this topic and requested more time to study the intricacies of the policy. The Board recognizes that eligibility to participate in subsistence activities in National Parks and Monuments has additional criteria compared to other Federal public lands in Alaska. The goal in proposing modifications to the policy on individual C&T is to provide transparency, expediency, and continuity in making determinations for those with existing patterns of use.

The first requirement for eligibility to harvest under Federal regulations, is to be a rural resident. Beyond this requirement, there must be a customary and traditional (C&T) use determination for the species and area. Where the Board have not make a C&T use determination all rural residents are eligible to harvest under Federal regulations. The regulations for making C&T use determinations call for determinations to be made for an entire community or area with an exception for National Parks and Monuments open to subsistence where there is an option for this C&T determination to be made on an individual basis and involves issuance of a 13.440 permit. The individual C&T use determination process provides a way to recognize existing patterns of use in light of the NPS-specific eligibility requirements. Largely, individual C&Ts have been used to recognize individuals that have moved from resident zone communities, are still Federally qualified subsistence users, but live remote or distant from other households that share such patterns of subsistence use. The same criteria used to determine C&T use for communities or areas are used in the making of individual C&Ts.

The Board adopted a revised version of the proposed individual C&T process at its January 2021 meeting, after carefully considering feedback that was offered by several Councils and incorporating the recommended modifications. The revised process includes **two critical recommendations** made by the Regional Advisory Councils and Subsistence Resource Commissions. *First*, there is no delegation of authority to the National Park Service (NPS) to make individual C&T determinations. The Board will retain the final decision-making authority. *Second*, the process now includes a formal recommendation from both the affected Councils and the affected SRC. *Significantly*, the biggest change is that the process is no longer tied to the lengthy biennial regulatory proposal cycle. Instead, the application window is open continuously and once the Council(s) and SRCs have weighed in, the Board will act on the request at its next

public meeting. Those who apply will have their requests addressed in a timely fashion and be able to navigate the intricacies of the application process easier than before.

Attached are two documents that we hope will better inform your council on the individual C&T process, and how it has been modified. The first is a one-page overview that compares the former and the newly modified process. The second is the longer Standard Operating Procedure that will be used in making all subsequent individual C&T determinations, until such time that the policy is further modified. Also included in the second document are the procedures that NPS will use in responding to requests for 13.440 subsistence eligibility permits. That process is fully within the purview of the NPS, not the Board, though the NPS thought that it would be useful to simultaneously clarify and streamline it as well. We invite you to reach out to NPS staff if you have questions.

In conclusion, the Board believes that it has taken strides to improve the individual C&T process to be transparent, responsive, and consistent. We have incorporated the valuable recommendations and insights of the Councils and SRCs. We hope that the Councils, yours included, will continue to provide recommendations to further improve the policy over time.

**4. State of Alaska Prioritizing Personal Use**

*The Council is concerned about the movements at the State level towards prioritizing de facto subsistence activity in non-subsistence areas. There are dangers in prioritizing 'personal use' of resources in areas around major urban centers where State subsistence activities are prohibited. The Council believes that the State managers are making political decisions by giving an identified population access in these non-subsistence areas. These decisions are not practical and will result in a significant reduction of resources in those areas.*

*The Council notes that several Federal fishing proposals submitted recently requested more restrictions than those existing under State fishing regulations. ANILCA provides a preference for harvest opportunity to the Federally qualified subsistence user. Subsistence regulations cannot be more restrictive than other regulated uses of the resource. Other user groups should be restricted before Federal subsistence users; however, with increased Federal proposals requesting restrictions on the Federal user and the increased prioritization of personal use in non-subsistence areas by the State, Federally qualified subsistence users are targeted to be the sole group burdened with sacrificing harvest to conserve the species.*

*The Council requests support for any ANILCA .804 analysis that may be required in the future, due to a shortage of subsistence resources.*

**Response:**

Under State law, personal use fisheries do not have priority over any other fisheries in Alaska. In practice, the State-managed subsistence, commercial, and sport fisheries have a higher priority than personal use fisheries. A change in State law is required to give personal use fisheries priority over other fisheries.

According to ANILCA, subsistence uses by Federally qualified subsistence users take precedence and priority over all other uses on Federal public lands and waters. If Federally qualified subsistence users conclude their continuance of subsistence uses is threatened or if a conservation concern is being realized, a Special Action Request to restrict or close the fisheries in which the non-Federally qualified users participate could be warranted.

If the resource abundance is low enough to not allow both harvest by all Federally qualified subsistence users and meet conservation needs, a request to restrict among Federally qualified subsistence users can be submitted to the Federal Subsistence Board, which will direct the Office of Subsistence Management to author an ANILCA Section 804 analysis prioritizing harvest among Federally qualified subsistence users only.

The Federal Subsistence Management Program does not have authority to reject valid proposals submitted to the State of Alaska's Board of Fisheries process or the Federal Subsistence Board process. It is expected, as history demonstrates, that high numbers of proposals will continue to be submitted to restrict all user groups in one manner or another in the Southcentral Region due to the notable percentage of Alaska's residents living near and participating in the region's road-accessible fisheries and watersheds.

In closing, I want to thank you and your Council for your continued involvement and diligence in matters regarding the Federal Subsistence Management Program. I speak for the entire Board in expressing our appreciation for your efforts and am confident that the subsistence users of the Southcentral Alaska Region are well represented through your work.

Sincerely,

Anthony Christianson
Chair

cc: Southcentral Alaska Subsistence Regional Advisory Council

Federal Subsistence Board
Sue Detwiler, Assistant Regional Director, Office of Subsistence Management
Amee Howard, Deputy Assistant Regional Director, Office of Subsistence Management
Robbin La Vine Subsistence Policy Coordinator, Office of Subsistence Management
Katerina Wessels, Council Coordination Division Supervisor
Office of Subsistence Management
Lisa Grediagin, Wildlife Division Supervisor, Office of Subsistence Management
George Pappas, State Subsistence Liaison and Acting Fisheries Division Supervisor
Office of Subsistence Management
Jonathan Vickers, Anthropology Division Supervisor, Office of Subsistence Management
DeAnna Perry, Council Coordinator, U.S. Department of Agriculture Forest Service
Interagency Staff Committee
Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and Game
Mark Burch, Special Project Coordinator, Alaska Department of Fish and Game
Administrative Record

# Federal Subsistence Board

**1011 East Tudor Road, MS 121**
**Anchorage, Alaska 99503 - 6199**

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

**FOREST SERVICE**

OSM 21024.KW

Della Trumble, Chair
Kodiak/Aleutians Subsistence
Regional Advisory Council
c/o Office of Subsistence Management
1011 East Tudor Road, MS 121
Anchorage, Alaska 99503-6199

Dear Chairwoman Trumble:

This letter responds to the Kodiak/Aleutians Subsistence Regional Advisory Council's (Council) fiscal year 2020 Annual Report. The Secretaries of the Interior and Agriculture have delegated to the Federal Subsistence Board (Board) the responsibility to respond to these reports. The Board appreciates your effort in developing the Annual Report. Annual Reports allow the Board to become aware of the issues outside of the regulatory process that affect subsistence users in your region. We value this opportunity to review the issues concerning your region.

**1. <u>Adak Island Caribou Management Plan</u>**

*The Council appreciates the response from the Board and looks forward to beginning the process of forming a management plan for Adak Island. The Council encourages the Board to initiate the management plan soon, and to include a member from the Council and a member from the community of Adak into the management plan development group.*

*In its FY-19 annual report reply, the Board said,*

> *"As noted by the Council, development of a management plan may allow for more thoughtful management of the species. The Alaska Maritime NWR supports the development of a caribou management plan for Adak that reflects the wishes of various interest groups. Roughly 2/3 of Adak Island is Alaska Maritime NWR and 1/3 is Aleut*

*Corporation land. Development of a plan should involve at a minimum ADF&G, the Aleut Corporation, the City of Adak, and the USFWS. Other interest groups may want to be involved, as well. The Alaska Maritime NWR would be more interested to support opportunistic monitoring of caribou, if a well-designed caribou management plan for Adak Island is developed. The plan should include population objectives that consider the needs of Federally qualified subsistence users, non-local hunters, local community, native wildlife, and natural biodiversity, and a way to manage the herd towards that population objective.*

*The Board will contact ADF&G through OSM and encourage coordination and initiation of a planning process with the Alaska Maritime NWR, Aleut Corporation, the Council, Adak residents, and other interested parties."*

*The Council looks forward to progress on contacting Federal and State agencies, as well as non-government agencies and other interested parties. Please keep the Council apprised of any development on the Adak caribou management plan.*

**Response**:

The Board understands the importance of developing an Adak caribou management plan and thanks the Council for its persistence on this matter. The Board reached out to the Alaska Maritime National Wildlife Refuge Manager, Steve Delehanty, and enquired on the progress of the plan. Manager Delehanty's reply is enclosed.

The Board also wants to note that last year was quite unusual due to COVID-19, therefore progress on this issue was delayed. The Board hopes that as Alaska returns to pre-COVID conditions, more progress can be made on the development of the Adak caribou management plan.

**2. <u>Izembek National Wildlife Refuge</u>**

*The Council appreciates the hiring of Izembek NWR manager, Ms. Maria Fosado. The manager and staff provide critical resource information to the Council. The reports presented by the Refuge provide the Council with information needed to develop subsistence and resource recommendations.*

**Response**:

We are grateful to hear positive feedback regarding recent staff additions. The U.S. Fish and Wildlife Service (FWS) recognizes the importance of having adequate staffing at all refuges throughout Alaska and supports the continued staffing at remote refuges such as Izembek. Within the last year, the Alaska Region prioritized the hiring of three permanent full-time positions at Izembek Refuge. Since June of 2020, FWS has hired Refuge Manager Maria Fosado, Administrative Support Assistant Patrick Magrath Jr., and Wildlife Biologist Alison Williams. Izembek Refuge currently has five permanent full-time staff located in Cold Bay.

The FWS believes information sharing is essential and critically important for the Council's ability to address subsistence issues while ensuring the conservation and protection of subsistence resources. We understand keeping the Council apprised of survey efforts, status and trends of subsistence resources, species concerns, and of management actions is vital to the Council as it strives to make informed decisions and recommendations regarding the management of subsistence resources.

The Refuge and the FWS as a whole value engaging with the Council. The Council plays a critically important role in bringing together rural subsistence users and resource management agencies, such as the FWS, with the goal of information sharing and facilitating thoughtful discussions pertaining to the management of subsistence resources. Collaboration with the Council fosters relationships, builds trust, and provides transparency on current and ongoing subsistence issues. Further, it provides a better understanding of the potential implications a management action, or lack of action, may have on the resource and/or the subsistence user.

**3. <u>Regional Advisory Council Alternate Member</u>**

*The Council currently has two vacant seats. The Council depends on members who have knowledge of their region and communities to develop recommendations to the Board on subsistence resource related issues in public meetings. It is important for the Council to have all the seats filled in order to represent the cultural and geographic diversity of the region. Not reappointing the Council incumbents who have served on the Council for several terms and that have reapplied to serve again, has handicapped the effectiveness of the Council in developing informed decisions.*

*The Council recommends that when the nominations package is submitted to the Secretaries of Interior and Agriculture that the Board will recommend that the Secretaries appoint alternates from a pool of qualified applicants identified by the interagency panel. Designation of alternate members to each of the ten Councils is needed to ensure seats remain filled and communities in the region have adequate representation at Council meetings.*

*In its FY-19 reply, the Board said,*

> *"As a result, prior to the charter language change, the seat would have remained vacant throughout an entire year, leaving subsistence regions underrepresented. With the new provision in place, the Board suggests that whenever possible the Council nominations panels identify qualified alternates from the pool of applicants and present names to the Board. After review, the Board might recommend that the Secretaries appoint them as alternate member(s).*
>
> *After the Secretaries appoint an alternate member(s), this member remains "in reserve" and will engage in the Council's business only if a seat becomes permanently vacant for the reasons stated above. An alternate member cannot replace a sitting Council member during a meeting if that Council member is sick or otherwise unavailable to attend the meeting. Under the new provision, alternate members do not become available until around December 2020, as noted by the Council."*

**Response**:

The Board understands the Council's concern regarding current vacant seats. It is important to have a diverse and wide representation of user groups throughout the region and have all of the Council's seats filled. In the 2019 appointment year, the Council had four seats that were open for appointment, but the Board received only three applications. In the 2020 appointment year, the Council had five seats that were open for appointment, but the Board received only four applications. As a result of insufficient applications in 2019 and 2020, the Board could not provide recommendations to the Secretaries of Interior and Agriculture to fill all of the vacant seats on the Council, and there were no applicants to recommend for alternate positions.

In Fiscal Year 2020, the Office of Subsistence Management (OSM) conducted outreach in the Kodiak/Aleutian Region and throughout the State during the application period that was open from September 3, 2019 to March 2, 2020. Applications were mailed and emailed to individuals, agencies, and organizations. Extensive outreach was conducted through a variety of media outlets, including, but not limited to newspaper, radio, internet, Facebook, and public conferences. These efforts resulted in 74 applications to fill 62 vacated or expiring seats on all Councils, but unfortunately, not enough for the Kodiak/Aleutians Region.

The Board encourages the Council members to assist OSM with outreach effort in its communities and throughout the Region to attract a wider pool of applicants for future

appointment cycles. Having a wider pool of applicants allows the Board to choose the most qualified individuals for appointment recommendations and to ensure that most or all seats are filled and alternates are selected when possible. However, it is important to remind the Council that the Board does not have final authority over which recommended applicants are appointed to the Councils. After the Board submits its annual appointment recommendations, the final appointment authority rests with the Secretary of the Interior.

**4. <u>Sea Otter – Endangered Species Act designation</u>**

*In prior Council public meetings, the Council has questioned the designation of the northern sea otter population in the Kodiak Archipelago as part of the Southwest Alaska Stock. The Southwest stock is currently considered a population that is threatened.*

*Sea otter numbers have declined in southwestern Alaska over the past 20 years. Once containing more than half of the world's sea otters, this population segment, which ranges from Kodiak Island through the western Aleutian Islands, has undergone an overall population decline of at least 55–67 percent since the mid-1980s. In 2005, the U.S. Fish and Wildlife Service (Service) listed this distinct population segment as Threatened under the Endangered Species Act. (https://www.fws.gov/alaska/pages/marine-mammals/sea-otters)*

*In 2005 the Service listed sea otters in southwest Alaska as threatened under the Endangered Species Act (ESA). As a result of this ESA listing, the Service has developed a recovery plan to identify the cause of the decline, monitor population trends, and help recover the sea otter population in southwest Alaska.*

*In 2009 the Service finalized the designation of critical habitat for the threatened northern sea otter in southwest Alaska. Critical habitat areas contain habitat that is essential to the conservation and recovery of a threatened or endangered species. (https://www.fws.gov/r7/fisheries/mmm/seaotters/pdf/factsheet_wildlife_biologue.pdf)*

*The Council has the following questions regarding sea otters. How does the Service determine stock identification (SW, PWS, and SE stocks), and the criteria/process for determining population stock designation? What criteria and administrative, genetic, and population size trends were used to designate the Kodiak Island sea otter population a part of the SW population?*

*Council discussions, and dialogue, with rural residents within the Kodiak Archipelago by Council members, reported that the sea otter population in the area are healthy. Rural residents have concerns on how the sea otters have impacted subsistence shellfish resources caused by the increasing sea otter population.*

*Additionally the council asked, can the population within the Kodiak Archipelago be reclassified as a separate stock? Stock assessment and habitat assessment within the Kodiak Archipelago should be evaluated to determine if the population is healthy.*

*The Council is interested in participating in agency sponsored meetings, and other public forums, relating to its knowledge of sea otters within the Kodiak area. The Council is willing to send a delegate to participate in future meetings and to sponsor a member from the Council to attend and participate when funding is available.*

**Response**:

Thank you for your detailed questions regarding the northern sea otter population in the Kodiak Archipelago and its designation as a part of the Southwest Alaska Stock. The Federal Subsistence Program does not manage marine mammals and sea otter is outside of the Board's jurisdiction. The Board has asked the U.S. Fish and Wildlife Service Marine Mammals Management program to provide the answers. Their full reply is enclosed.

**5. <u>Fisheries Resource Monitoring Program</u>**

*The Council would like to express its appreciation for Ms. Robbin La Vine and Mr. Jarred Stone for their assistance at our recent meeting to develop Priority Information Needs (PINs) Working Group volunteer meeting on August 31, 2020.*

*The Council is impressed with the information the staff assembled and their professional facilitation for our "informal" teleconference to review the "2022 Draft Priority Information Needs for the Southwest region" (Bristol Bay Regional Advisory Council and Kodiak Aleutian Regional Advisory Council).*

*This was a great assistance in developing our research priorities list and Mr. Keith Ivy, the young intern, who assembled the "backlog information" materials, did a great job as well.*

*The Council indicated this Fisheries Resource Monitoring Program cycle was an exhausting endeavor and was probably without a doubt, the best prepared and conducted working group planning meeting and review session in which we have participated, in the experience of our Council.*

**Response**:

The Board is gratified to hear your Council benefited from the support and expertise of OSM staff, Ms. Robbin La Vine and Mr. Jarred Stone, during the development of the 2022 Fisheries Resource Monitoring Program's Priority Information Needs for your region. A letter of appreciation from this Council was shared with the Regional Directorate. The Board is also grateful for your recognition of the Directorate Fellowship Program intern, Keith Ivy, originally from Bethel. Mr. Ivy has also interned with the NPS's Regional Cultural Resources Program and is a graduate of the Alaska Native Science and Engineering Program. You might be interested to learn that Mr. Ivy was accepted into the Masters of Science in Fisheries Program at University of Alaska Fairbanks for the Fall of 2021 and was recently hired as a permanent fisheries biologist within the USFWS. Mr. Ivy's position with the Service and graduate work will have a special focus on indigenizing salmon management through the process of creating safe spaces for dialogue of historical or current inequities in science or management systems so that Indigenous peoples, values, practices and knowledge are better understood and included in science and management systems.

**6. <u>Food Security</u>**

*With the recent COVID-19 pandemic and food production plants shutting down throughout the country, it is important to emphasize the importance of subsistence resources in Alaska. It is uncertain how long the pandemic will continue, along with delays of goods and services caused by the pandemic and its associated affects across Alaska. Food security for subsistence users is important. The Board can continue to support subsistence opportunities by providing subsistence resource access through season extensions and special actions to address food security.*

**Response**:

In 2020, the Interagency Staff Committee began developing a draft white paper on Food Security as a Threat to Public Safety and a draft Framework to Evaluate Special Action Requests Related to Public Safety/Food Security. Once these drafts are finalized, they will be presented to the Board for further discussion and direction. If the framework is approved by the Board, it could serve as a mechanism available to allow access to subsistence food resources during emergencies in the future.

COVID-19 did indeed highlight food security issues. The Federal Subsistence Management Program can support adaptation to changing conditions by ensuring that regulations facilitate

flexibility, rather than hindering it. A responsive regulatory process can also ensure that people continue to access healthy local and traditional foods during times of unexpected shortage. The Special Action process provides an avenue for responding to these changes, and the Board has been responsive to the need for quick action on out of cycle requests.

In addition, flexibility can be built into the system by delegating authority to local land managers. Delegation of authority enables managers to respond more quickly to unpredictable seasons and will likely need to be used with increasing frequency given that climate change may cause the timing of certain subsistence resources to fluctuate widely from year to year.

More persistent changes to the availability and seasonality of resources due to climate change can be accommodated through the regulatory process. When species become less abundant due to climate change, closures to non-Federally qualified users, or ANILCA Section 804 prioritizations may become necessary. Other species may become more abundant with shifts in environmental conditions, or new species may expand into the region. In this case, the Federal Subsistence Management Program can assist communities in delineating seasons, harvest limits, and methods and means for these newly available resources.

**7. Closure Reviews**

*The Boards policy on closure reviews is to provide transparency to the public regarding the process for addressing Federal closures and provide for periodic review of regulatory closures, and subject to change during the regulatory year.*

*The Council had seven closure reviews to consider at its fall 2020 meeting and develop its recommendations to the Board. It is important to the Council, that the public has an opportunity to review these closures and the Council seeks their comments regarding affected subsistence activities. The Council deferred all seven closure reviews until its winter 2021 public meeting. The Council requested that the Office of Subsistent Management (OSM) staff present the closure reviews to local State advisory committees and Tribal entities to gather additional public comments in the fall of 2020. The Council will develop its final recommendations to the Board after hearing all public comments on the closures. The Board convened in January 2021 to act on the April 2021 – March 2023 fishery proposals and closure reviews. The Board deferred the Federal fishery closure reviews to the 2023 fishery cycle, in deference to the Council.*

*At its winter 2021 March meeting, the Council approved a planning team to develop outreach strategies to inform the public, affected by the Federal fishery closure reviews, to inform the public of these closures within the Kodiak/Aleutians region and take testimony and comments. The planning team is composed of three Council members and OSM staff.*

**Response:**

The Board acknowledges this is the first time your region has had the opportunity to review area closures under our new Closure Policy. Your region is unique across the state as most of your fisheries closures were incorporated into Federal regulations from State regulations approximately 20 years ago, and this is the first time any have been reviewed. As you know, the Federal Subsistence Management Program is a public process made better by local involvement and expertise. The Board recognizes that advanced notice during the fall meeting cycle prior to the fisheries regulatory cycle can aid in Council outreach. We are grateful for your forethought and planning on this issue and direct OSM staff to support your efforts to inform the public and gather local input. We expect the program can learn from your action and guidance, improving the closure review process for all Councils.

**8. <u>Invasive Species</u>**

*The Council recognizes the presence of invasive species in the region and within the State. Invasive species have the potential to invade anadromous streams and lake systems in Alaska affecting the native flora and fauna and disrupting the natural environment. The Sun'aq Tribe of Kodiak reported they have begun investigations of introduced crayfish in the Buskin Lake drainage. The Buskin River currently has crayfish that may compete for habitat used by juvenile salmon, as an example, and potentially feed on salmon eggs or fry.*

*The Council encourages Federal and State agencies to monitor invasive species in the State. Invasive species affecting the natural environment will also affect subsistence resources, specifically for all salmon. Invasive species should be mitigated to protect the natural resources. Mitigation of invasive species is key to protecting subsistence resources.*

**Response**:

The Board thanks the Council for bringing this concern to its attention. Alaska is undergoing large-scale changes that are accelerating, including the introduction and expansion of invasive species. However, Alaska is also in a unique position to prevent new introductions and spread of existing invasive species by adopting policies and actions aimed at bolstering prevention, early detection efforts and rapid response efforts.

The Alaska Invasive Species Partnership is a statewide collaborative made of Federal, State, and Tribal resources managers, researchers, industry representatives, and community members. This partnership is working on a variety of invasive species work such as:

- Enhancing communication and education opportunities about invasive species;
- Assessing the habitat suitability and pathways for invasive species within and into Alaska;
- Prioritizing species and locations for prevention and early detection work;
- Studying the basic life history of species of concern to make better informed management decisions; and
- Standardizing field techniques and expanding early detection and rapid response efforts in priority areas.

One priority area for the United States Fish and Wildlife Service (USFWS), a Federal member of the Alaska Invasive Species Partnership, is the Kodiak Archipelago. Over the past five years, the USFWS has been working closely with the Sun'aq Tribe of Kodiak, Kodiak Soil and Water Conservation District, and the Alaska Department of Fish and Game to assess the distribution, movements and potential impacts of Signal Crayfish, which were introduced to the Buskin River Watershed.

There are no native crayfish in Alaska and Signal Crayfish are known to feed on fish eggs and juvenile fish as well as increase the amount of suspended sediment in streams and lakes through their burrowing behavior. Increased sediment in the water of the Buskin Lake and stream systems could impact the food webs that the salmon and char rely on.

The USFWS, along with the Bureau of Indian Affairs, has provided funding and technical support to:

- Assess what the Signal Crayfish are feeding on (e.g., stomach samples and stable isotope analysis);
- Map the distribution of Signal Crayfish populations in reference to salmon spawning locations;
- Track the movement of Signal Crayfish within the watershed and conduct surveys for them along the Kodiak road system; and
- Evaluate and implement control measures to keep the invasive population at a low level until a management technique is identified to eradicate the population.

The USFWS and partners also hope to expand early detection tools in the near future to include environmental DNA surveys. This tool has shown to be very useful in Alaska for detecting invasive Northern Pike populations in Southcentral Alaska.

In closing, I want to thank you and your Council for your continued involvement and diligence in matters regarding the Federal Subsistence Management Program. I speak for the entire Board

in expressing our appreciation for your efforts and am confident that Federally qualified subsistence users of the Kodiak Aleutian Region are well represented through your work.

Sincerely,

Anthony Christianson
Chair

Enclosures

cc: Kodiak Aleutian Subsistence Regional Advisory Council
Federal Subsistence Board
Sue Detwiler, Assistant Regional Director, Office of Subsistence Management
Amee Howard, Deputy Assistant Regional Director, Office of Subsistence Management
Robbin La Vine, Subsistence Policy Coordinator, Office of Subsistence Management
Katerina Wessels, Council Coordination Division Supervisor
Office of Subsistence Management
Lisa Grediagin, Wildlife Division Supervisor, Office of Subsistence Management
George Pappas, State Subsistence Liaison and Acting Fisheries Division Supervisor
Office of Subsistence Management
Jonathan Vickers, Anthropology Division Supervisor, Office of Subsistence Management
Donald Mike, Council Coordinator, Office of Subsistence Management
Interagency Staff Committee
Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and Game
Mark Burch, Special Project Coordinator, Alaska Department of Fish and Game
Administrative Record

# United States Department of the Interior

FISH AND WILDLIFE SERVICE

Alaska Maritime National Wildlife Refuge
95 Sterling Highway, Suite 1
Homer, Alaska 99603

May 17, 2021

Kodiak/Aleutians Regional Advisory Council

Dear Council:

Thank you for your inquiry regarding the development of a management plan for caribou on Adak Island. I share your interest in developing a plan but must report that I have made no substantive progress.

In my view, any such plan must involve the Alaska Department of Fish and Game in a key leadership role. I have discussed the concept with the ADF&G area manager for the Aleutians, Dave Crowley. Between hectic work schedules and living hundreds of miles apart, we haven't made any progress beyond broaching the subject. I do not know if the Department views development of a management plan for Adak caribou as a priority, but without their active involvement, I don't see a path forward. I will contact Mr. Crowley again and learn whether the Department is able to invest in this effort. As you know, ADF&G has faced serious staff and budget challenges for several years, so it is possible that ADF&G simply doesn't have the capacity to tackle this issue now.

While it is a poor excuse for the lack of progress, I also want to point out to the Council that the Alaska Maritime National Wildlife Refuge staff has been reduced by 28% in recent years. It is increasingly difficult to maintain existing activities and even more difficult to begin new actions. That said, I remain committed to participating in a caribou management planning effort if we can successfully involve the key players. That likely includes Adak, The Aleut Corporation, the Alaska Department of Fish and Game, and the Alaska Maritime National Wildlife Refuge as a minimum. The Aleut Corporation and the federal government are the major landowners. ADF&G has a primary wildlife management responsibility, and the City of Adak has interested residents and economic interests involved. If the Regional Advisory Council is not adequately represented through the community, I would be happy for the RAC to participate in some other way.

Sincerely,

STEVEN DELEHANTY

Digitally signed by STEVEN DELEHANTY
Date: 2021.05.17 09:42:22 -08'00'

Steve Delehanty, Refuge Manager

cc: Dave Crowley, ADF&G

**Answers to the Council's questions re Endangered Species Act designation of sea otter provided by the USFWS Marine Mammals Management Program**

Question: Why is the northern Sea Otter population in the Kodiak Archipelago designated as part of the Southwest Alaska Stock?

Answer: The Northern sea otter population in the Kodiak Archipelago was designated as part of the Southwest Alaska Stock based on genotypic, phenotypic, and geographic distribution evidence. The FWS gave considerable weight to the work of Gorbics and Bodkin (2001), who followed the phylogeographic approach of Dizon et al. (1992) to identify stock structure when the FWS determined the three stocks of sea otters in Alaska. This approach provides a more robust assessment of separation than any single technique alone. Based on these finding the Kodiak Archipelago was included as part of the Southwest sea otter stock. This population is discrete due to its separation from other northern sea otter populations due to geographical barriers combined with the relatively narrow band of sea otter habitat. The physical feature separating sea otters between the Kenai Peninsula and the Kodiak Archipelago is approximately 70 kilometers (approx. 43.5 miles) of open water with maximum water depth approximately 200 meters (approx. 656 feet) (with the Barren Islands half-way between). There are also morphological and genetic differences from the remainder of the taxon that are evidence of this separation.

Question: What criteria and administrative, genetic, and population size trends were used to designate the Kodiak Island sea otter population a part of the Southwest population?

Answer: The identification of three stocks of sea otters in Alaska was based on the best available scientific information that had been published in peer-reviewed scientific journals. Prior to determining these three stocks the FWS sought input from the Alaska Regional Scientific Review Group, a group of marine mammal experts that provides advice to the Service and is established under the Marine Mammal Protect Act. The FWS also sought input on this designation from the public when it proposed the designation in 1998 by way of a Federal Register notice published in March 1998 (63 FR 10936). After additional genetic analysis addressing the issue of stock identification was completed, in March 2002, the FWS once again proposed the identification of three stocks of sea otters in Alaska (67 FR 14959) and finalized the stock assessment reports in August 2002 (67 FR 62979).

Rather than rely on genetic information alone to determine if sea otters in Southwest Alaska are markedly separated from the other two stocks of sea otters in Alaska, and as noted above, the FWS gave considerable weight to the work of Gorbics and Bodkin (2001). This work followed a phylogeographic approach to identify stock structure. The FWS believes that this broad-based approach, which considers multiple lines of evidence including distribution, population response, morphology, and genetics, provides a more robust assessment of separation than any single technique alone.

The evidence for separate stock identity is genotypic (all stocks), phenotypic (Southcentral and Southwest stocks), and geographic distribution (Southeast stock), whereas population response data are more ambiguous between all stocks. Differences in genotype frequencies and the presence of unique genotypes among areas indicate restricted gene flow. This indicated that genetic exchange may be limited by little or no movement across stock boundaries and discontinuities in distribution at stock boundaries. Skull size differences (phenotypic) between Southwest and Southcentral Alaska populations further support stock separation.

Physical features of the habitat of the sea otter contribute to isolation of populations from each other. The sea otter uses a relatively narrow band of coastal habitat generally bounded by the shoreline and waters to 100 m in depth (Kenyon 1969). The physical feature constraining movement of sea otters between the Kenai Peninsula and the Alaska Peninsula is approximately 100 kilometers (approx. 62 miles) of open

water across Cook Inlet with maximum water depth approximately 100 meters (approx. 328 feet). The physical feature separating sea otters between the Kenai Peninsula and the Kodiak Archipelago is approximately 70 kilometers (approx. 43.5 miles) of open water with maximum water depth approximately 200 meters (approx. 656 feet) (with the Barren Islands half-way between).

On the basis of that review, the following boundaries were identified: (1) a Southeast stock extending from Dixon Entrance to Cape Yakataga; (2) a Southcentral stock extending from Cape Yakataga to Cape Douglas including Prince William Sound and Kenai peninsula coast; and (3) a Southwest stock including Alaska Peninsula coast, the southward and westward along the Aleutians to Attu Island including Barren Islands, Kodiak Archipelago, Pribilof Islands, and Bristol Bay.

Question: Can the population within the Kodiak Archipelago be reclassified as a separate stock?

Answer: The FWS completed a 5-year Review and a Species Status Assessment in January 2021 on the Northern Sea Otter Southwest Alaska Stock and assessed that the available information does not support this action. The Kodiak Archipelago is identified as part of a larger entity (Southwest stock), which is also classified as threatened distinct population segment (DPS) under the Endangered Species Act. Designating a DPS of a DPS, which we would request here, would need information that demonstrates that it is discreet and significant, as defined under the 1996 DPS policy, from the rest of the current DPS, and would also need to demonstrate that the DPS is not threatened or endangered.

Question: How does the Service determine stock identification (SW, PWS, and SE stocks), and the criteria/process for determining population stock designation?

Answer: A stock is defined by the Marine Mammal Protection Act, as a group of marine mammals of the same species or smaller taxa in a common spatial arrangement that interbreed when mature. As noted above, the work of Gorbics and Bodkin (2001), was used to identify stock structure.

The Southwest stock is also classified as a distinct population segment (DPS) per the Endangered Species Act (ESA). A DPS is defined as a vertebrate population or group of populations that is discrete from other populations of the species and significant in relation to the entire species.
Criteria for judging the significance of a DPS includes, but is not limited to, the four examples listed in our DPS policy (see Distinct Vertebrate Population Segment (61 FR 4722)), which addresses the recognition of DPSs for potential listing actions. The policy allows for more refined application of the Act that better reflects the biological needs of the taxon being considered, and avoids the inclusion of entities that do not require its protective measures. Under our DPS policy, three elements are considered in a decision regarding the status of a possible DPS as endangered or threatened under the Act. They are: (1) discreteness of the population segment in relation to the remainder of the taxon; (2) the significance of the population segment to the taxon to which it belongs; and (3) the population segment's conservation status in relation to the Act's standards for listing (i.e., is the population segment, when treated as if it were a species, endangered or threatened?).

Based on these criteria, the Southwest stocks meets the classification of a distinct population segment. The population's discreteness is due to its separation from other Alaskan sea otter stocks as a consequence of physical factors, and there are also morphological and genetic differences that are evidence of this separation. The population segment's significance is due principally to the significant gap that its loss would represent in the range of the Alaskan sea otters. In addition, this population segment represents a considerable portion of the overall genetic variability of the species.

Question: Are there any upcoming meetings that the Council can send a delegate to attend related to the topic of sea otters within the Kodiak area?

Answer: To the best extent known, there are currently no meetings focusing on sea otters in the Kodiak area happening in the near future; however, if there is an interest, Marine Mammals Management can arrange to have a meeting with the Council and any other pertinent party to discuss Southwest sea otter topics and issues. There is a Southeast Sea Otter Stakeholder Working Group that was recently developed (2021). This group meets quarterly to discuss on-going Southeast sea otter topics and relevant issues. If you would like more information on this group or when they meet next, please contact Jenipher Cate, the Sea Otter and Walrus Program Lead, at jenipher_cate@fws.gov.

**Literature cited:**

Gorbics, C.S., and J.L. Bodkin. 2001. Stock structure of sea otters (*Enhydra Lutris Kenyoni*) in Alaska. Marine Mammal Science 17(3):632-647.

Dizon, A. E., C. Lockyer, W. F. Perrin, D. P. Demaster and J. Sisson. 1992. Rethinking the stock concept: A phylogeographic approach. Conservation Biology 6:24-36.

Kenyon, K. W. 1969. The sea otter in the eastern Pacific Ocean. North American Fauna Number 68: 1-352. Bureau of Sport Fisheries and Wildlife, Washington, DC.

# Federal Subsistence Board

**1011 East Tudor Road, MS 121**
**Anchorage, Alaska 99503 - 6199**

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

**FOREST SERVICE**

OSM 21022.KW

Nancy Morris Lyon, Chair
Bristol Bay Subsistence
Regional Advisory Council
c/o Office of Subsistence Management
1101 East Tudor Road, MS 121
Anchorage, Alaska 99503-6199

Dear Chairwoman Lyon:

This letter responds to the Bristol Bay Subsistence Regional Advisory Council's (Council) Fiscal Year 2020 Annual Report. The Secretaries of the Interior and Agriculture have delegated to the Federal Subsistence Board (Board) the responsibility to respond to these reports. The Board appreciates your effort in developing the Annual Report. Annual Reports allow the Board to become aware of issues outside of the regulatory process that affect subsistence users in your region. We value this opportunity to review the issues concerning your region.

**1. <u>Public Participation in the Regional Advisory Council Public Meetings</u>**

*The Council held its fall 2020 and winter 2021 public meetings via teleconference due to the COVID-19 pandemic social distancing requirements and travel restrictions and was unable to meet in person. It is important to have meaningful participation from all those attending the meeting via teleconference, especially the Council and the public. The Office of Subsistence Management (OSM) staff used Microsoft Teams' video capabilities as a way to display agency reports and track other issues for the Council to follow. During the pandemic, this was a meaningful way to get the Council members engaged, as well as other participants. The use of video conferencing capabilities (instead of teleconference phone lines) should be considered for future public meetings in order for documents and presentations to be displayed visually.*
*During the Regional Advisory Council public meetings held via teleconference, a lack of public participation through the teleconference method was noted. This Council encourages OSM to*

*conduct additional outreach efforts to notify the public and encourage public participation when holding public meetings via teleconference.*

**Response**:

The Board recognizes the importance of public participation in all Council meetings no matter if they are held in person or via tele/video conference. Title VIII of ANILCA Section 805(a)(3)(B) and (C) specifically gives the authority to the Subsistence Regional Advisory Councils to provide "a forum for the expression of opinions and recommendations by persons interested in any matters related to the subsistence uses of fish and wildlife within the region" and to encourage "local and regional participation … in the decision making process affecting the taking of fish and wildlife on the public lands within the region for subsistence uses."

Fall 2020 and Winter 2021 Council meetings were held via teleconference and/or video conference due to various COVID-19 pandemic restrictions and guidelines from the U.S. Fish and Wildlife Service, State of Alaska, as well as local and Tribal governments. Well in advance of the meetings, OSM conducted its usual outreach to the agencies, tribes, and communities about the opportunity to participate in the upcoming Council's public meeting, and the meetings were widely advertised to the public via various media sources.

The Board is pleased that several Councils found it useful to utilize the Microsoft Teams platform video capabilities to display agency reports and track other issues, which OSM will be able to utilize for meetings in the future on an "as needed" basis. However, the Board also received feedback from users in rural communities that they experienced difficulties accessing the Microsoft Teams platform due to low internet capabilities or unfamiliarity with the platform. The Board asks the Council to advise your Council Coordinator on the ability to use the Teams platform and if your Council wishes to use it in the future.

The Board remains hopeful that the in-person meetings will be allowed in the fall of 2021 and is making plans for it. However, if the in-person meetings are not allowed, the Board will request OSM to conduct a more extensive outreach prior to the fall meeting to ensure more public participation in the tele/video conference.

## 2. Chignik Salmon Fishery

*The Chignik Sockeye Salmon fishery run continues to be a stock of concern for the Council. The Council prioritized the research of Sockeye Salmon as a need in the Chignik watershed. Research, stock assessment, and recovery plans for this fishery may provide answers to the questions of what caused the run to decrease and the role of environmental factors in the conservation of healthy populations.*

*Funding for this fishery should continue to be a priority as it supports subsistence opportunities for rural residents. In 2018 – 2020, closures and subsistence fishery restrictions were initiated in the Chignik River drainage for Sockeye and Chinook salmon conservation reasons. The abundant salmon stocks are a main subsistence resource for the residents within the Chignik watershed and is a strong part of their social and cultural well-being tied to the health of the lands and waters surrounding the communities.*

**Response**:

The Board understands that the last three seasons of Chignik River watershed salmon returns neither met escapement goals nor provided for much opportunity for Federally qualified users to harvest fish for subsistence. Unprecedented restrictions were warranted for all users of the Chignik River watershed Sockeye and Chinook salmon.

In 2021, the Alaska Department of Fish and Game, the U.S. Fish and Wildlife Service, Fisheries and Ecological Services, and the Chignik Intertribal Coalition applied for Fisheries Resource Monitoring Program funds to conduct harvest studies in the local area. Proposals for the Fisheries Resource Monitoring Program are under review now and funding decisions are expected in early 2022.

The Board recommends that when the Council reviews the 2022 Draft Fishery Resource Monitoring Plan at its fall meeting, they provide recommendations regarding the importance of this project for your region.

**3. <u>Staffing of Alaska Department of Fish and Game office in Dillingham</u>**

*The position of staff wildlife biologist with the State of Alaska Department of Fish and Game (ADF&G) in Dillingham has been vacant for quite some time. In the past a person in this position was able to provide residents of the area with biological information on the Nushagak Peninsula Caribou Herd. Togiak National Wildlife Refuge has been able to assist with biological information as well. Without proper staffing, it is hard for residents to get information on the State management strategies for the herd. The Council relies on biological information of the herd's status from the State and Federal wildlife biologists. The ADF&G and Togiak NWR Refuge biologists coordinate together for cooperative management and research to manage the herd.*

*Additionally, the Unit 17A winter moose hunt is managed by the ADF&G, while a significant portion of the hunt occurs on Togiak NWR lands. An onsite local ADF&G wildlife biologist is important for information on Unit 17A moose management strategies.*

**Response**:

The Board is pleased to relay the good news to the Council that the State of Alaska Department of Fish and Game successfully filled the Wildlife Biologist III Area Manager position in early 2021. Mr. Bryan Reiley was hired to fill this position and began his tenure in February of this year. OSM State Subsistence Liaison can invited Mr. Reiley through the ADF&G to attend the fall 2021 Council meeting.

**4. Brucellosis**

*Recently, the ADF&G reported increased cases of Brucella suis biovar 4, that causes a disease known as rangiferine brucellosis, affecting caribou and reindeer. The Mulchatna Caribou Herd has been affected by this disease and exposure from the contaminated parts of an animal can cause illness to people. Symptoms can include a very high fever that frequently comes and goes, chills, loss of appetite, sweats and fatigue. More detailed information can be found on this website: www.adfg.alaska.gov/index.cfm?adfg=disease.general3 and in the attached ADF&G Advisory Announcement (see enclosure).*

*The Mulchatna Caribou Herd is an important subsistence resource for the rural residents of Bristol Bay. The Council was informed about precautions that need to be taken when processing an infected animal and to report suspected cases of brucellosis to the ADF&G. Currently, the season for Mulchatna caribou is closed for harvest across the herd's full range.*

*The Council expresses concerns regarding the effects of the disease on the Mulchatna Caribou Herd, and requests that the ADF&G monitors the herd to protect the health and safety for the residents of the region. The Council requests that ADF&G keep the Council and public apprised of the current status of the Mulchatna Caribou Herd.*

**Response**:

The Board fully understands the importance of the Mulchatna Caribou Herd to subsistence users in the Bristol Bay Region and shares the Council's concerns regarding the effects of the rangiferine brucellosis disease on the herd. To the Board's knowledge, ADF&G continues to monitor the Mulchatna Caribou Herd and moose for *Brucella suis biovar* 4. In January 2021, Alaska Department of Fish and Game (ADF&G) researchers received positive test results for

brucellosis from a relatively high percentage of caribou sampled during collaring operations. Even though the MCH season was closed, public service announcements and outreach efforts were immediately done for public safety concerns. ADF&G will continue to monitor the herd for brucellosis, and the public is asked to report observations of caribou exhibiting signs of infection. USFWS Refuges have worked with ADF&G to distribute informational bulletins regarding brucellosis. In addition, a team of ADF&G and USFWS outreach specialists have been working collaboratively in the development, production, and distribution of additional informational materials for the MCH. These efforts have been done jointly to maintain consistent messaging and the pooling of expertise allows for effective and efficient outreach efforts. A Caribou Tracks publication specific to the MCH has been produced and will be made available to the public very soon. Public Service Announcements and other printed outreach materials are also being developed and will be distributed soon. We are enclosing two information fact sheets on brucellosis prepared by the Alaska Native Tribal Health Consortium Center for Climate and Health for the Council information. Additional materials and presentations are forthcoming. Your Council Coordinator may request a presentation from ADF&G on the status of the herd.

In closing, I want to thank you and your Council for your continued involvement and diligence in matters regarding the Federal Subsistence Management Program. I speak for the entire Board in expressing our appreciation for your efforts and am confident that Federally qualified subsistence users of the Bristol Bay Region are well represented through your work.

Sincerely,

Anthony Christianson
Chair

Enclosure

cc: Bristol Bay Subsistence Regional Advisory Council
Federal Subsistence Board
Sue Detwiler, Assistant Regional Director, Office of Subsistence Management
Amee Howard, Deputy Assistant Regional Director, Office of Subsistence Management
Robbin La Vine, Subsistence Policy Coordinator, Office of Subsistence Management
Katerina Wessels, Council Coordination Division Supervisor
Office of Subsistence Management
Lisa Grediagin, Wildlife Division Supervisor, Office of Subsistence Management
George Pappas, State Subsistence Liaison and Acting Fisheries Division Supervisor
Office of Subsistence Management
Jonathan Vickers, Anthropology Division Supervisor, Office of Subsistence Management
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Administrative Record

**Division of Wildlife Conservation**
**Eddie Grasser, Director**

Region IV, Palmer Area Office
1801 S. Margaret Way, Suite 4
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**Alaska Department of Fish and Game**
**Doug Vincent-Lang, Commissioner**

PO Box 115526
Juneau, AK 99811-5526
www.adfg.alaska.gov

## Advisory Announcement

***For Immediate Release:*** January 28, 2021

**CONTACT:** Dr. Kimberlee Beckmen
Wildlife Veterinarian
(907) 328-8354

### Increased Prevalence of Bacteria, *Brucella*, Found in Mulchatna Caribou

(Dillingham) – Caribou and reindeer, especially in northern Alaska, are known to be infected with a bacteria, *Brucella suis* biovar 4, that causes a disease known as rangiferine brucellosis. These bacteria are mainly spread amongst caribou from contact with birthing fluids during calving. Exposure to contaminated parts such as fluids from enlarged joints can cause illness in people but is preventable through hygienic butchering and safe meat handling practices. In people, brucellosis often causes a high fever that frequently comes and goes. People that experience symptoms and are concerned about infection should tell their health care provider that they may have been exposed to *Brucella*. If signs of the disease are seen in wildlife, it should be reported to ADF&G.

The Alaska Department of Fish and Game monitors the health of caribou which includes periodic testing specifically for brucellosis in animals handled by staff as well as harvested wildlife with signs of potential disease. Recently, routine surveillance of serum samples from Mulchatna caribou found a higher prevalence rate of antibodies to *Brucella* compared to other herds. Along with observations of caribou with the typical swollen front knee or enlarged scrotum, and detection of bacteria in tissues of two dead caribou, these findings indicate an increase of brucellosis in this herd.

Hunters may be aware of the constant, low-level presence and potential risk of brucellosis in other herds including Western Arctic, Teshekpuk, Central Arctic and Porcupine. The higher rates recently observed in the Mulchatna herd are notable, warranting a notice to hunters and their family members who have harvested a Mulchatna caribou. Department wildlife health veterinarian Dr. Kimberlee Beckmen advises these precautions: “Do not cut into enlarged or abnormally appearing organs or meat, and do not cut into the womb. Smoking, drying, or pickling may *not* kill all potential pathogens in game meat so cook all meat thoroughly (minimum internal temperature of 165$^{o}$ F). Wash your hands, knives, and food processing surfaces with hot soapy water after handling game meat. Do not consume raw bone marrow, as this is a high risk for infection with Brucellosis. Do not feed diseased parts to pets.”

**Division of Wildlife Conservation**
**Eddie Grasser, Director**

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**Doug Vincent-Lang, Commissioner**

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The Mulchatna caribou are harvested under the state registration permit RM503 and the season ended in September under both state and federal regulations. There is currently no open season for Mulchatna caribou. The Mulchatna caribou population is currently under the population objective set by wildlife managers.

Biologists are researching several possible factors including health and disease that may be contributing to the population decline. For best practices to prevent infections, and how to report diseased caribou, please visit the Division's Wildlife Parasites and Diseases webpage at www.adfg.alaska.gov/index.cfm?adfg=disease.general3 and refer to the bulletin *Brucellosis: Answers to Frequently Asked Questions*, issued by the Alaska Native Health Consortium (https://anthc.org/wp-content/uploads/2016/01/CCH-Bulletin-No-6-Brucellosis.pdf).

###

# Brucellosis: Understanding an Important Arctic Infectious Disease

## Center for Climate and Health

Michael Brubaker MS, James Berner MD, Jay Butler MD, Michael Bradley DVM
CCH Bulletin No. 5, November 30, 2010

*This bulletin describes brucellosis, an infectious disease caused by bacteria found in some land and sea mammals, including Arctic species that are important subsistence foods. We discuss the history of brucellosis in Alaska, explain climate change connections, and describe some of the implications for consumers of these wild foods.*

**Background**

Brucellosis is considered one of the most important Arctic infectious diseases and frequently affects wildlife including land and marine mammals that are important subsistence resources for Arctic people. Brucellosis is a "zoonotic disease", meaning that people can become infected by coming in contact with the same bacteria that causes the disease in animals. Ten species of *Brucella* are recognized in animals and some of these *Brucella* species include different biovars (i.e., different strain types).

Three *Brucella* species are known to cause disease in humans, *Brucella abortus* (mainly infecting cattle and bison), *Brucella melitensis* (mainly infecting sheep and goats), and *Brucella suis* (mainly infecting pigs, caribou and reindeer). *Brucella* suis "biovar 4" is the strain found in caribou and reindeer. Less frequently it can be found in dogs, moose, sheep, muskoxen and predator species. These are "spill over" hosts, meaning that the infection is usually not sustainable in the absence of a bacterial reservoir in the caribou or reindeer.

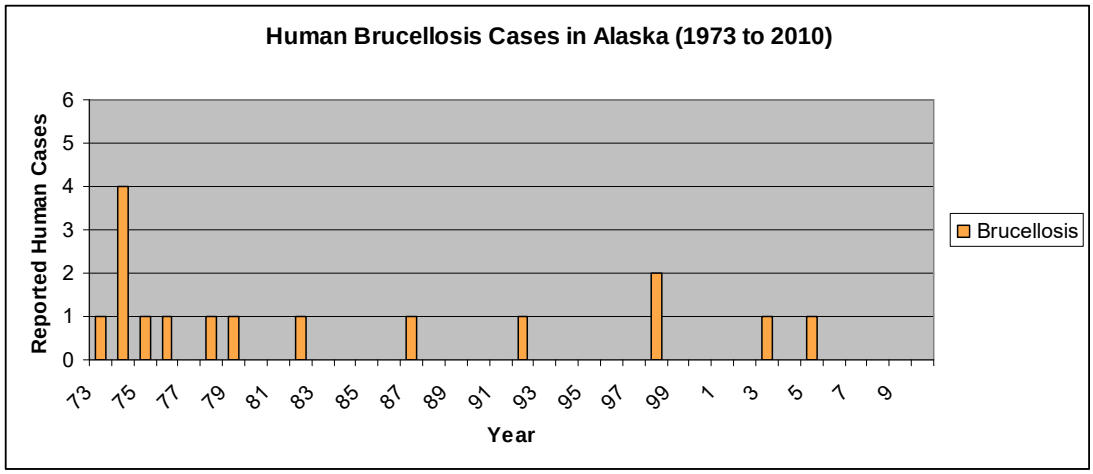
In Alaska, caribou are hunted mostly in spring, fall and winter. In the spring and fall, meat is air dried on racks and saved for later consumption. This is an efficient and economical way for preserving wild meat, as well as a traditional practice. Part of a freshly killed caribou is sometimes eaten raw, including the bone marrow and some internal organs. This can expose people to the *Brucella* bacteria. Another route of exposure is through a cut in the hand during butchering.

It is not known how frequently the infection occurs in people; although brucellosis has only rarely been reported to public health. Since 1973, there have been 17 reported cases in Alaska (DHSS). But the fact that brucellosis is difficult to diagnose may mean the disease is under reported, and that the rates are actual higher.

**The *Brucella* – Caribou Connection**

Brucellosis is a very old disease, and yet it has only recently been associated with wildlife in the Arctic. Up until the 1950s, reported human cases in Alaska were largely attributed to drinking

unpasteurized milk, as was common on small farms[1]. Cattle and pigs sometimes are infected with *Brucella abortus or Brucella suis* biovar 1, but in the 1950s, the disease had not yet been associated with Alaska wildlife. This changed in August of 1959 when an otherwise healthy, nineteen year old Alaska Native woman from Barrow fell ill (Edwards, S. 1959). She was admitted to the Barrow Native Hospital with flu-like symptoms, including fever, diarrhea, vomiting, and stomach pain. The following week, she was transferred to the Alaska Native Hospital in Anchorage under the care of Dr. Stan Edwards. After months of tests she was diagnosed with an uncommon type of brucellosis; not the variety found in farm animals, but rather *B. suis,* biovar 4 which had, never before been identified in Alaska. The woman was treated successfully with antibiotics, but the source of her *Brucella suis* remained a mystery.




Source: State of Alaska Department of Health and Social Services

Dr. Edwards had a strong suspicion that the young woman had received some unique exposure to *Brucella suis*. Prior to her illness, she had never been more then 120 miles from Barrow. Fresh dairy products were unheard of in Barrow, and people routinely consumed dry or canned milk. There was however, an interesting recent event in the patient's history. In August of 1958, three months prior to her illness, she had participated in a seal hunting trip. During the trip, a caribou was taken and the woman and two others from the party ate the bone marrow raw.

Dr. Edwards and Dr. Robert Phillips of the U.S. Public Health Service's Arctic Health Research Center traveled to Barrow to investigate. They were able to collect blood samples from 480 people. Of those tested, only one person was positive for anti-*Brucella* antibodies, an eighteen year old boy from Wainwright who was also a member of the seal hunting party and had eaten the raw caribou bone marrow. The third person who had eaten bone marrow was a 50 year old man. He also had been ill three months after the hunt, and had been treated with antibiotics. His tests came back negative for *Brucella*.

[1] Forty-nine cases were reported between 1939 and 1953 (Huntley et al. 1963).

Edwards and Phillips provided initial epidemiological evidence for an Alaska reservoir of *Brucella suis* in caribou. Human cases had also been described in other parts of the Arctic, including Canada in 1953 and in 1955, where caribou was also considered a possible source (Matas 1953, Corrigan 1955), and in Siberia, (Pinigin and Petukhova, 1962). More evidence of the caribou – human *Brucella suis* relationship was soon to follow.

In 1960 the 1st and 2nd Scout Battalions, of the Alaska National Guard, were mustering for their annual encampment. There were 795 members from 55 villages throughout southwest, western, northern and the interior of Alaska. It was an opportunity to assess exposure to *Brucella suis* statewide. Blood samples were collected from all guardsmen as well as from the general population of residents in the communities of Anatuvik Pass, Barrow, and Wainwright. Additionally, bone marrow for culture and blood samples was collected from 145 caribou around Anaktuvuk Pass (Huntley et al., 1963). Up to 10% of the Guardsmen tested positive for anti-*Brucella* antibodies, indicating past exposure. In Anatuvik Pass 14 people were positive, suggesting an exposure of 10 to 20% of the population.

In 1961, two more cases of brucellosis were identified, one from Anatuvuk Pass and a second from Kivalina (Huntley et al., 1963). People in both villages rely heavily on caribou in their diet. The strains isolated in these patients resembled the strains isolated in caribou, suggesting that the *Brucella* among caribou may also cause illness in humans. By 1966, the relationship had been firmly established. The strain of bacteria isolated in caribou and in people were the same (Brody et al. 1966), it was *Brucella suis* biovar 4 (Meyer, 1964).

Between 1961 and 1965 samples were collected from 763 residents in seven Arctic villages that rely heavily on caribou for food. These included Anaktuvuk Pass, Arctic Village, Fort Yukon, Kiana, Kivalina, Noatak and Shungnak. Chevak was selected as a control (unexposed) community since caribou was not commonly used there for subsistence (Brody et al. 1966). Blood samples were acquired from between 20% and 95% of the population and represented all age groups with the exception of children under five years of age.

No one tested positive in the control community Chevak, but in the others between 5% and 21% tested positive for anti-*Brucella* antibodies, showing that they had been exposed but were not necessarily experiencing illness. During the same period however, eight active infections were identified among men and women: one case in Anaktuvuk Pass, two in Kiana, two in Kivalina, one in Kotzebue, one in Wainwright, and one in Barrow. All suffered from similar flu-like symptoms and recovered after receiving antibiotics. All cases were in people who commonly ate caribou, both cooked and raw. So even though many residents had *Brucella* antibodies in their blood, it was uncommon for people to develop the disease.

During almost the same period, analysis of caribou from across Alaska identified an epidemic of brucellosis in both the Nelchina (Southcentral Alaska) and Arctic caribou herds (Neiland et al., 1967). Speculation was made about a potential caribou-dog-human connection, similar to other dog-human zoonotic disease pathways in rural Alaska; such as rabies (fox-dog-human) and echinococcus (vole-dog-human).

**Brucellosis serology in 7 villages above the Arctic Circle (Brody, 1966)**

| Village | Number Tested | % Positive Male | % Positive Female | % Positive Total |
|---|---|---|---|---|
| Anaktunuk Pass | 98 | 7 | 10 | 8 |
| Arctic Village | 45 | 24 | 13 | 18 |
| Fort Yukon | 174 | 20 | 21 | 21 |
| Kiana | 174 | 4 | 8 | 6 |
| Kivalina | 64 | 3 | 11 | 6 |
| Noatak | 131 | 4 | 7 | 5 |
| Shungnak | 77 | 14 | 14 | 14 |
| TOTAL | 763 | 9 | 13 | 11 |

A later blood survey by the State of Alaska Department of Fish and Game, suggested that the disease was present in all caribou herds in Alaska, but with a high prevalence in the Northwest, and a low prevalence in southern part of the state (Zarnke, 2001). Similarly, in Canada, caribou continued to be identified as carriers of *Brucella suis* biovar 4. Arctic people were considered at particular risk for infection because of the raw caribou meat in their diet. As advised in a 1989 report on brucellosis among Canadian Inuit, "physicians should consider brucellosis in these individuals who present with persistent fever or hepatosplenomegaly (an enlarged liver or spleen)" (Chan et al., 1989).

**The *Brucella* – Marine Mammal Connection**

In 1994 a new *Brucella* species was described; the first case of brucellosis in a sea mammal, a captive dolphin in California (Ewalt et al. 1994). The fact that the animal had an aborted pregnancy (a common outcome of brucellosis in animals including caribou) suggests that this new *Brucella* species was not only present but was also causing disease. Two different marine mammal *Brucella* species *Brucella pinnipedialis,* infecting preferentially seals, and *Brucella ceti,* infecting preferentially whales and porpoises, have since been isolated in a variety of marine mammals.

Marine mammals strains were different than any of the terrestrial strains of the bacteria. A survey from the North Atlantic found that 38% of surveyed hooded seals were sero (blood) positive for *Brucella* (Tryland et al, 2005). Brucellosis was also found to have high prevalence in 49% of tested common seals and 33% of harbor porpoises on the Scottish coast (Foster et al., 2002). Anti-*Brucella* antibodies have also been detected in 10% of ringed seals tested in the Barents Sea (Tryland et al., 1999). In Alaska, a 2006 study in the Gulf of Alaska, Prince William Sound, Kodiak Island and the Southeast, described 46% sero-positivity in Harbor seals (11% for pups and 54% for non pups), the highest of any species tested in Alaska (Zarnke et al., 2006).

Climate change may be increasing the opportunity for *Brucella* and other infectious agents to spread throughout the Arctic. Whereas some Alaska sea mammals were once geographically isolated, the opening of ice-free routes across the Arctic Ocean are increasing opportunities for interaction and the spread of infectious disease. The social behavior of seals, sea lions and other pinniped species, especially during haulout periods, provides added opportunity for

transmission of infectious disease (Zarnke et al. 2006). Transfer may occur through prey species, from mother to calf (or pup), or through a parasite such as lung worms that were reported to have infected a Pacific harbor seal (Garner et al., 1997).

But can marine *Brucella* also affect people? The occupational acquired infection of a laboratory worker suggested that the marine *Brucella* may also be contagious to humans. The lab worker had headache, sinusitis and fatigue, and had bacteria in his blood (Brew et al. 1999). Marine *Brucella* species have also infected people in a community setting. Two incidents of community-acquired human infections from marine *Brucella* were reported in Peru, both resulting in neurobrucellosis, a rare, severe form of systemic nervous system infection. Neither of the patients reported consuming or having contact with sea mammals, despite the fact that the strain of *Brucella* they acquired, *B. pinnipedialis* is associated with seals. This raises questions about the possible routes of human exposure to marine *Brucella* (Sohn et al, 2003).

Because each *Brucella* species has distinctive characteristics of infection, the complexity of the interaction between the bacteria, the animals and humans has increased (Godfroid et al., 2005). At least two newly identified species, *B. ceti* infecting cetaceans like whales, dolphins and porpoises) and *Brucella pinnipedialis* (infecting different seal species) are now present in the Arctic (Godfroid J, 2002) and new *Brucella* strains or species may emerge as existing *Brucella* adapt to a changing environment. Marine *Brucella* species may utilize non-mammal species such as fish or round worms as intermediate hosts. Marine ecosystems may add complexity to the marine *Brucella* life – cycle, and may pose additional possible sources of human exposure. It is not known whether antibodies developed to *Brucella* from caribou will protect against infection from marine forms of *Brucella*, or to what extent standard tests for infections in humans exposed to terrestrial forms of *Brucella*, will also detect antibodies to marine *Brucella*.

**Conclusion**

In Alaska, little is know about the prevalence of brucellosis in humans. Although rarely reported, it may be diagnosed and treated more frequently than is apparent. Surveillance and reporting systems to improve understanding about this disease are needed, both in wildlife and for the people who depend on these animals as a staple in their diet.

Caribou as well as reindeer are the reservoir of *Brucella suis* biovar 4 brucellosis infection in people. This can be a severe disease and requires prompt diagnosis and treatment. There is also a possible reservoir of *Brucella ceti* and *Brucella pinnipedialis* in Arctic marine mammals. However, to date no human infection with marine *Brucella* has been described in the Arctic. On the basis of the blood tests available, a determination of the origin of the *Brucella* infection, marine versus terrestrial, is not possible.

The extent of exposure and infection by marine *Brucella* in humans is currently unknown. Worldwide, only three naturally acquired human cases have been described, for which the route of transmission is not known.

Alaska Natives depend upon traditional foods to provide a healthy, affordable, sustainable, and culturally meaningful diet. Sea and land mammals used for food are often eaten raw (such as bone marrow), dried, or raw after freezing. These practices are known to carry more risk for food-borne illnesses than eating food that has been cooked, which effectively kills most bacteria and parasites. The risks are highest for people who are susceptible to infection, such as pregnant mothers, the elderly, or people that are immune suppressed due to illness or cancer therapy. But how great is the risk, what benefits would be lost, and do the risks justify changing behaviors and traditions that have been passed down for generations?

More information is needed to answer these questions, and to help us understand the risks and benefits associated with different methods of food preparation. With better information, consumers of traditional foods can make choices based on sound science and their own personal and cultural priorities. In the meantime, some basic precautions such as wearing protective gloves during butchering can help consumers protect themselves from brucellosis while continuing to use and enjoy these important subsistence resources.

The bulletin entitled ***Brucellosis – Answers to Frequently Asked Questions,*** provides information for subsistence food consumers and some basic guidelines on how to prevent exposure to *Brucella*. The fact sheet is available at the ANTHC Center for Climate and Health website. Google us with: “Center for Climate and Health.”

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# Brucellosis: Answers to Frequently Asked Questions
## Center for Climate and Health

Michael Brubaker MS, James Berner MD, Jay Butler MD, Michael Bradley DVM
CCH Bulletin No. 6, November 30, 2010

*This bulletin describes brucellosis, an infectious disease caused by bacteria found in some land and sea mammals, including species that are important food resources. As climate change is providing new opportunities for the spread of infectious disease, ANTHC developed this bulletin to provide prevention guidelines and answer some commonly asked questions. The risk of infection from brucellosis is thought to be low, but it can be a serious illness. This information can help Alaska Natives reduce risk while continuing to enjoy a healthy, subsistence diet.*

**What is Brucellosis?**
Brucellosis (pronounced: brew-cell-o-sis) is a disease caused by a bacteria called *Brucella*, that infects some animals and can also infects people. In Alaska, the most common source of *brucellosis* in people is from exposure to infected caribou and reindeer. *Brucella* can also infect other land mammals including wolves, bears, musk ox, and moose among others. It has also recently been identified in sea mammals including seals and whales.

**Where does it occur?**
Brucellosis is most commonly associated with the four Arctic caribou herds: the Western Arctic, the Teshekpuk, the Central Arctic, and the Porcupine. These herds occupy parts of Norton Sound, the Northwest Arctic Borough, the North Slope Borough, the Interior, and across the border into Canada's Northwest Territory. Brucellosis is also reported in other caribou and reindeer herds in Alaska.


Bearded Seal Courtesy E. Regehr, U.S. Fish and Wildlife.


Caribou (Courtesy APIA Photo Archives).

**How frequently does it occur in animals?**
In surveillance performed since 1971 by the Alaska Department of Fish and Game, more then 1000 North Slope caribou have been sampled, and antibodies against brucella have been found in 5% of the animals tested (Personal communication, Kimberlee Beckmen, ADF&G 2010). Efforts are underway by ADF&G and others to describe this disease in caribou and other wildlife. Tests in marine mammals showed that in parts of Alaska, 46% of harbor seals had been

exposed to brucella. However, to date no Alaskan cases of human brucellosis associated with marine mammals have been identified so the potential risk to hunters and consumers is unknown.

**What are the signs of brucellosis in caribou?**
Brucellosis usually affects caribou reproductive organs and the legs. Infected animals may have swollen joints causing limping or lameness, especially in the front legs. However, this is not the only disease or condition that can cause these symptoms in caribou. In fact, an infected animal may appear healthy. It is for this reason that people handling caribou should be aware of the disease so that they can take precautions.

Photo of swollen caribou fore leg. Courtesy of the Government of Northwest Territories, Canada.

**Would I notice anything different when butchering?**
In caribou, you may find a swollen joint, testicle or womb, but typically you will not find anything unusual. As for marine mammal brucellosis, infected seal usually appear healthy whereas in whales and other cetaceans, lesions in reproductive organs, in the brain, skin and joints have been reported.

**How often does brucellosis occur in people?**
Brucellosis has rarely been diagnosed in people. Since 1973, there have been only 17 reported cases in Alaska (DHSS). The fact that brucellosis is difficult to diagnose may mean the disease is under reported, and rates may actually be higher.

**How does brucellosis affect people?**
In people, the effects of brucellosis can range from having no symptoms at all, to a very serious and sometimes chronic infection of the brain, heart or other internal organs. Untreated it can result in death. When there are symptoms, they can include fever, sweats, headaches, back pains, and physical weakness. Long-lasting, chronic symptoms include fevers that come and go, joint pain, and fatigue. Brucellosis in people can be diagnosed in a laboratory by testing samples of blood or bone marrow.

**What should you do if you think you have been exposed?**
People that experience symptoms and are concerned about infection should tell their health care provider that they may have been exposed to *Brucella*.

**What is the treatment?**
Treatment for a confirmed case of brucellosis involves antibiotics. Depending on the timing of treatment and severity of illness, recovery may take a few weeks to several months. Brucellosis can be cured with treatment.

**How common is it in people?**
It is difficult to say as there are few records in Alaska and it is possible that some cases go without ever being diagnosed. A 1981 State of Alaska Epidemiology Bulletin reported that since 1958, brucellosis averaged about one case per year (ranging between 0 and 5), with 24 cases in all (Ribar, J., 1981).

**How are people exposed to *Brucella*?**
It is usually while butchering, when cuts in a person's hand come in contact with the fluids from the womb, swollen joints and possibly the blood. It can also be contracted if infected fluids are splashed into the eyes, nose or mouth, or through eating uncooked or improperly cooked bone marrow.

**If a caribou looks like it has brucellosis, can I still eat it?**
Remember, it may not be possible to tell if an animal is infected. If it appears infected, you can still eat the healthy looking meat and marrow of the animal as long as it is properly cooked. Freezing, drying, pickling or smoking *will not* kill most bacteria, including *Brucella* either in caribou or in other animals.

**Can the disease be passed from person to person?**
The spread of brucellosis from person to person is extremely rare. However, infected mothers can transmit brucellosis to their infants. This is why cooking meat and marrow is especially important for nursing mothers.

**How can I protect myself while butchering?**
If part of the animal appears diseased, avoid cutting into it. If you have an open cut on your hand, ask someone else to do the butchering and preparation; or wear a pair of rubber gloves. Avoid wiping your eyes or mouth with anything that has come in contact with blood or fluids. Wearing glasses or sunglasses can help to avoid this kind of exposure.

**What about clean up?**
The bacteria can remain viable for months so thorough cleaning of tools after butchering or preparation is strongly recommended. In the field, hand sanitizers are a good alternative if water is not readily available. At home, take care to clean the area where butchering has occurred. Water mixed with bleach, (one part bleach to ten parts water) works well to clean counters and other surfaces.



Wearing gloves helps to prevent exposure to brucella during butchering. Photos M. Brubaker, 2010

**Does this mean I should only eat cooked meat?**
Much of the sea and land mammal that is consumed by Alaska Natives is dried, or eaten raw after freezing. This is an economical and efficient way to prepare meat, and also has cultural and nutritional value. But consumers need to be aware that these practices may carry more risk for brucellosis and other foodborne diseases than cooked meat. Deciding how to eat (cooked, uncooked or otherwise) is a personal decision that should be made based on good information about the specific food resource.

**Are some people more vulnerable to infection?**
Although brucella is difficult to detect in people, the risk for infection is thought to be low. However, special precautions are recommended for people who are more vulnerable to infectious disease, such as infants, pregnant mothers, the elderly, or people that are immune suppressed due to illness or cancer therapy. With these populations, cooking meat and marrow can help to prevent a serious infection.

**What is the connection to climate change?**
Brucellosis is one of the diseases commonly discussed in relation to climate change in the Arctic. Warming temperature is changing the range of many animals and other wildlife, and improving conditions for the spread of some types of disease. Little is known about climate change influence on brucellosis rates in animals or people, but efforts are on-going to improve understanding of the disease and to monitor for new diseases or changes in disease patterns.

**Where can I get more information?**
For more information about brucellosis in wildlife, contact the State of Alaska Department of Fish and Game, or visit their Wildlife Disease Website. For more information about brucellosis in people, you can contact the Alaska Native Tribal Health Consortium, Center for Climate and Health, or the State of Alaska Section of Epidemiology. If you are concerned about your own health or that of your family, contact your health care provider or regional health corporation.

**Conclusion** - Alaska Natives depend upon traditional foods to provide a healthy, affordable, sustainable, and culturally meaningful diet. Wild land and sea mammals are generally more nutritious then the meat that is available at the store. More research is needed into the risks and benefits associated with different methods of preparing wild foods, as well as ways for reducing risk, and broader surveillance for brucellosis is needed. With good information, consumers can make choices based on sound science and their own personal and cultural priorities. Brucellosis is not a new problem in Alaska, nor is it thought to be a common one. But brucellosis can be serious, especially in people who are vulnerable to infections. By taking a few precautions everyone can enjoy the benefits of these important subsistence foods and prevent illness.

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# Federal Subsistence Board

**1011 East Tudor Road, MS 121**
**Anchorage, Alaska 99503 - 6199**

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

**FOREST SERVICE**



OSM 21028.KW

Raymond Oney, Chair
Yukon-Kuskokwim Delta
Subsistence Regional Advisory Council
c/o Office of Subsistence Management
1011 East Tudor Road, MS 121
Anchorage, Alaska 99503-6199

Dear Chairman Oney:

This letter responds to the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council's (Council) fiscal year 2020 Annual Report. The Secretaries of the Interior and Agriculture have delegated to the Federal Subsistence Board (Board) the responsibility to respond to these reports. The Board appreciates your effort in developing the Annual Report. Annual Reports allow the Board to become aware of the issues outside of the regulatory process that affect subsistence users in your region. We value this opportunity to review the issues concerning your region.

**1. <u>Request for the Board's support for rural subsistence priority</u>**

*The Council requests that the Board recognize and support the critical importance of rural subsistence priority. Our communities depend on subsistence resources for survival and it is the very fabric of our family and community. It is central to our culture and way of life. Subsistence foods and taking care of others, such as providing for our elders and sharing subsistence foods through the potlach, are central also to our traditional and cultural values. As provided for in ANILCA, subsistence priority should be recognized and supported over other uses. This is more critical now than ever with declining fish and wildlife populations and stress to the resource caused by climate change.*

*The Council has submitted several letters over the years requesting reduction in Bering Sea salmon bycatch and limitation of sport fishing on our tributary rivers – every fish counts to make*

*escapement and provide for subsistence. The Council seeks the support of the Board to help ensure the burden of Chinook Salmon conservation is shared by all and protect subsistence priority over industrial trawl fisheries and sport fishing.*

**Response**:

The Board shares your concern for the decrease in Chinook Salmon populations statewide. We recognize that as stocks decline, fishing opportunities for Federally qualified subsistence users become more limited. The Federal Subsistence Management Program has a number of tools to support a rural subsistence priority within the scope of the Board's authority such as special actions, closures to non-Federally qualified users, the ANILCA section 804 prioritization among Federally qualified subsistence users, and delegation of Board authority to the in-season manager. Your Council has been proactive in utilizing these tools and informing Board processes and actions. However, these actions can only be implemented in Federal public waters and limited marine waters within or adjacent to Federal lands.

Although it is beyond the scope of the Board's authority, we are supportive of the steps your Council has taken over the years, such as writing letters to express your concerns to the North Pacific Fisheries Management Council. Your efforts and advocacy helped inform the North Pacific Fisheries Management Council's 2016 decision (Amendment 110) to reduce the Chinook salmon bycatch hard cap (prohibited species catch) from 60,000 to 45,000 fish in the Bering Sea Pollock fishery and the performance standard is lowered from 47,591 to 33,318. This reduction is dependent on Chinook salmon abundance using the 3-System Index for western Alaska based on the post-season in-river Chinook salmon run size for the Kuskokwim, Unalakleet, and Upper Yukon aggregate stock grouping. This action was implemented in 2016. One of the primary intentions of this policy is to minimize Chinook bycatch at low levels of salmon abundance. In addition to these bycatch reduction measures, we recognize there are likely other factors that impact the rebound of salmon stocks statewide. The Board continues to urge the Council to remain vigilant in voicing concerns to the North Pacific Fisheries Management Council and active in their regulatory process.



**2. <u>Recent food security issues and need for the Board's awareness and support</u>**

*Recent events have created real and urgent food security emergencies for subsistence communities across the Yukon-Kuskokwim Delta. Not only has the COVID-19 pandemic caused*

*transportation lockdowns and resulted in food supply challenges for rural communities, but additionally the recent loss of regional airlines has greatly limited freight flights to bring food and supplies to these off-the-road-system communities. With bare shelves, we are more than ever dependent on access to fresh, healthy subsistence foods to sustain our families.*

*Salmon declines over the past several years and the 2020 total fisheries disaster on the Yukon and Kuskokwim rivers have left communities throughout the region with no dry or frozen fish for the winter. The year 2020 was one of the worst on record for subsistence communities – with very few fish in the river many people did not even catch one salmon to eat. The subsistence fishers took the brunt of the restrictions for conservation. The Council believes that everyone including all agencies need to be at the table to work towards conservation – from the Bering Sea feeding grounds to the headwaters' spawning grounds. The Council requests the Board recognize this as an emergency and find ways to provide food support and ensure access to subsistence resources that our communities need to survive and thrive.*

**Response**:

In 2020, the Interagency Staff Committee began developing a draft white paper *Food Security as a Threat to Public Safety* and a draft *Framework to Evaluate Special Action Requests Related to Public Safety/Food Security*. Once these drafts are finalized, they will be presented to the Board for further discussion and direction. If the framework is approved by the Board, it could serve as a mechanism available to allow access to subsistence food resources during emergencies in the future.

The Federal Subsistence Management Program can support adaptation to changing conditions by using the various tools available that enable the Program to be responsive to subsistence users' needs as conditions change. For example, the Special Action process enables the Board to respond quickly to out-of-cycle needs for regulatory actions. The Board has also used its ability to delegate authority to local land managers to enable them to respond quickly to unforeseen circumstances such as unpredictable seasons and fluctuations in resource availability.

More persistent changes to the availability and seasonality of resources due to climate change can be addressed through the regulatory process. When species become less abundant due to climate change, closures to non-Federally qualified users, or ANILCA section 804 prioritization among Federally qualified subsistence users, may become necessary. Other species may become more abundant with shifts in environmental conditions, or new species may expand into the region. In this case, the Federal Subsistence Management Program can assist communities in delineating seasons, harvest limits, and methods and means for these newly available resources.

**3. <u>Consideration for traditional ecological knowledge (TEK) when making subsistence resource management decisions</u>**

*Traditional ecological knowledge has been used by our elders and ancestors for generations. We have lived on this land from season to season, know what the weather brings, and study our surroundings to understand the cycle of life and the natural environment that sustains us. We grew up learning to observe, to listen to the stories of elders, and to have an in-depth relationship with and understanding of the environment of the place where our ancestors lived for generations. For example, when there is a lot of snow, there will be good fish because of the cold waters coming down stream; the length of the grass will tell you if it is going to be a cold winter; and abundant mosquitos is an indication of how the season to come will be. We are experts in our own land and waters and our traditional knowledge should be considered along with western science in management decisions affecting subsistence resources that we depend upon.*

*The Council requests that the Board, Federal Subsistence Management Program, and Federal managers of subsistence resources listen to local experts and knowledge holders and make decisions based on our traditional science gained from generations of observations as well as western scientific data. The Council also stresses that the engagement with subsistence communities and traditional knowledge bearers should come at the outset of research and management projects in the region – not as an afterthought as it often has been. We encourage the Federal subsistence program to continue to fund traditional knowledge studies, such as through the Fisheries Resource Monitoring Program in-season fisheries programs in partnership with local Tribes, formal documentation of traditional knowledge so that it can be used now and preserved for future generations, and encourage increased traditional knowledge documentation and incorporation of TEK into management.*

**Response**:

Thank you for sharing these examples of the interconnections in the environment, as recognized and passed down in Traditional Ecological Knowledge (TEK). The Board acknowledges the critical importance of TEK in informing the Federal Subsistence Management Program. We rely on this knowledge and consider it alongside western scientific knowledge. Similar to western science, TEK is obtained through repeated interactions with the natural world over time. The Board understands that TEK may provide a spatial and temporal scale of knowledge that is otherwise unavailable to resource managers. Holders of TEK experience local landscapes and

environmental phenomena throughout the seasons, and often over the span of many years and passed down through generations.

The Board strives to obtain TEK from many sources to inform our management decisions. Analyses for wildlife and fishery proposals, customary and traditional use determination proposals, and rural determination proposals strive to incorporate available TEK to help us better understand subsistence resources and the people that depend on them. We direct OSM staff to include all relevant TEK in all aspects of these analyses. That said, our analysts are typically do not conduct primary research and thus must rely on published literature and public testimony. This is one of the many reasons that we rely on you, our Regional Advisory Councils, to help inform the program of local conditions and available knowledge on the subject matter through preparation of an annual report containing information related to current and future subsistence uses of fish and wildlife populations, an evaluation of current and future subsistence needs for these populations, a strategy for their management, and recommendations related to policies, standards, guidelines and regulations to implement the strategy.

Transcripts from public meetings, Regional Advisory Council meetings, and Federal Subsistence Board meetings are mined for TEK that can inform the Federal Subsistence Management Program. We also rely on written public comments and conversations with local stakeholders and land managers. The Board also considers our government-to-government consultations with Tribes and Alaska Native Claims Settlement Act (ANCSA) Corporations as imperative to our program. We are committed to improving avenues of communication between these entities and our Board, and ask that as members of the Council you encourage individuals and both public and private entities in your communities to engage with our program and make their voices and knowledge heard.

As the Council noted, meaningful collaboration on research funded by the Fisheries Research Monitoring Program can only occur when communities are consulted with prior to decision-making about research design and goals. Early engagement must substantively shape research on Stock, Status, and Trends, Harvest Monitoring, and Traditional Ecological Knowledge. The Technical Review Committee, which evaluates proposals for the Monitoring Program, considers projects to be fundable and of high quality only when they have demonstrated that consultation and partnerships with communities has begun in earnest prior to proposals being submitted.

**4. <u>Youth Science and Culture Camps</u>**

*The Council supports the Federal Subsistence Management Program and Federal land managers holding Youth Science and Culture Camps in collaboration with local area Tribes. These programs help instill an interest and learning about science, traditional knowledge and*

*cultural values. We hope the Board sees the great benefit of these programs and continues to provide funding and support for the important role science and culture camps play in the conservation of subsistence resources for future generations.*

**Response**:

The Board acknowledges your Council's support for continued offering and funding of Youth and Culture Camps and primary involvement with local Tribes. The Board will continue to support these types of efforts to reach the youth of Alaska and is very grateful for your support of these established programs. There is no question that providing the opportunity for the next generation to learn many subjects and skills in a hands-on type of Youth Science or Culture Camp will help build knowledge and future interest in resource conservation in Alaska, especially the subsistence resources in the area the students were raised. The Board will continue to support these types of programs and looks forward to a future where the former attendees of these efforts are the scientists, managers, regulators, and even Board members in the Federal Subsistence Management Program. Thank you for supporting the ongoing educational efforts funded by this program.

**5. <u>Mulchatna caribou herd and other inventory and monitoring studies</u>**

*The Mulchatna Caribou Herd is very important to subsistence communities of the Yukon-Kuskokwim Delta. The Council is very concerned about its decline and what may be causing this recent dramatic reduction in the size of the herd. The Council encourages the Federal Subsistence Management Program and agency biologists and managers to continue conducting population surveys and ongoing monitoring of the herd's health. We also encourage the Federal Subsistence Management Program to listen to the local observations and expert knowledge of subsistence hunters who know this caribou herd well, have been concerned about its conservation at the outset, and alerted the Board to its decline before the latest population surveys were conducted.*

**Response**:

The Mulchatna Caribou Herd (MCH) population has fluctuated over the years, as is the case with most caribou herds. The MCH reached a population peak of about 200,000 in the late 1990's. Currently, the herd is estimated at about 13,500 which is well below the State population objective of 30,000-80,000 set by the Alaska Board of Game. Due to the low population level, Federal and State managers began taking emergency actions starting in the 2019-2020 hunting season. Initially, harvest limits were decreased and an early closure was later implemented. With the population estimated to be the same as 2019 and continued concern by agencies and the

public, Federal and State managers only allowed a limited fall bull harvest during the 2020-2021 season. The remainder of the season was closed.

The reason for the recent population decline is not known; however, biologists continue to gather information in order to make informed decisions. A few possible contributing factors may include brucellosis, predation, human harvest, and habitat.

In January 2021, Alaska Department of Fish and Game (ADF&G) researchers received positive test results for brucellosis from a relatively high percentage of caribou sampled during collaring operations. Even though the MCH season was closed, public service announcements and outreach efforts were immediately done for public safety concerns. ADF&G will continue to monitor the herd for brucellosis, and the public is asked to report observations of caribou exhibiting signs of infection. USFWS Refuges have worked with ADF&G to distribute informational bulletins regarding brucellosis. In addition, a team of ADF&G and USFWS outreach specialists have been working collaboratively in the development, production, and distribution of additional informational materials for the MCH. These efforts have been done jointly to maintain consistent messaging and the pooling of expertise allows for effective and efficient outreach efforts. A *Caribou Tracks* publication specific to the MCH has been produced and will be made available to the public very soon. Public Service Announcements and other printed outreach materials are also being developed and will be distributed soon. We are enclosing two information fact sheets on brucellosis prepared by the Alaska Native Tribal Health Consortium Center for Climate and Health for the Council information.

Federal agencies are continuing to assist the ADF&G with monitoring efforts and with the design and implementation of future research. The ADF&G calf survival/mortality study was initiated the spring 2021 and continues through the summer. ADF&G will be providing a summary of those results in July 2021. A population estimate was done at the end of June and the report is being finalized and should also be available July 2021. The herd composition study generally occurs later in the fall. USFWS biologists have assisted with these monitoring efforts. Federal and State biologists are currently working together to design and implement a range wide habitat assessment study. Current information such as calf weights and adult caribou condition does not correlate to habitat being a contributing issue with depressed herd populations. Biologists do believe habitat monitoring would be useful with the current situation and provide for better future management decision-making.

The ADF&G and Federal managers and biologists have been meeting regularly as a management team in order to strategize monitoring, research and management options. The managers are also looking at how to best involve the public. As in the past, we will be making every attempt to solicit input from the Councils, ADF&G Fish and Game Advisory Committees, natural resource departments of regional native corporations, Tribal Councils, and individual comments from

local area residents. Every effort will be made to solicit public input. Based on the information is available right now, it is unlikely that the MCH can sustain any harvest if the goal is to grow the herd. Given the current population estimates and other contributing factors, there has been consensus that conservation measures are needed to grow the herd's population and without immediate actions, we will more than likely see a further decline in the population.

The in-season managers welcome your comments.

FWS Contacts:

- Kenton Moos, Federal in-season Manager and Refuge Manager for Togiak NWR, 907-842-8404
- Boyd Blihovde, Refuge Manager for Yukon Delta NWR, 907-543-1002

**6. Climate change effects on subsistence resources, activities, and safe access and possible mitigation measures**

*The Council addressed this issue at great length in our FY-2019 Annual Report (enclosed). We bring it up again to continue to explore possible mitigation measures to support subsistence in a changing environment. There will be some Federal subsistence proposals coming before the Board to help provide flexibility with timing, seasons, areas, and tools that can be used to help subsistence hunters and fishers. These proposal requests may be regarding changing of hunt area boundaries when low water conditions on rivers make them no longer accessible by boat; or extending seasons into fall or alternate winter season if weather conditions are too hot; or asking for to-be-announced seasons when the snow and ice are safe for snow machine travel. Additionally, the Council notes that recent years of hot dry summers and low snow pack and warm river temperatures is causing heat stress to fish. The salmon may be swimming deeper in the cooler waters and there may soon be a time to increase the allowed net mesh depth to support subsistence fishers successfully catching salmon when they are swimming at greater depths.*

**Response**:

The Board shares the Council's concern over the impacts of climate change on the fish, wildlife, and habitats essential for the continuation of the subsistence way of life. The Board encourages the Council to continue to submit proposals to change regulations to address climate induced impacts. The regulatory process can be used to ensure that shifts in the timing and distribution of subsistence resources and activities is supported rather than constrained by regulations.

Furthermore, the Board appreciates the Council's comments and testimonies on recent seasonal changes and their effects on fish, wildlife, and the subsistence way of life. Council members are a source of TEK and local observations of climate change. Therefore, the Council should continue to document its observations of changes through annual reports and testimony at Council and Board meetings. Documenting local observations are part of most Harvest Monitoring and TEK reports submitted through the Fisheries Resource Monitoring Program and are often included in research and resource management reports by State and Federal agencies.

**7. <u>Hardship on the Council and community to participate by teleconference only</u>**

*Participation in the Council meetings by teleconference only has been very difficult. The Council recognizes the safety precautions needed to protect rural communities due to COVID-19, but it has come at great hardship and loss of effectiveness for the Council. Teleconference lines are full of static and background noise and calls repeatedly get dropped. It is very difficult to hear and challenging to fully engage in the meeting under these conditions. The Council would like to stress the importance of meetings in person, where the Council can engage with each other, the community, and Office of Subsistence Management staff, agencies, and Tribal representatives. We lose a lot of meaning, context, and connection as a result of being apart during teleconference meetings. There is no way to share visual information or data to all participating by teleconference. The Council strongly encourages the Federal Subsistence Management Program to resume in-person meetings as soon as safely possible. Until such time we request the program explore all options to increase the effectiveness of better teleconferencing services with improved reception, elimination of background noise, and computer support to Council members. The Council requests that computer-based videoconferencing options (such as Zoom) are provided so the Council members can see each other and all the speakers and their presentations.*

**Response**:

Some of the winter 2020 Councils' meeting as well as all of the fall 2020 and winter 2021 meetings were held via teleconference and/or video conference due to the various pandemic restrictions and guidelines from the U.S. Fish and Wildlife Service, State of Alaska, and local and Tribal governments. The Board and OSM is committed to the safety and health of the Council members, employees and citizens of communities across rural Alaska, and is deeply concerned about the threat posed by the transmission of the infectious disease, COVID-19.

At the same time, the Board fully understands and supports the value of in-person meetings and is committed to resuming them as soon as it is possible to conduct them safely and adhere to all

applicable guidelines. The Board remains hopeful that the in-person meetings will be allowed in the near future.

The Board would also like to inform the Council that OSM was able to secure the services of the Verizon MyMeeting platform that provides operator assistance and includes the ability to eliminate noise by muting and unmuting participants. This service was utilized for several public hearings in the spring of 2021 and worked well, with good sound quality for all participants including those calling from rural communities. We are hopeful this new teleconference service will be helpful for future Council meetings.

Additionally, OSM can provide a videoconferencing option via Microsoft Teams platform, which is approved for use by the Federal government (currently Zoom platform is not approved). At the same time, it is important to note that participants might experience difficulties accessing and maintaining a clear reception to the meeting via the Microsoft Teams platform or any other video-meeting platform in rural communities with limited internet capabilities. We recognize many Council members may not have access to computers or the internet to participate in these ways. Prior to the fall 2021 meeting cycle, the Council Coordinator for your region will reach out to all Council members and assess if it is practicable to use video conferencing.

In closing, I want to thank you and your Council for your continued involvement and diligence in matters regarding the Federal Subsistence Management Program. I speak for the entire Board in expressing our appreciation for your efforts and am confident that Federally qualified subsistence users of the Yukon-Kuskokwim Delta Region are well represented through your work.

Sincerely,

Anthony Christianson
Chair

Enclosure

cc: Yukon-Kuskokwim Delta Subsistence Regional Advisory Council
Federal Subsistence Board
Sue Detwiler, Assistant Regional Director, Office of Subsistence Management
Amee Howard, Deputy Assistant Regional Director, Office of Subsistence Management
Robbin La Vine, Subsistence Policy Coordinator, Office of Subsistence Management
Katerina Wessels, Council Coordination Division Supervisor
Office of Subsistence Management

Lisa Grediagin, Wildlife Division Supervisor, Office of Subsistence Management
George Pappas, State Subsistence Liaison and Acting Fisheries Division Supervisor
Office of Subsistence Management
Jonathan Vickers, Anthropology Division Supervisor, Office of Subsistence Management
Eva Patton, Council Coordinator, Office of Subsistence Management
Interagency Staff Committee
Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and Game
Mark Burch, Special Project Coordinator, Alaska Department of Fish and Game
Administrative Record

# Brucellosis: Understanding an Important Arctic Infectious Disease

## Center for Climate and Health

Michael Brubaker MS, James Berner MD, Jay Butler MD, Michael Bradley DVM
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*This bulletin describes brucellosis, an infectious disease caused by bacteria found in some land and sea mammals, including Arctic species that are important subsistence foods. We discuss the history of brucellosis in Alaska, explain climate change connections, and describe some of the implications for consumers of these wild foods.*

**Background**

Brucellosis is considered one of the most important Arctic infectious diseases and frequently affects wildlife including land and marine mammals that are important subsistence resources for Arctic people. Brucellosis is a "zoonotic disease", meaning that people can become infected by coming in contact with the same bacteria that causes the disease in animals. Ten species of *Brucella* are recognized in animals and some of these *Brucella* species include different biovars (i.e., different strain types).

Three *Brucella* species are known to cause disease in humans, *Brucella abortus* (mainly infecting cattle and bison), *Brucella melitensis* (mainly infecting sheep and goats), and *Brucella suis* (mainly infecting pigs, caribou and reindeer). *Brucella* suis "biovar 4" is the strain found in caribou and reindeer. Less frequently it can be found in dogs, moose, sheep, muskoxen and predator species. These are "spill over" hosts, meaning that the infection is usually not sustainable in the absence of a bacterial reservoir in the caribou or reindeer.

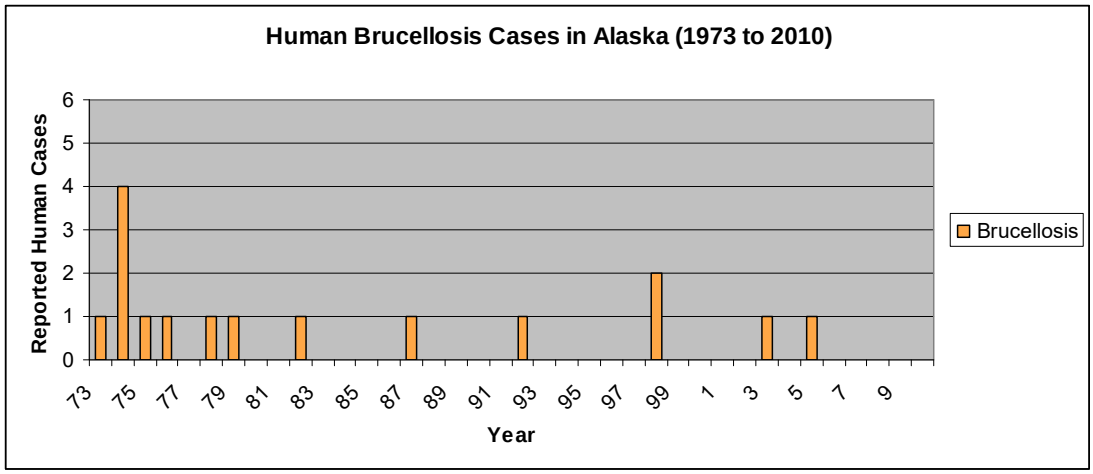
In Alaska, caribou are hunted mostly in spring, fall and winter. In the spring and fall, meat is air dried on racks and saved for later consumption. This is an efficient and economical way for preserving wild meat, as well as a traditional practice. Part of a freshly killed caribou is sometimes eaten raw, including the bone marrow and some internal organs. This can expose people to the *Brucella* bacteria. Another route of exposure is through a cut in the hand during butchering.

It is not known how frequently the infection occurs in people; although brucellosis has only rarely been reported to public health. Since 1973, there have been 17 reported cases in Alaska (DHSS). But the fact that brucellosis is difficult to diagnose may mean the disease is under reported, and that the rates are actual higher.

**The *Brucella* – Caribou Connection**

Brucellosis is a very old disease, and yet it has only recently been associated with wildlife in the Arctic. Up until the 1950s, reported human cases in Alaska were largely attributed to drinking

unpasteurized milk, as was common on small farms[1]. Cattle and pigs sometimes are infected with *Brucella abortus or Brucella suis* biovar 1, but in the 1950s, the disease had not yet been associated with Alaska wildlife. This changed in August of 1959 when an otherwise healthy, nineteen year old Alaska Native woman from Barrow fell ill (Edwards, S. 1959). She was admitted to the Barrow Native Hospital with flu-like symptoms, including fever, diarrhea, vomiting, and stomach pain. The following week, she was transferred to the Alaska Native Hospital in Anchorage under the care of Dr. Stan Edwards. After months of tests she was diagnosed with an uncommon type of brucellosis; not the variety found in farm animals, but rather *B. suis,* biovar 4 which had, never before been identified in Alaska. The woman was treated successfully with antibiotics, but the source of her *Brucella suis* remained a mystery.




Source: State of Alaska Department of Health and Social Services

Dr. Edwards had a strong suspicion that the young woman had received some unique exposure to *Brucella suis*. Prior to her illness, she had never been more then 120 miles from Barrow. Fresh dairy products were unheard of in Barrow, and people routinely consumed dry or canned milk. There was however, an interesting recent event in the patient's history. In August of 1958, three months prior to her illness, she had participated in a seal hunting trip. During the trip, a caribou was taken and the woman and two others from the party ate the bone marrow raw.

Dr. Edwards and Dr. Robert Phillips of the U.S. Public Health Service's Arctic Health Research Center traveled to Barrow to investigate. They were able to collect blood samples from 480 people. Of those tested, only one person was positive for anti-*Brucella* antibodies, an eighteen year old boy from Wainwright who was also a member of the seal hunting party and had eaten the raw caribou bone marrow. The third person who had eaten bone marrow was a 50 year old man. He also had been ill three months after the hunt, and had been treated with antibiotics. His tests came back negative for *Brucella*.

[1] Forty-nine cases were reported between 1939 and 1953 (Huntley et al. 1963).

Edwards and Phillips provided initial epidemiological evidence for an Alaska reservoir of *Brucella suis* in caribou. Human cases had also been described in other parts of the Arctic, including Canada in 1953 and in 1955, where caribou was also considered a possible source (Matas 1953, Corrigan 1955), and in Siberia, (Pinigin and Petukhova, 1962). More evidence of the caribou – human *Brucella suis* relationship was soon to follow.

In 1960 the 1st and 2nd Scout Battalions, of the Alaska National Guard, were mustering for their annual encampment. There were 795 members from 55 villages throughout southwest, western, northern and the interior of Alaska. It was an opportunity to assess exposure to *Brucella suis* statewide. Blood samples were collected from all guardsmen as well as from the general population of residents in the communities of Anatuvik Pass, Barrow, and Wainwright. Additionally, bone marrow for culture and blood samples was collected from 145 caribou around Anaktuvuk Pass (Huntley et al., 1963). Up to 10% of the Guardsmen tested positive for anti-*Brucella* antibodies, indicating past exposure. In Anatuvik Pass 14 people were positive, suggesting an exposure of 10 to 20% of the population.

In 1961, two more cases of brucellosis were identified, one from Anatuvuk Pass and a second from Kivalina (Huntley et al., 1963). People in both villages rely heavily on caribou in their diet. The strains isolated in these patients resembled the strains isolated in caribou, suggesting that the *Brucella* among caribou may also cause illness in humans. By 1966, the relationship had been firmly established. The strain of bacteria isolated in caribou and in people were the same (Brody et al. 1966), it was *Brucella suis* biovar 4 (Meyer, 1964).

Between 1961 and 1965 samples were collected from 763 residents in seven Arctic villages that rely heavily on caribou for food. These included Anaktuvuk Pass, Arctic Village, Fort Yukon, Kiana, Kivalina, Noatak and Shungnak. Chevak was selected as a control (unexposed) community since caribou was not commonly used there for subsistence (Brody et al. 1966). Blood samples were acquired from between 20% and 95% of the population and represented all age groups with the exception of children under five years of age.

No one tested positive in the control community Chevak, but in the others between 5% and 21% tested positive for anti-*Brucella* antibodies, showing that they had been exposed but were not necessarily experiencing illness. During the same period however, eight active infections were identified among men and women: one case in Anaktuvuk Pass, two in Kiana, two in Kivalina, one in Kotzebue, one in Wainwright, and one in Barrow. All suffered from similar flu-like symptoms and recovered after receiving antibiotics. All cases were in people who commonly ate caribou, both cooked and raw. So even though many residents had *Brucella* antibodies in their blood, it was uncommon for people to develop the disease.

During almost the same period, analysis of caribou from across Alaska identified an epidemic of brucellosis in both the Nelchina (Southcentral Alaska) and Arctic caribou herds (Neiland et al., 1967). Speculation was made about a potential caribou-dog-human connection, similar to other dog-human zoonotic disease pathways in rural Alaska; such as rabies (fox-dog-human) and echinococcus (vole-dog-human).

**Brucellosis serology in 7 villages above the Arctic Circle (Brody, 1966)**

| Village | Number Tested | % Positive Male | % Positive Female | % Positive Total |
|---|---|---|---|---|
| Anaktunuk Pass | 98 | 7 | 10 | 8 |
| Arctic Village | 45 | 24 | 13 | 18 |
| Fort Yukon | 174 | 20 | 21 | 21 |
| Kiana | 174 | 4 | 8 | 6 |
| Kivalina | 64 | 3 | 11 | 6 |
| Noatak | 131 | 4 | 7 | 5 |
| Shungnak | 77 | 14 | 14 | 14 |
| TOTAL | 763 | 9 | 13 | 11 |

A later blood survey by the State of Alaska Department of Fish and Game, suggested that the disease was present in all caribou herds in Alaska, but with a high prevalence in the Northwest, and a low prevalence in southern part of the state (Zarnke, 2001). Similarly, in Canada, caribou continued to be identified as carriers of *Brucella suis* biovar 4. Arctic people were considered at particular risk for infection because of the raw caribou meat in their diet. As advised in a 1989 report on brucellosis among Canadian Inuit, "physicians should consider brucellosis in these individuals who present with persistent fever or hepatosplenomegaly (an enlarged liver or spleen)" (Chan et al., 1989).

**The *Brucella* – Marine Mammal Connection**

In 1994 a new *Brucella* species was described; the first case of brucellosis in a sea mammal, a captive dolphin in California (Ewalt et al. 1994). The fact that the animal had an aborted pregnancy (a common outcome of brucellosis in animals including caribou) suggests that this new *Brucella* species was not only present but was also causing disease. Two different marine mammal *Brucella* species *Brucella pinnipedialis,* infecting preferentially seals, and *Brucella ceti,* infecting preferentially whales and porpoises, have since been isolated in a variety of marine mammals.

Marine mammals strains were different than any of the terrestrial strains of the bacteria. A survey from the North Atlantic found that 38% of surveyed hooded seals were sero (blood) positive for *Brucella* (Tryland et al, 2005). Brucellosis was also found to have high prevalence in 49% of tested common seals and 33% of harbor porpoises on the Scottish coast (Foster et al., 2002). Anti-*Brucella* antibodies have also been detected in 10% of ringed seals tested in the Barents Sea (Tryland et al., 1999). In Alaska, a 2006 study in the Gulf of Alaska, Prince William Sound, Kodiak Island and the Southeast, described 46% sero-positivity in Harbor seals (11% for pups and 54% for non pups), the highest of any species tested in Alaska (Zarnke et al., 2006).

Climate change may be increasing the opportunity for *Brucella* and other infectious agents to spread throughout the Arctic. Whereas some Alaska sea mammals were once geographically isolated, the opening of ice-free routes across the Arctic Ocean are increasing opportunities for interaction and the spread of infectious disease. The social behavior of seals, sea lions and other pinniped species, especially during haulout periods, provides added opportunity for

transmission of infectious disease (Zarnke et al. 2006). Transfer may occur through prey species, from mother to calf (or pup), or through a parasite such as lung worms that were reported to have infected a Pacific harbor seal (Garner et al., 1997).

But can marine *Brucella* also affect people? The occupational acquired infection of a laboratory worker suggested that the marine *Brucella* may also be contagious to humans. The lab worker had headache, sinusitis and fatigue, and had bacteria in his blood (Brew et al. 1999). Marine *Brucella* species have also infected people in a community setting. Two incidents of community-acquired human infections from marine *Brucella* were reported in Peru, both resulting in neurobrucellosis, a rare, severe form of systemic nervous system infection. Neither of the patients reported consuming or having contact with sea mammals, despite the fact that the strain of *Brucella* they acquired, *B. pinnipedialis* is associated with seals. This raises questions about the possible routes of human exposure to marine *Brucella* (Sohn et al, 2003).

Because each *Brucella* species has distinctive characteristics of infection, the complexity of the interaction between the bacteria, the animals and humans has increased (Godfroid et al., 2005). At least two newly identified species, *B. ceti* infecting cetaceans like whales, dolphins and porpoises) and *Brucella pinnipedialis* (infecting different seal species) are now present in the Arctic (Godfroid J, 2002) and new *Brucella* strains or species may emerge as existing *Brucella* adapt to a changing environment. Marine *Brucella* species may utilize non-mammal species such as fish or round worms as intermediate hosts. Marine ecosystems may add complexity to the marine *Brucella* life – cycle, and may pose additional possible sources of human exposure. It is not known whether antibodies developed to *Brucella* from caribou will protect against infection from marine forms of *Brucella*, or to what extent standard tests for infections in humans exposed to terrestrial forms of *Brucella*, will also detect antibodies to marine *Brucella*.

**Conclusion**

In Alaska, little is know about the prevalence of brucellosis in humans. Although rarely reported, it may be diagnosed and treated more frequently than is apparent. Surveillance and reporting systems to improve understanding about this disease are needed, both in wildlife and for the people who depend on these animals as a staple in their diet.

Caribou as well as reindeer are the reservoir of *Brucella suis* biovar 4 brucellosis infection in people. This can be a severe disease and requires prompt diagnosis and treatment. There is also a possible reservoir of *Brucella ceti* and *Brucella pinnipedialis* in Arctic marine mammals. However, to date no human infection with marine *Brucella* has been described in the Arctic. On the basis of the blood tests available, a determination of the origin of the *Brucella* infection, marine versus terrestrial, is not possible.

The extent of exposure and infection by marine *Brucella* in humans is currently unknown. Worldwide, only three naturally acquired human cases have been described, for which the route of transmission is not known.

Alaska Natives depend upon traditional foods to provide a healthy, affordable, sustainable, and culturally meaningful diet. Sea and land mammals used for food are often eaten raw (such as bone marrow), dried, or raw after freezing. These practices are known to carry more risk for food-borne illnesses than eating food that has been cooked, which effectively kills most bacteria and parasites. The risks are highest for people who are susceptible to infection, such as pregnant mothers, the elderly, or people that are immune suppressed due to illness or cancer therapy. But how great is the risk, what benefits would be lost, and do the risks justify changing behaviors and traditions that have been passed down for generations?

More information is needed to answer these questions, and to help us understand the risks and benefits associated with different methods of food preparation. With better information, consumers of traditional foods can make choices based on sound science and their own personal and cultural priorities. In the meantime, some basic precautions such as wearing protective gloves during butchering can help consumers protect themselves from brucellosis while continuing to use and enjoy these important subsistence resources.

The bulletin entitled ***Brucellosis – Answers to Frequently Asked Questions,*** provides information for subsistence food consumers and some basic guidelines on how to prevent exposure to *Brucella*. The fact sheet is available at the ANTHC Center for Climate and Health website. Google us with: “Center for Climate and Health.”

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*ANTHC would like to acknowledge the contributions of Louisa Castrodale DVM, with the State of Alaska Department of Public Health; Jacques Godfroid DVM PhD, with the Norwegian School of Veterinary Medicine; and Alan Parkinson PhD with the U.S. Centers for Disease Control Arctic Investigations Program. Thank you very much for your help in developing this bulletin.*

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# Brucellosis: Answers to Frequently Asked Questions
## Center for Climate and Health

Michael Brubaker MS, James Berner MD, Jay Butler MD, Michael Bradley DVM
CCH Bulletin No. 6, November 30, 2010

*This bulletin describes brucellosis, an infectious disease caused by bacteria found in some land and sea mammals, including species that are important food resources. As climate change is providing new opportunities for the spread of infectious disease, ANTHC developed this bulletin to provide prevention guidelines and answer some commonly asked questions. The risk of infection from brucellosis is thought to be low, but it can be a serious illness. This information can help Alaska Natives reduce risk while continuing to enjoy a healthy, subsistence diet.*

**What is Brucellosis?**
Brucellosis (pronounced: brew-cell-o-sis) is a disease caused by a bacteria called *Brucella*, that infects some animals and can also infects people. In Alaska, the most common source of *brucellosis* in people is from exposure to infected caribou and reindeer. *Brucella* can also infect other land mammals including wolves, bears, musk ox, and moose among others. It has also recently been identified in sea mammals including seals and whales.

**Where does it occur?**
Brucellosis is most commonly associated with the four Arctic caribou herds: the Western Arctic, the Teshekpuk, the Central Arctic, and the Porcupine. These herds occupy parts of Norton Sound, the Northwest Arctic Borough, the North Slope Borough, the Interior, and across the border into Canada's Northwest Territory. Brucellosis is also reported in other caribou and reindeer herds in Alaska.


Bearded Seal Courtesy E. Regehr, U.S. Fish and Wildlife.


Caribou (Courtesy APIA Photo Archives).

**How frequently does it occur in animals?**
In surveillance performed since 1971 by the Alaska Department of Fish and Game, more then 1000 North Slope caribou have been sampled, and antibodies against brucella have been found in 5% of the animals tested (Personal communication, Kimberlee Beckmen, ADF&G 2010). Efforts are underway by ADF&G and others to describe this disease in caribou and other wildlife. Tests in marine mammals showed that in parts of Alaska, 46% of harbor seals had been

exposed to brucella. However, to date no Alaskan cases of human brucellosis associated with marine mammals have been identified so the potential risk to hunters and consumers is unknown.

**What are the signs of brucellosis in caribou?**
Brucellosis usually affects caribou reproductive organs and the legs. Infected animals may have swollen joints causing limping or lameness, especially in the front legs. However, this is not the only disease or condition that can cause these symptoms in caribou. In fact, an infected animal may appear healthy. It is for this reason that people handling caribou should be aware of the disease so that they can take precautions.

Photo of swollen caribou fore leg. Courtesy of the Government of Northwest Territories, Canada.

**Would I notice anything different when butchering?**
In caribou, you may find a swollen joint, testicle or womb, but typically you will not find anything unusual. As for marine mammal brucellosis, infected seal usually appear healthy whereas in whales and other cetaceans, lesions in reproductive organs, in the brain, skin and joints have been reported.

**How often does brucellosis occur in people?**
Brucellosis has rarely been diagnosed in people. Since 1973, there have been only 17 reported cases in Alaska (DHSS). The fact that brucellosis is difficult to diagnose may mean the disease is under reported, and rates may actually be higher.

**How does brucellosis affect people?**
In people, the effects of brucellosis can range from having no symptoms at all, to a very serious and sometimes chronic infection of the brain, heart or other internal organs. Untreated it can result in death. When there are symptoms, they can include fever, sweats, headaches, back pains, and physical weakness. Long-lasting, chronic symptoms include fevers that come and go, joint pain, and fatigue. Brucellosis in people can be diagnosed in a laboratory by testing samples of blood or bone marrow.

**What should you do if you think you have been exposed?**
People that experience symptoms and are concerned about infection should tell their health care provider that they may have been exposed to *Brucella*.

**What is the treatment?**
Treatment for a confirmed case of brucellosis involves antibiotics. Depending on the timing of treatment and severity of illness, recovery may take a few weeks to several months. Brucellosis can be cured with treatment.

**How common is it in people?**
It is difficult to say as there are few records in Alaska and it is possible that some cases go without ever being diagnosed. A 1981 State of Alaska Epidemiology Bulletin reported that since 1958, brucellosis averaged about one case per year (ranging between 0 and 5), with 24 cases in all (Ribar, J., 1981).

**How are people exposed to *Brucella*?**
It is usually while butchering, when cuts in a person's hand come in contact with the fluids from the womb, swollen joints and possibly the blood. It can also be contracted if infected fluids are splashed into the eyes, nose or mouth, or through eating uncooked or improperly cooked bone marrow.

**If a caribou looks like it has brucellosis, can I still eat it?**
Remember, it may not be possible to tell if an animal is infected. If it appears infected, you can still eat the healthy looking meat and marrow of the animal as long as it is properly cooked. Freezing, drying, pickling or smoking *will not* kill most bacteria, including *Brucella* either in caribou or in other animals.

**Can the disease be passed from person to person?**
The spread of brucellosis from person to person is extremely rare. However, infected mothers can transmit brucellosis to their infants. This is why cooking meat and marrow is especially important for nursing mothers.

**How can I protect myself while butchering?**
If part of the animal appears diseased, avoid cutting into it. If you have an open cut on your hand, ask someone else to do the butchering and preparation; or wear a pair of rubber gloves. Avoid wiping your eyes or mouth with anything that has come in contact with blood or fluids. Wearing glasses or sunglasses can help to avoid this kind of exposure.

**What about clean up?**
The bacteria can remain viable for months so thorough cleaning of tools after butchering or preparation is strongly recommended. In the field, hand sanitizers are a good alternative if water is not readily available. At home, take care to clean the area where butchering has occurred. Water mixed with bleach, (one part bleach to ten parts water) works well to clean counters and other surfaces.



Wearing gloves helps to prevent exposure to brucella during butchering. Photos M. Brubaker, 2010

**Does this mean I should only eat cooked meat?**
Much of the sea and land mammal that is consumed by Alaska Natives is dried, or eaten raw after freezing. This is an economical and efficient way to prepare meat, and also has cultural and nutritional value. But consumers need to be aware that these practices may carry more risk for brucellosis and other foodborne diseases than cooked meat. Deciding how to eat (cooked, uncooked or otherwise) is a personal decision that should be made based on good information about the specific food resource.

**Are some people more vulnerable to infection?**
Although brucella is difficult to detect in people, the risk for infection is thought to be low. However, special precautions are recommended for people who are more vulnerable to infectious disease, such as infants, pregnant mothers, the elderly, or people that are immune suppressed due to illness or cancer therapy. With these populations, cooking meat and marrow can help to prevent a serious infection.

**What is the connection to climate change?**
Brucellosis is one of the diseases commonly discussed in relation to climate change in the Arctic. Warming temperature is changing the range of many animals and other wildlife, and improving conditions for the spread of some types of disease. Little is known about climate change influence on brucellosis rates in animals or people, but efforts are on-going to improve understanding of the disease and to monitor for new diseases or changes in disease patterns.

**Where can I get more information?**
For more information about brucellosis in wildlife, contact the State of Alaska Department of Fish and Game, or visit their Wildlife Disease Website. For more information about brucellosis in people, you can contact the Alaska Native Tribal Health Consortium, Center for Climate and Health, or the State of Alaska Section of Epidemiology. If you are concerned about your own health or that of your family, contact your health care provider or regional health corporation.

**Conclusion** - Alaska Natives depend upon traditional foods to provide a healthy, affordable, sustainable, and culturally meaningful diet. Wild land and sea mammals are generally more nutritious then the meat that is available at the store. More research is needed into the risks and benefits associated with different methods of preparing wild foods, as well as ways for reducing risk, and broader surveillance for brucellosis is needed. With good information, consumers can make choices based on sound science and their own personal and cultural priorities. Brucellosis is not a new problem in Alaska, nor is it thought to be a common one. But brucellosis can be serious, especially in people who are vulnerable to infections. By taking a few precautions everyone can enjoy the benefits of these important subsistence foods and prevent illness.

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# Federal Subsistence Board

**1011 East Tudor Road, MS 121**
**Anchorage, Alaska 99503 - 6199**

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

**FOREST SERVICE**

IN REPLY REFER TO:
OSM 21031.KW

Jenny Pelkola, Chair
Western Interior Alaska Subsistence
Regional Advisory Council
c/o Office of Subsistence Management
1101 East Tudor Road, MS 121
Anchorage, Alaska 99503-6199

Dear Chairwoman Pelkola:

This letter responds to the Western Interior Alaska Subsistence Regional Advisory Council's (Council) fiscal year 2020 Annual Report. The Secretaries of the Interior and Agriculture have delegated to the Federal Subsistence Board (Board) the responsibility to respond to these reports. The Board appreciates your effort in developing the Annual Report. Annual Reports allow the Board to become aware of the issues outside of the regulatory process that affect subsistence users in your region. We value this opportunity to review the issues concerning your region.

**1. Mean High Water Mark Definition**

*The Council appreciates that the Board responded to this concern in our 2019 Annual Report. As cited in your reply, the Army Corp of Engineers defined the term "ordinary high water mark" for purposes of the Clean Water Act lateral jurisdiction at 33 CFR 328.3(e), which states: "The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."*

*The Council believes this definition is inadequate, particularly for Federally-qualified subsistence users who must hunt during the winter months to feed their families. The*

*characteristics described above delineate the ordinary high water mark for bare ground and are not visible during the winter months. Subsistence hunters are therefore vulnerable to illegally harvesting an animal during the winter months when the boundary is not visible based on the current definition. The regulation is therefore inadequate and needs further clarification to encompass seasonal variability.*

*Recommendation:*

*The Council is recommending that during winter months with snow cover, the "ordinary high water mark" be defined as the brush line, where willow and other vegetation occur above the snow column. This will enable a user to have a clear delineation of the brush line, and know whether they are on State or Federal lands for legal subsistence harvest.*

**Response:**

The Federal Subsistence Board does not have the authority to modify the Conservation System Unit boundaries or the jurisdictional definition for "Ordinary High Water" for Federal Public Lands in Alaska. The Council's concern was heard and understood.

At the March 26, 2019 Council meeting, Brandon Bosch, Federal Wildlife Officer for Kanuti, Yukon Flats, and Arctic National Wildlife Refuges, advised hunters to determine the ordinary high water mark by digging through the snow and checking for the presence of vegetation. Although this may seem to be a burdensome, it is one method to assist hunters with determining the status of land where they are located. Your Council Coordinator can invite a law enforcement officer for a further discussion of this issue during your next Council meeting.

## 2. Council Membership

*The Council continues to be extremely frustrated with the lack of both timely member appointments and fully seated Councils. The Council submitted detailed concerns in a letter to the Board dated December 8, 2020; notably unacceptable delays in appointments for seats expiring each year on December 2, and continued high vacancy rates on all Subsistence Regional Advisory Councils, which greatly diminish the abilities of the Councils to accomplish the statutory requirements under Section 805 of Title VIII in ANILCA. The Councils cannot be expected to meet the statutory requirement for a "meaningful role in fish and wildlife management" with decreased memberships and inexcusable delays in member appointments. The Council believes that this "de facto" reduction of Council seats has not been justified, and is in fact a violation of the Council's charter and ANILCA. The Council has copied all Subsistence Regional Advisory Councils on its December 8, 2020 letter to ensure there is a collective voice*

*with these concerns, as the continued mishandling of member appointments is adversely affecting all ten subsistence regions in Alaska.*

*Recommendation:*

*As stated in our letter to the Board, the Council is requesting that the Board contact the Secretary of the Interior's office and call for immediate relief with timely appointments for both incumbent and new members for Subsistence Regional Advisory Councils in Alaska.*

**Response**:

The Board acknowledges the Council's continuing concerns regarding the lack of timely appointments and fully seated Councils. A diverse and wide regional representation on all Councils is key to these advisory bodies' ability to fulfill Section 805 of Title VIII of ANILCA mandates. The Board notes that the current administration already is aware of the significance and magnitude of the appointment issues. When in 2021 the lack of appointments was brought to this administration's attention, it acted promptly to resolve them by appointing additional members to the Councils out-of-cycle. The Board feels that since the issue was resolved so expeditiously it is not necessary at this point to contact the Secretary of the Interior office regarding the Councils' appointments concerns.

However, the Board would like to point out that in some situations it is impossible to fill the vacant seats and/or appoint alternates when there is not a sufficient number of applications or nominations from the region. For example, in the 2020 appointment year there were six seats open on the Council for appointments. The Board received only five applications from your region to fill these six vacancies.

In fiscal year 2020, the Office of Subsistence Management (OSM) conducted outreach in the Western Interior Alaska Region and throughout the State during the application period that was open from September 3, 2019 to March 2, 2020. Applications were mailed and emailed to individuals, agencies, and organizations. Extensive outreach was conducted through a variety of media outlets, including, but not limited to, newspaper, radio, internet, Facebook, and public conferences. These efforts resulted in 74 applications to fill 62 vacated or expiring seats on all Councils, but unfortunately, not enough for the Western Interior Region.

The Board encourages the Council members to assist OSM with outreach effort in its communities and throughout the Region to attract a wider pool of applicants for the future appointment cycles. Having a wider pool of applicants allows the Board to choose the most qualified individuals for appointment recommendations and ensure that most or all seats are

filled and alternates are selected when possible. However, it is important to remind the Council that the Board does not have final authority over which recommended applicants are appointed to the Councils. The final appointment authority rests with the Secretary of the Interior.

The Board wants to assure the Council that OSM will continue working with the Department of the Interior to ensure that the 2021 cycle appointments stay on schedule and that the work is done in the most efficient manner possible. The Board has a high level of confidence that in the future the Councils' appointments will be made in a timely manner.

**3. Bureau of Land Management Guide Use Permitting Process**

*At its meeting held October 14–15 via teleconference, the Council queried representatives from the Bureau of Land Management (BLM) about the number of hunting guides permitted in the Brooks Range, and specifically along the Dalton Highway Corridor. Multiple factors have contributed to low populations of sheep and moose, including increased guiding pressure. These activities are threatening subsistence resources and the subsistence priority for Federally-qualified subsistence users in this region.*

*Moose and sheep populations have been depleted along the Dalton Highway Corridor due to harsh winters and low recruitment. This past year, only seven rams were observed in the Dalton Highway Corridor, south of Atigun Pass. Most of the rams seen were sub-legal, but will become legal size in two years and likely harvested. This could result in full reproductive failure in a population of sheep that is already suffering. Of the 31 ewes observed in this area, only three had lambs. Large populations of both wolves and lynx exist, both of which prey on sheep.*

*In addition to this conservation concern, there are increasing numbers of hunting guides and assistant guides in the area, some operating under one permit. The COVID-19 restrictions in Canada have pushed more guiding operations into the Brooks Range of Alaska. These guides are equipped with multiple aircraft, giving them clear advantages over subsistence users who depend on the resources. There appears to be little control of the potential for overharvest, and possible extirpation of sheep populations in the region. The lack of a guide-use permitting process with clear area delineations and limited harvest allocation exasperates this situation.*

*Recommendation:*

*The Council is requesting a guide-use permit program that ensures a priority for subsistence uses in the Brooks Range and along the Dalton Highway Corridor. In 2004, BLM promised a guide-use permitting process to select guides on BLM lands, if the State of Alaska failed to implement a guide use permitting process for these lands. The State has not done this. Therefore, the Council is requesting that BLM develop a guide-use permitting process similar to*

*the National Park Service's preserve guide permitting process, and the National Wildlife Refuge permitting process. Guide use areas would be delineated, guides would compete for those permits, guides would not be permitted to hunt "over" one another, and guides would be held under specific allocation standards for resources in their areas. The Council believes its request is justified, as the State has not fulfilled its duty to subsistence use.*

**Response**:

The Bureau of Land Management (BLM) authorizes recreation use of the public lands and waters through the issuance of special recreation permits (SRPs). The BLM's authority to issue permits is described in the Federal Land Policy and Management Act of 1976 and 43 Code of Federal Regulations (CFR) 2930. SRPs are authorizations that allow for commercial, competitive, and group recreation uses of the public lands and related waters. They are issued as a management tool to control visitor use, protect recreational and natural resources, and provide for the health and safety of visitors.

BLM-Alaska utilizes standard processes and procedures as identified in 43 CFR 2930 and the 2930 Recreation Permit Handbook to process and issue SRPs. That process begins with an application submitted by the applicant who proposes to operate commercially or competitively on BLM-AK administered lands. BLM-AK requires that the applicant describes the type of proposed activity, the season of use, the procedures and methods that will be utilized to protect the natural resources, and the qualifications it meets for recreational use.

Issuing an SRP is a comprehensive process. In BLM-AK, SRPs are issued on a first-come-first-served basis until the affected area desired use level is reached. That desired use level is determined by Resource Management Plans, Recreation Area Management Plans, and ad hoc NEPA analysis. When an area's desired use level is reached, no additional permits are issued.

For outfitter and guides that propose to commercially guide clients for hunting operations, several additional pieces of information are required to process applications. This additional information includes what State of Alaska Guide Use Areas (GUA) the applicants are authorized in, the status of their business and guide license(s), list of sub guides, what species they propose to guide for and in what GUAs, do they propose to have any camps on the land other than spike camps, map(s) of proposed areas of activity, and how they propose to access lands for clients (pack stock, foot, OHV, aircraft).

Once the field office where the activity is proposed has the required information and documentation in place, a determination is made for the type of NEPA analysis required to process the application. Those analyses range from Categorical Exclusions for low impact activities, to Environmental Assessments for something that requires more extensive analysis and

determination for an authorization. Per 43 CFR 2932, BLM-AK can deny applications that are submitted less than 180 days in advance of the proposed activity. This provides us adequate time to consider all resources and enough time to provide for public notification and outreach for the proposed activity.

The analysis process begins with an Interdisciplinary Team of program specialists that are convened to review the proposed activity. Those specialists represent the resources that may be affected. A project synopsis is then presented to the Interdisciplinary Team, typically by the SRP permit administrator, and management will then assign the appropriate resource staff to review and analyze the proposed action.

**Where there is potential for conflict between commercial and subsistence hunters, in addition to posting the proposed action on the BLM's NEPA E-planning site, the local field office will also notify local residents who have expressed interest in this type of activity. SRPs are approved only where overlapping outfitter and guide operators in a GUA, or any area can be attained. This is a standard practice for areas where there is known density of use, where there is ease of access, or where there is a high demand for SRPs.**

Following the opportunity for public review, a decision is made by the Authorized Officer to approve or deny the application. That decision is also posted on the BLM's NEPA E-planning site. If approved, the decision record will include detailed stipulations concerning the total clients that can be commercially guided, as well as authorized species to be hunted, access points or ROWs needed, and the total authorized take of species. Irrespective of an outfitter and guide total number of guides or sub-guides employed by the company, total hunting in an area by commercial outfitter and guide is determined by the total number of clients that are authorized to be guided in the SRP. If an outfitter and guide has 5 sub guides but only 3 sheep clients authorized, then the outfitter and guide can only pursue up to 3 clients for potential sheep harvest, and the same system applies to any other game species authorized.

Stipulations such as the following are also utilized to control indirect pressure from associated sub guides or buddy hunts. This stipulation was included in a SRP Central Yukon Field Office authorized in 2020 for commercial hunting in the Dalton Highway Management Corridor: ***Camps are to be used only in support of authorized activities. No more than 6 people per camp inclusive of camp staff are allowed on one site. Support of non-commercial activities at spike camps on BLM lands is not authorized. This includes but is not limited to supporting non-paying hunters in the approved camp(s). Camps will not be used in support of personal, family, or 'buddy' hunts. This permit DOES NOT authorize a base camp on BLM lands".***

Specific to Dall sheep for the Brooks Range hunting guide SRPs (Guide Use Area 24-03), the BLM does issue permits based on discrete non-overlapping geographic areas per guide, does not allow for "buddy" hunts, and does not allow hunting for Dall sheep on the west side of the Dalton Highway in this GUA. In addition, the number of permitted client hunts for Dall sheep has not increased in this GUA in at least the past ten years. The BLM continues to contribute to population assessments of the Brooks Range Dall sheep population to monitor and inform how to manage the SRP guide program.

Following a decision to authorize an SRP, recreation management staff and BLM law enforcement coordinate to monitor and manage use on the land. BLM law enforcement routinely contacts commercial hunters in the Dalton Highway Management Corridor, both via vehicle, and backcountry aircraft flights and monitoring. Annual review of the permit is conducted by recreation staff, and permits are subject to annual authorization, even if authorized for multiple years. Staff complete annual performance evaluations to assess permit holder's compliance with required stipulations and SRP terms.

Issuance of an SRP is a discretionary action. Applications for an SRP may be denied based on many factors, including nonconformance with land use plans or designations; a moratorium on permits issued as part of a planning process; state licensing requirements; the results of an environmental analysis; other resource values; public health and safety concerns; and the applicant's past performance, including previous convictions for violating Federal or State laws or regulations concerning the conservation or protection of natural resources.

Other factors that may determine whether or not the Authorizing Officer approves an SRP application include recreation conflicts in the proposed area of operations, diversity of services provided to the public, number of similar services already offered, and whether the public land area available is sufficient to accommodate the proposed use.

In closing, I want to thank you and your Council for your continued involvement and diligence in matters regarding the Federal Subsistence Management Program. I speak for the entire Board in expressing our appreciation for your efforts and am confident that the Federally qualified subsistence users of the Western Interior Region are well represented through your work.

Sincerely,

Anthony Christianson
Chair

cc: Western Interior Alaska Subsistence Regional Advisory Council
Federal Subsistence Board
Sue Detwiler, Assistant Regional Director, Office of Subsistence Management
Amee Howard, Deputy Assistant Regional Director, Office of Subsistence Management
Robbin La Vine, Subsistence Policy Coordinator, Office of Subsistence Management
Katerina Wessels, Council Coordination Division Supervisor
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Jonathan Vickers, Anthropology Division Supervisor, Office of Subsistence Management
Karen Deatherage, Council Coordinator, Office of Subsistence Management
Interagency Staff Committee
Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and Game
Mark Burch, Special Project Coordinator, Alaska Department of Fish and Game
Administrative Record

**Federal Subsistence Board**

**1011 East Tudor Road, MS 121**
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FISH and WILDLIFE SERVICE
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BUREAU of INDIAN AFFAIRS

FOREST SERVICE

OSM 21021.KW

Louis Green, Chair
Seward Peninsula Subsistence
Regional Advisory Council
c/o Office of Subsistence Management
1101 East Tudor Road, MS 121
Anchorage, Alaska 99503-6199

Dear Chairman Green:

This letter responds to the Seward Peninsula Subsistence Regional Advisory Council's (Council) fiscal year 2020 Annual Report. The Secretaries of the Interior and Agriculture have delegated to the Federal Subsistence Board (Board) the responsibility to respond to these reports. The Board appreciates your effort in developing the Annual Report. Annual Reports allow the Board to become aware of the issues outside of the regulatory process that affect subsistence users in your region. We value this opportunity to review the issues concerning your region.

## 1. Norton Sound Red King Crab Fishery

*At its fall meeting held October 27–28, 2020 via teleconference, the Council heard from multiple individuals regarding updated biological data for Red King Crab in Norton Sound. Council members shared their concerns over dwindling subsistence harvests and the long term conservation of Red King Crab in Norton Sound.*

*Council members and other subsistence users are extremely frustrated with their inability to harvest this important traditional resource, despite the fact that the subsistence crab fishery is open 365 days a year with no size or catch limit. Users reported either a complete absence of crab altogether, or that any good size crab were extremely difficult to locate. One subsistence crabber noted he only caught 20–30 crabs when 200 was the customary harvest needed to feed his family.*

*Alaska Department of Fish and Game (ADF&G) reported that subsistence harvest of Norton Sound Red King Crab peaked this past decade. Sizable decreases in harvest began in 2017 and 2018, with only 4,000 Red King Crab harvested by Norton Sound subsistence users in 2019. In 2020, there was a marginal subsistence take of just 1,200 Red King Crab in Norton Sound, representing the lowest subsistence harvest in twenty years. Effort was also low, either because some users thought the season was closed to subsistence harvest or users were not interested in small crabs and throwback females. Only 80 permits for subsistence crab fishing were issued in 2020. This is a result of low harvest success.*

*The current commercial Red King Crab fishery closure sunsetted in December 2020. ADF&G explained that a commercial harvest goal for next season is already in place, with the crab fishery beginning through the ice in February and continuing through the summer. State managers were informed by a recent trawl survey conducted by the ADF&G, which showed thatthe female cohort and clutch size were larger and closer to normal than the past few years.*
*ADF&G believes that many male Red King Crab increased in size this past year and were ableto successfully mate with mature females. ADF&G representatives believe that although the population of legal size crab is currently at a low point, some younger crab will or are molting, and are expected to grow to legal size this coming year.*

*Based on ADF&G's trawl survey, described above, the Crab Planning Team's recommendationsto the North Pacific Fishery Management Council (NPFMC) will be an Allowable Biological Catch of close to 400,000 crab, up nearly 200,000 from last year. The Guideline Harvest Level (GHL) may go up 100,000 pounds from last year's GHL of 170,000. The Council is deeply concerned with the increased GHL recommendation, particularly given that commercial crabbers were only able to harvest 80,000 pounds of the 170,000 GHL for legal sized Red King Crab in 2020.*

*Charlie Lean, Chair of the Northern Norton Sound Fish and Game Advisory Council, cited that the ADF&G trawl survey only observed three-quarters of the legal sized males compared to the previous year. He stated there is still concern that approximately one-third of mature males are failing to molt and grow because they are spending physical resources breeding. There continues to be a significant lack of mature males to mate with females. This discrepancy, combined with last season's reduced rate of egg fertilization and a market demand for larger than legal size crab, will likely result in a limited commercial opportunity in the near future. Mr. Lean also shared that while some recruitment will occur this year, the bulk of legal size crab readiness willoccur in 2022 and thereafter.*

*The Council believes that allowing both a winter and summer commercial fishery at these levels could harvest most legal sized crab and result in the mortality of many of the sub-legal crab that will be handled during sorting. Handling mortality during winter months is particularly high since frost injury is likely to occur before undersized crab are returned to the water.*
*Additionally, the market for Norton Sound Red King Crab requires crab to be 5 inches across the carapace rather than the legal requirement of 4.75, meaning half of legal size recruitment could be subject to handling mortality. Both subsistence and commercial users of this resourceare opposed to this marginal fishery with the vast majority of crab being sub-legal and unmarketable.*

*The Council is also very disturbed that ADF&G is only "speculating" that the current population of sub-legal crabs will molt this year and become legal during the upcoming fishing season. This is a dangerous gamble for an already depleted resource, and should not be the driving factor behind opening up the crab fishery in 2021 to commercial use. The Council is convinced that years of overharvest have resulted in the collapse of this fishery, and strong conservation measures are necessary to ensure its viability for future use. If commercial harvest is allowed to continue, it could result in the loss of Red King Crab for many years to come. Last year's reduced reproduction will also contribute to poor recruitment within seven or eight years.The Council also believes there may be environmental impacts to the population from warming ocean temperatures and contamination, in addition to acquiring reliable 2021 Red King Crab population data.*

*<u>Recommendation:</u>*

*The Council highly recommends that managers review actual crab statistics in 2021, and based upon that review, recommend whether or not to open the commercial fishery in 2022. The Council is also requesting that research be conducted to further understand how these changesto the ocean environment may be adversely affecting the resource.*

*The Council is strongly opposed to opening the Norton Sound Red King Crab commercial fishery in 2021. The Council has requested in a letter to the NPFMC that they work with ADF&G, the Alaska Board of Fisheries (BOF) and others to close the Red King Crab fishery in Norton Sound, while encouraging continued research and data gathering to monitor the recovery of this population before opening to any commercial use. The Council believes that commercial fishing for Red King Crab in Norton Sound should only be open when there is verifiable evidence that legal size crab populations have reached sustainable levels. Most importantly, successful*

*subsistence harvest based on historic use and needs should unequivocally be an indicator of when commercial fishing should resume. Otherwise, failure by ADF&G and the BOF to provide adequate subsistence opportunities for Red King Crab is contrary to management for a subsistence priority for this resource.*

**Response:**

During both the October 27-28, 2020 and March 11, 2021 Council meetings, a significant amount of time was invested in discussing local subsistence users' concerns about the Red KingCrab population with managers and experts in this field. The Board appreciates the Council's work in building a public record on the Red King Crab issue while communicating their concerns to the regulatory bodies and managers responsible for management of fisheries targeting this marine species. The Council's transcripts for the meeting will be a valuableresource for those interested in understanding the full discussion.

The Council is encouraged to attend the NPFMC Pacific Northwest Crab Industry Advisory Committee meetings and the Bering Sea/Aleutian Islands Crab Plan Team public meetings and voice their concerns. Meeting information can be found at https://www.npfmc.org/fishery-management-plan-team/bsai-crab-plan-team/ and https://www.npfmc.org/pnciac/ and by contacting NPFMC staff Jim Armstrong at 907-271-2805 and Sarah Marrinan at 907-271-2814. Additionally, the Board will request that the USFWS representative on the NPFMC relays Council concerns to the NPFMC.

To change the management of the Norton Sound Red King Crab fisheries, the Council is encouraged to become or continue to be involved with both the State Local Advisory Committee process and the Alaska Board of Fisheries process. Both bodies are the avenue to changing management of the fisheries under both State and Federal (non-ANILCA) jurisdiction. Both of these bodies can also be invited to submit reports or attend the Council's meetings in-person orvia teleconference.

**2. Seward Peninsula Salmon**

*Council members are reporting seeing or harvesting very few Silver and Chum Salmon this past summer and fall. One member observed "millions" of Pink Salmon, which may be competing with Silver, Chum and Chinook Salmon for resources. The lack of healthy populations of Silver,Chum and Chinook Salmon are negatively affecting subsistence users throughout the region. Research on these species is lacking due to funding ineligibilities, as well as the motivation to determine what is happening to this critical subsistence resource.*

*This needed research is not eligible for Fisheries Resource Monitoring Program (FRMP) funding on most tributaries, drainages and rivers in the Seward Peninsula because they are notsituated within and adjacent to Federal conservation units. Regardless, the Council expressed the need for salmon research on the Niukluk and Kuchablock Rivers, as well as Bear Creek.*
*Unfortunately, the State of Alaska does not see salmon research or management on these important waters as a priority and have even removed a Chinook Salmon escapement goal for Boston Creek. Despite the fact that fish coming from marine waters migrate largely through State lands, the Council would like to see the type of inventory currently underway in the northern part of the Seward Peninsula occur down in the Nome area and surrounding communities. The Council requested research 10 years ago, but it never materialized.*
*Subsistence users rely on these fish resources, regardless of whether or not they are in State or Federally managed waters.*

*<u>Recommendation:</u>*

*The Council would like the Board to encourage the State of Alaska to conduct research on Chinook, Silver and Chum salmon on multiple river drainages in the region that currently do not qualify for research funding under the FRMP. The Council would like the Board to stress that although these drainages do not currently qualify as a Federal nexus for management or research funding, they are critical to subsistence users in the region. The Council would also likethe Board to reassess the Federal qualifications for waters in this region. The Council strongly supports a conservative approach to management of these resources, including minimal harvest by local subsistence users, particularly for Chinook Salmon.*

**Response:**

The Board understands the importance of salmon to the residents of the Seward Peninsula as an irreplaceable subsistence resource. To confirm what was stated in your FY20 annual report, the total available FRMP funding is finite and must be focused on projects in waters with a direct nexus to Federal public lands so that it is used effectively to inform Federal subsistence management regulatory decisions. The FRMP Technical Review Committee looks closely at Federal land ownership and the waterway's eligibility for FRMP when it reviews this and all other FRMP proposals.

There are other funding opportunities that may provide funds for research of Chinook salmon such as the Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative (AYK SSI). While the Council cannot apply as a body, the Council can also make recommendations to others to applyand/or suggest funding recommendations to the AYK SSI. There may be other opportunities

through Tribal and non-governmental organizations also working in the area that we encourage the Council to consider.

The Board provides the State with all RAC reports, which include all recommendations pertaining to State research and management of the anadromous salmon systems in your region.The information available to the State from your Council meetings includes discussions with local managers, meeting transcripts, and all information provided during the meetings. This information, in addition to local residents' and some Council members' participation in the State's local AC meetings, provides the State with a robust set of information documenting people's concerns about the status of salmon and their recommendation that the State elevate thepriority of these drainages in its research plans.

In closing, I want to thank you and your Council for your continued involvement and diligence in matters regarding the Federal Subsistence Management Program. I speak for the entire Boardin expressing our appreciation for your efforts and am confident that the subsistence users of the Seward Peninsula Region are well represented through your work.

Sincerely,

Anthony ChristiansonChair

cc: Seward Peninsula Subsistence Regional Advisory CouncilFederal Subsistence Board
Sue Detwiler, Assistant Regional Director, Office of Subsistence Management
Amee Howard, Deputy Assistant Regional Director, Office of Subsistence ManagementRobbin La Vine, Subsistence Policy Coordinator, Office of Subsistence Management Katerina Wessels, Council Coordination Division Supervisor
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Benjamin Mulligan, Deputy Commissioner, Alaska Department of Fish and GameMark Burch, Special Project Coordinator, Alaska Department of Fish and Game Administrative Record

**Federal Subsistence Board**

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**Anchorage, Alaska 99503 - 6199**

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**FOREST SERVICE**

OSM 21030.KW

Sue Entsminger, Chair
Eastern Interior Alaska Subsistence
Regional Advisory Council
c/o Office of Subsistence Management
1101 East Tudor Road, MS 121
Anchorage, Alaska 99503-6119

Dear Chairwoman Entsminger:

This letter responds to the Eastern Interior Alaska Subsistence Regional Advisory Council's (Council) fiscal year 2020 Annual Report. The Secretaries of the Interior and Agriculture have delegated to the Federal Subsistence Board (Board) the responsibility to respond to these reports. The Board appreciates your effort in developing the Annual Report. Annual Reports allow the Board to become aware of the issues outside of the regulatory process that affect subsistence users in your region. We value this opportunity to review the issues concerning your region.

## 1. Food security and subsistence needs satisfaction

*The Council brings its concern to the attention of the Board regarding rapidly declining important subsistence food resources in the Eastern Interior Region, which results in most of the subsistence needs not being met (except caribou). The Council members report that in FY 2020, all across the Region, the fisheries were very poor and salmon are in significant decline. Salmon are one of the most critical subsistence resources that communities rely on for food security. According to ADF&G data, "The composition of the wild food harvest in rural Alaska is 31.8% salmon, 21.4% other fish, 22.3% land mammals, 14.2% marine mammals, 2.9% birds, 3.2% shellfish, and 4.2% wild plants."1*

*1 Food Security and Wild Resource Harvests in Alaska, James A. Fall and Marylynne L. Kostick, Alaska Department of Fish and Game Division of Subsistence, July 2018.*

*In the summer of 2020, some communities had almost no fishing opportunities and the average season's catch was dismal (sometimes as few as three fish) with only a few Chinook Salmon and fall Chum Salmon. Sometimes, the only fish available to Federally qualified subsistence users were whitefish, pike, suckers, and sticklebacks. The returning Chinook Salmon were of the poorest quality Yukon fishers had seen in the last 30 years. With few salmon coming, there is a lot of hardship and lack of critical food for the Federally qualified subsistence users in the communities along the Yukon River and in other parts of the Eastern Interior Region.*

*Besides being a critical food source for Federally qualified subsistence users, Chum Salmon are also a very important food source for sled dogs. The poor returns, especially of fall Chum Salmon, resulted in tremendous costs to mushers that maintain sled dog teams. The lack of fish last summer left mushers unable to stock up enough food for their dog teams for the winter, and many mushers had to cull their teams, sometimes as much as fifty percent. Due to the pandemic travel restrictions and quarantines, Federally qualified subsistence users were not even able to travel to other fishing areas in the State to compensate for the lack of fish in their region.*

*According to the U.S. Congress findings outlined in the Title VIII Sec. 801 of ANILCA, "the continuation of the opportunity for subsistence uses by rural residents of Alaska, including both Natives and non-Natives, on the public lands … is essential to Native physical, economic, traditional, and cultural existence and to non-Native physical, economic, traditional, and social existence." ANILCA also states that "no practical alternative means are available to replace the food supplies and other items gathered from fish and wildlife …" Based on its observations, the Council feels that over the coming decade climate change impacts and other environmental stressors will have significant yet unpredictable impacts on food security for the Federally qualified subsistence users.*

*The Council raises the alarm that the depletion of wild salmon stocks creates a very serious situation making traditional food unavailable to the users. The Council requests that the Board directs Federal managers to step up and develop measures to mitigate the situation before it is too late. The Federal managers need to make their decisions based on Federally qualified subsistence users' food needs that are identified through comprehensive surveys. Additionally, the Council believes that Federal managers need to show flexibility, and when salmon stocks are not available, provide easier access to the other subsistence fish stocks. Based on last summer's situation, it is very important to develop adaptation strategies and policy responses in cooperation with State managers to accommodate subsistence users' critical needs and provide food security.*

**Response**:

The Board understands the Council's concerns and recognizes that climate change poses a fundamental challenge to food security and the continuation of subsistence uses, because the ranges, abundance, and seasonality of species traditionally harvested are shifting. Cultural traditions and community wellbeing are negatively affected. See the attached enclosure for additional information about recent Chinook and Chum salmon runs in your region.

Federal managers must manage for both conservation and continuation of subsistence uses, and for a subsistence priority over other uses when resources are limited. The Council is correct that comprehensive surveys would help to illustrate subsistence uses and changes in harvest over time. Through interviews with local experts, they may also identify likely reasons for changes in communities' abilities to meet subsistence harvest goals, and the adaptive strategies that people might be able to take, if supported by regulation.

The Board is aware that in some cases there is a lack of up-to-date comprehensive surveys, often due to insufficient funding. These surveys are vital if management is to be responsive to dynamic climate conditions and effects on fish and wildlife. The Board understands the need for more frequent comprehensive surveys. These are usually conducted by the Alaska Department of Fish and Game Division of Subsistence but can be supported by funding from the Fisheries Resource Monitoring Program and other sources.

The Federal Subsistence Management Program can support adaptation to changing conditions by using the various tools available that enable the program to be responsive to subsistence users' needs as conditions change. For example, the Special Action process enables the Board to respond quickly to out-of-cycle needs for regulatory actions. The Board has also used its ability to delegate authority to fisheries in-season managers to enable them to respond quickly to unforeseen circumstances such as unpredictable seasons and fluctuations in resource availability.

More persistent changes to the availability and seasonality of resources due to climate change can also be accommodated through the regulatory process. When species become less abundant due to climate change, closures to non-Federally qualified users, or ANILCA 804 prioritizations may become necessary. Other species may become more abundant with shifts in environmental conditions, or as new species expand into the region. In this case, the Federal Subsistence Management Program can assist communities in delineating seasons, harvest limits, and methods and means for these newly available resources.

**2. <u>Impacts of hatchery production on Alaska's wild fisheries</u>**

*In the last three annual reports, the Council highlighted to the Board the issue of hatchery production impacts on Alaska's wild fisheries.*

*The Council understands that, as the Board pointed out in its FY 2019 annual report reply, "the hatchery system in Alaska and the vast majority of Alaska's marine waters are outside the purview of the Board"; however, the Council acts in accordance with the ANILCA Title VIII mandate that these annual reports to the Board contain "an evaluation of current and anticipated subsistence needs for fish" and "recommended strategy for the management of fish." The Council believes that the increase in hatchery production is having tremendous biological impact on all of Alaska's wild fisheries.*

*It is time for Yukon River subsistence users to be better informed about the potential impacts of hatchery production on their fisheries in the State of Alaska and along the Pacific Rim. ANILCA mandates that the Council can have access to "all available technical and scientific support data"; therefore, the Council requests to make the existing data on the current biological impacts of hatchery production available to it. Specifically, the Council requests a synopsis of historic data on hatchery production from 1980 to the present. Having access to this information will allow the Council that represents the Federally qualified subsistence users of the Eastern Interior Region to have a better understanding of anthropogenic impacts on fish resources crucial to the users. Understanding these impacts is key to restoring some of these fisheries.*

*The fish populations are not familiar with, and don't recognize administrative borders of, various Federal and State agencies. For this reason, the Council suggests that the Board consider working collaboratively across traditional jurisdictional boundaries with other agencies to develop policies and regulations that support "the continued viability of such populations" and insure long term viable fisheries for Federally qualified subsistence users throughout the State of Alaska.*

**Response:**

Much of the current hatchery programs we know today in Alaska were initiated in the 1970s to rehabilitate depleted salmon fisheries. During the development of these programs, precautionary plans, permits and policies were enacted to help proactively protect wild salmon stocks. The management of these hatchery stocks begins with decisions made by the State to allow for hatchery production through a permitting process. The Alaska Board of Fisheries then reviews these regulatory changes to allow for hatcheries. Operation of the hatcheries is governed by the aquaculture associations, and the Marine Stewardship Council certifies fisheries as sustainable with public participation from local stakeholders.

Alaska has a total of two State sport fish operated hatcheries: one research hatchery managed by the National Marine Fisheries Service, and one production hatchery managed by the Metlakatla

Indian Community and eight private nonprofit hatchery associations that operate a total of 26 hatcheries throughout Southeast, Southcentral, and Kodiak, Alaska. Currently, an estimated 4.9 billion hatchery juvenile salmon are released annually between the United States, Canada, Japan and Russia. Alaska currently releases between 1.5 and 1.7 billion juvenile salmon annually. The majority of the released juvenile salmon are Chum and Pink Salmon. From the inception of the Alaska hatchery programs, salmon production has increased from 400 million juveniles released annually in 1980 to 1.4 to 1.8 billion juvenile salmon released annually between 1990-present. The primary release of hatchery propagated juvenile salmon is intended for the Gulf of Alaska and the overall mixing of hatchery salmon between the Gulf of Alaska and the Bering Sea is currently unknown, which leaves the contributions of hatchery propagated fish into the Yukon River unknown. However, the Canadian Whitehorse Hatchery cultures Chinook Salmon and releases an estimated 150,000 smolt annually into the Yukon River. This small contribution is to offset the impacts of the dam on annual salmon migration.

The Board encourages the Councils to recommend Priority Information Needs directed towards the FRMP to prompt prospective investigators to research the possible genetic contributions of hatchery fish in the Yukon. This research would offer insight into the genetic mixing of wild stocks with hatchery stocks, and potentially offer clues as to the potential impacts of hatchery fish on wild stocks. The Board will continue to instruct OSM to extend invitations to subject matter experts from management agencies and universities on the topic of impacts from hatchery production on wild Alaska fisheries to present at upcoming Council meetings.

**3. <u>Climate change and its impacts on moose mating seasons</u>**

*The Council observed that over the last few years, moose were not going into rut until the end of September, which has a significant impact on the current hunting season. The Council also wants to highlight to the Board its observation of smaller calf moose in the early spring, which is potentially a result of climate change.*

*In accordance with ANILCA mandates, the Council requests "all available technical and scientific support data" on climate change impacts on moose, for example later rutting dates and potential effects on legal hunting seasons. Having access to this information will allow the Council to develop informed proposed regulatory changes and work with State and Federal mangers on adjusting hunting seasons that better correspond to the moose rutting season. Timely adjustment of hunting seasons on the Federal public lands will accommodate remote Federally qualified subsistence users, so they can harvest moose legally when the weather is sufficiently cool for hanging meat to dry. Many remote users do not have freezers, and rely on harvesting when weather conditions are cooler and drier.*

**Response**:

The Board shares the Council's concern over the impact of climate change on the fish, wildlife, and habitat essential to continuation of the subsistence way of life. As the Council noted, over the past ten years weather and environmental conditions have become highly unpredictable and deviated from historical conditions and are affecting animals.

The role of the Office of Subsistence Management (OSM) as a regulatory agency includes synthesis of climate change research only as it applies to analyses of specific regulatory proposals. OSM staff collects all available technical and scientific data to analyze regulatory proposals. That said, OSM does have recent research findings on regional moose population dynamics and behavior in the Yukon Flats area. Point estimates demonstrate that the moose population has increased over the years in Yukon Flats. Although it has not yet been determined, it is possible that the population increase is related to a series of mild winters over the past decade. All metrics also indicate healthy moose body sizes for the Yukon Flats; i.e., data does not suggest that there has been a decrease in calf size. Research on moose suggests that daylength is the strongest driver for rut timing. However, there may be a latent association with temperature. Lastly, research shows that later ice freeze-ups and earlier break-ups make moose hunting more difficult for rural Alaskans.

It is the Board's understanding that the Council's observation of smaller moose calves in the early spring came from the Tanana/Rampart area. More research, observations, and testimonies are needed for other areas from the Eastern Interior region to better understand associations between moose size, behavior and environmental change and to compare these general trends to how moose in the Tanana/Rampart might be affected.

The Board appreciates the Council's comments and testimonies of change in moose and other animal behaviors. The Council members are an important source of traditional ecological knowledge and local observations of climate change. Therefore, the Council should continue to document its own observations of changes through annual reports and testimony at Council and Board meetings.

**4. <u>Hunter ethics education and outreach and dialog with rural communities</u>**

*The Council again would like to emphasize to the Board their wishes to continue work on developing of the Board's approved hunter ethics and education initiative. To achieve better understanding between rural communities and the Federal Subsistence Management Program, it*

*is imperative to increase cultural awareness and foster respect for people who live in rural Alaska. The Council also would like to have a better mechanism to engage in a direct dialog with rural communities like Arctic Village. A lot of the times when a meeting is held in a hub community, rural users do not have an opportunity to attend it.*

*In October 2019, the Council requested the Board's approval to create a subcommittee to work on Arctic Village Sheep Management Area issues and find mutually beneficial solutions. The Board deferred to act on the Council's request until the Council, with the help of their Coordinator, develops a framework for establishing this subcommittee. Prior to the fall 2020 Council meeting, no work had been done on the development of this framework due to the Council Coordinator being on extended sick leave and OSM staff shortages, and the last meeting was held via teleconference due to the pandemic travel restrictions.*

*However, despite these delays, the Council wants to continue pursuing the creation of a subcommittee and other means of having an open, engaged dialog with rural communities. Other means might be to have one of the Board agencies, such as the U.S. Fish and Wildlife Service, sponsor a Council member trip to a community, or receive approval from OSM's Assistant Regional Director to hold a future meeting in a rural community. Getting users from rural communities like Arctic Village involved with the Council will provide them with better opportunities to become proactive in the management of the wildlife; plus, it can become an example for other communities. The Council requests that OSM provide "adequate qualified staff," as mandated in ANILCA, to accomplish these goals.*

**Response**:

The Board remains supportive of the Council's wishes to continue work on the development of the Board's approved hunter ethics and education initiative. The primary responsibility of coordinating this work is with your Subsistence Council Coordinator. OSM continues to experience staff shortages, and currently the position of the Subsistence Council Coordinator for your Council remains vacant. OSM intends to advertise and hire this position by the end of 2021.

During the fall of 2020 the Council received a brief oral report from OSM on small progress in the initiative, when the preliminary contacts were made with the representatives from Eielson Air Force Base and Fort Wainwright to discuss collaboration on the pilot project concept titled "Hunt Like an Alaskan" that was aimed to work with military groups on creating a program that would emphasize the importance of mutual respect between different user groups through building and improving relationships between military, local communities, and the land. There was no further progress on this pilot project concept primarily because of the pandemic and OSM staff shortages.

Additionally, during the fall 2020 meeting, the Council heard a report from the Yukon Flats Refuge Manager, Jimmy Fox, on the progress of the other pilot project titled "A Community Based Hunter Liaison" that was conducted in cooperation with the Council of Athabascan Tribal Governments and was in its second year. Through this partnership the hunter liaisons were stationed in both Fort Yukon and Circle. This pilot project continues being successful with many hunters willing to talk to liaisons about meat sharing and cultural values of local residents, as well as property and boundary lines concerns. Amanda Pope, Community Hunter Liaison in Circle, provided a report on her work as well. Suggestions were made to expand this collaboration to include the National Park Service and to station a hunter liaison in Eagle, as well as to have another liaison stationed at the beginning of the Taylor Highway. The Council also suggested and unanimously voted to organize a hunter ethics brainstorming teleconference meeting to develop a plan for the future with the intent to hold this meeting in February 2021; however, due to the late Council appointments and other priorities, the meeting did not take place.

The Board recognizes that the Council must interact with the public as part of their official duties, and that the Council desires to engage in a direct dialog with rural communities. Currently, the two avenues of dialog available to the Council are through 1) holding one of its public meetings in a rural community and having discussions with rural users on record, and 2) communicating the Council's comments and positions on subsistence issues to the Tribal and/or rural community leadership through correspondence. If the Council desires to hold a future public meeting in a rural non-hub community, the Board encourages the Council to submit, with the help of their Subsistence Council Coordinator (when this position is filled), a request to the OSM Assistant Regional Director for consideration. At the same time, the request for creating a formal subcommittee to work on the resolution of the Arctic Village Sheep Management Area (AVSMA) issues can be re-submitted. The Council is also free to work through their Subsistence Council Coordinator with the U.S. Fish and Wildlife Service and request the Service sponsor a Council member trip to Arctic Village for a specified purpose of finding solutions to the AVSMA issues. The Board recommends that the Council reach out to the USFWS Regional Subsistence Coordinator, Jill Klein, and the Arctic National Wildlife Refuge Manager, Steve Berendzen.

## 5. Copper River Sockeye and Chinook Salmon

*The 2021 pre-season estimates indicate that Sockeye and Chinook salmon will be below the most recent 10-year average by 37.4% and 22.4%, respectively. For Chinook Salmon, this recent 10-year average already represents a steep decline from previous decades. The 10-year average for the 1998 - 2007 period was 86,684, compared with only 47,386 for the 2010 - 2019 period.*

*While Sockeye Salmon runs were generally strong during the early 2010s, they have been markedly smaller since 2017, and alarmingly low during 2018 and 2020. The estimated total run size for 2018 is 817,121, while preliminary estimates for 2020 put the number at 602,000, making these among the lowest returns since at least the early 1980s. These declines indicate an urgent need for more research into better understanding Copper River salmon fisheries, in order to inform management of these crucial subsistence resources. The Council requests that the Office of Subsistence Management prioritizes funding research of Copper River salmon fisheries through its Fisheries Resource Monitoring Program.*

**Response**:

The Board recognizes the need for continued monitoring to inform in-season fisheries management decisions on the Copper River. Without these monitoring projects, fisheries managers are left with inadequate data to make informed in-season decisions, and often this results in a conservative management approach. The Fisheries Resource Monitoring Program process begins with Councils providing fisheries priority information needs for their respective regions. These research needs are then advertised on www.grants.gov as a Notice of Funding Opportunity, and prospective investigators submit investigative proposals to address these priority information needs. The 2022 priority information needs for the Southcentral Region contained this information need:

> Reliable estimates of Chinook, Coho, and Sockeye salmon escapements (for example projects utilizing weir, sonar, and/or mark-recapture methods) into the Copper River drainage and delta systems.

All proposals submitted to the Monitoring Program are evaluated by a Technical Review Committee based on five criteria, which include strategic priority, technical and scientific merit, investigator ability and resources, partnership and capacity building, and cost benefit. The 2022 Draft Fishery Resource Monitoring Plan will be reviewed this fall by the Regional Councils. The Board recognizes that the users of several communities in the Eastern Interior Alaska subsistence region have a C&T use determination for salmon in the Chitina Subdistrict and Glennallen Subdistrict of the Upper Copper River and Batzulnetas Area; therefore, if your Council would like to express support for research proposals that address your concerns for the Copper River, which is in the Southcentral Region, you could ask to have the Southcentral Region Draft Fisheries Monitoring Plan presented at your fall meeting.

Currently the Alaska Department of Fish and Game (ADF&G) administers a sonar project at Miles Lake to count lower river Sockeye Salmon escapement. They are also working on validating a size-based apportionment for Chinook Salmon using sonar; however, this method is

currently still being evaluated and is not a management tool yet. The Native Village of Eyak estimate is currently the only statistically viable estimate for Chinook Salmon abundance, which uses fish wheels and mark-recapture methods. This fish wheel also hosts several other projects opportunistically. Currently, ADF&G is planning to tag 700 Chinook Salmon using the Native Village of Eyak fish wheel to capture the fish and follow their movement into the upper watershed to better understand spawning habitat and run timing. Additionally, since 2018, Dr. Pete Rand from the Prince William Sound Science Center has utilized the Native Village of Eyak fish wheels to capture and tag Sockeye Salmon to assess energetic content and track migratory success. He is also investigating the presence of pathogens within the Sockeye Salmon population and looking into the cause for the observed reduction in body size. The ADF&G Sport Fish Division is also tagging juvenile Chinook Salmon using coded wire tags to estimate survival from smolt to adult, providing the first data on ocean survival for Copper River Chinook Salmon. This project is scheduled to continue through 2025. Additionally, the Native Village of Eyak is planning to install a sonar in the Klutina River to provide an estimate of Chinook Salmon abundance. The Board recognizes the need for these projects to continue and for additional projects to find new ways to study recent salmon declines.

In closing, I want to thank you and your Council for your continued involvement and diligence in matters regarding the Federal Subsistence Management Program. I speak for the entire Board in expressing our appreciation for your efforts and am confident that the Federally qualified subsistence users of the Eastern Interior Region are well represented through your work.

Sincerely,

Anthony Christianson
Chair

Enclosure

cc: Eastern Interior Alaska Subsistence Regional Advisory Council
Federal Subsistence Board
Sue Detwiler, Assistant Regional Director, Office of Subsistence Management
Amee Howard, Deputy Assistant Regional Director, Office of Subsistence Management
Robbin La Vine, Subsistence Policy Coordinator, Office of Subsistence Management
Katerina Wessels, Council Coordination Division Supervisor
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George Pappas, State Subsistence Liaison and Acting Fisheries Division Supervisor

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Administrative Record

**Enclosure to Topic 1 of the Eastern Interior Council Annual Report Reply**
**Information from the USFWS management staff**

Returns of Chinook Salmon on the Yukon River have been approximately half the size they were, on average, compared to numbers seen in the 1980s and 1990s, and seem to have stabilized to an average run size around 187,000 fish. Run sizes below 150,000 fish tend to be too small to effectively meet escapement goals, and they provide very few extra fish for harvest (**Figure 1**). Therefore, in most years since 2008, fishing restrictions to reduce harvests of Chinook Salmon have been necessary.

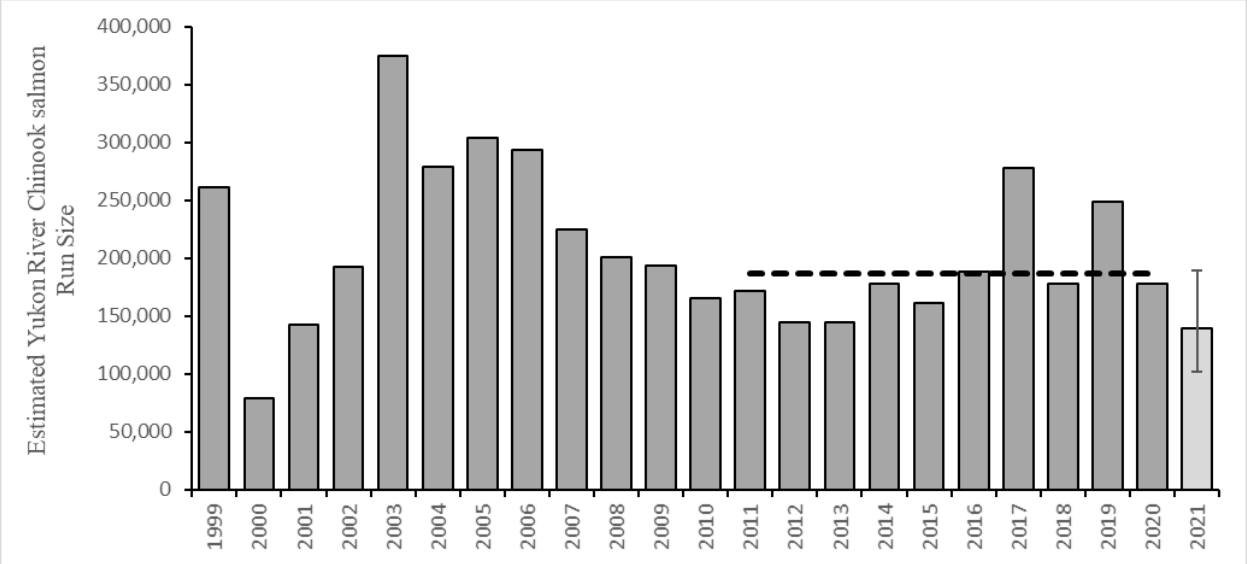


**Figure** 1: Drainage wide run sizes of Chinook Salmon. These bars represent the passage estimate at Pilot Station sonar plus harvest and escapement below the sonar. The average run size is approximately 187,000. The pale bar for 2021 shows the outlook and range around the estimate and a run size that may be smaller than 2012, 2013, and 2020- years when goals were not met.

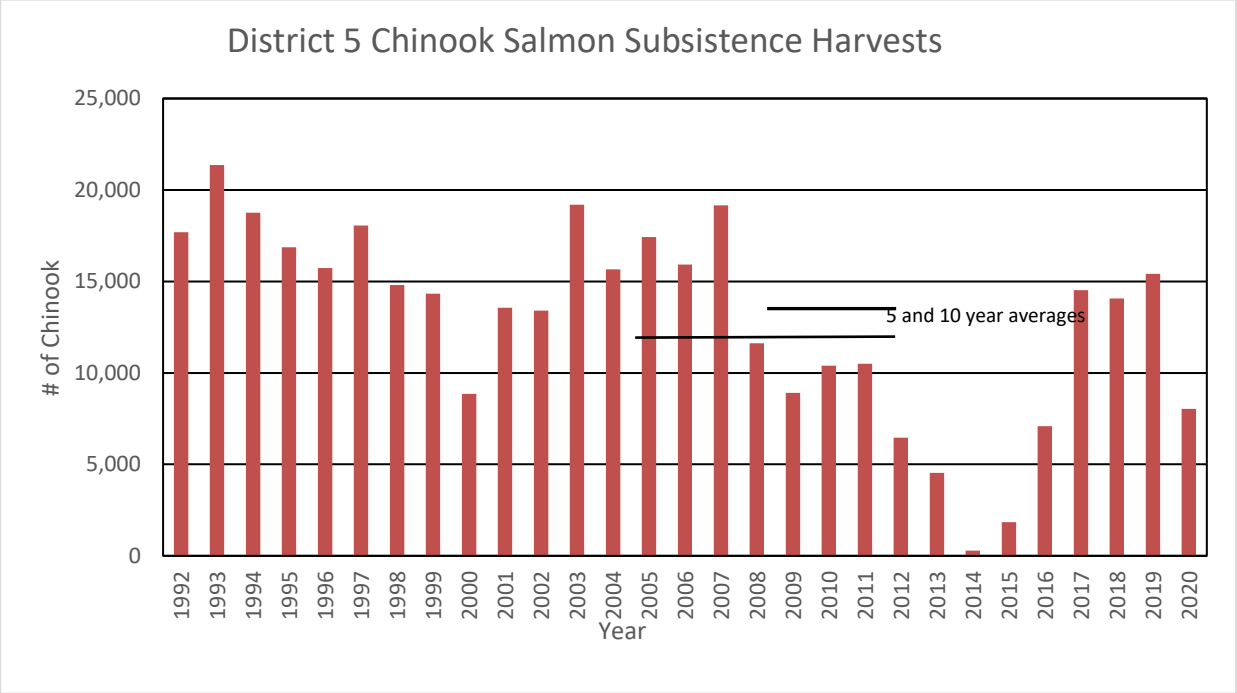


**Figure 2**: District 5 Chinook Salmon subsistence fishing harvests since 1992, with recent 5 and 10-yr averages. Data from the ADG&G website: (https://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareayukon.subsistence_salmon_harvest

Overall, when reviewing Chinook Salmon subsistence harvests in all regions, every region is experiencing reductions in traditional Chinook Salmon subsistence harvests. The drainage-wide harvest of Chinook Salmon was just under 23,000 Chinook Salmon and this represents a 23% reduction from the recent 5-year average. Sometimes fishing restrictions may not be enough to reduce harvest sufficiently to meet escapement goals, this was true in 2019 and 2020. In 2020, despite fishing restrictions for Chinook Salmon, we failed to meet the goal (42,500-55,000) by nearly 10,000 fish. While management couldn't have known this in-season, we should have been more restrictive with fishing throughout the drainage. The graph below, taken from the 2021 JTC report shows the historical estimated Chinook Salmon spawning escapement into Canada (**Figure 3**).

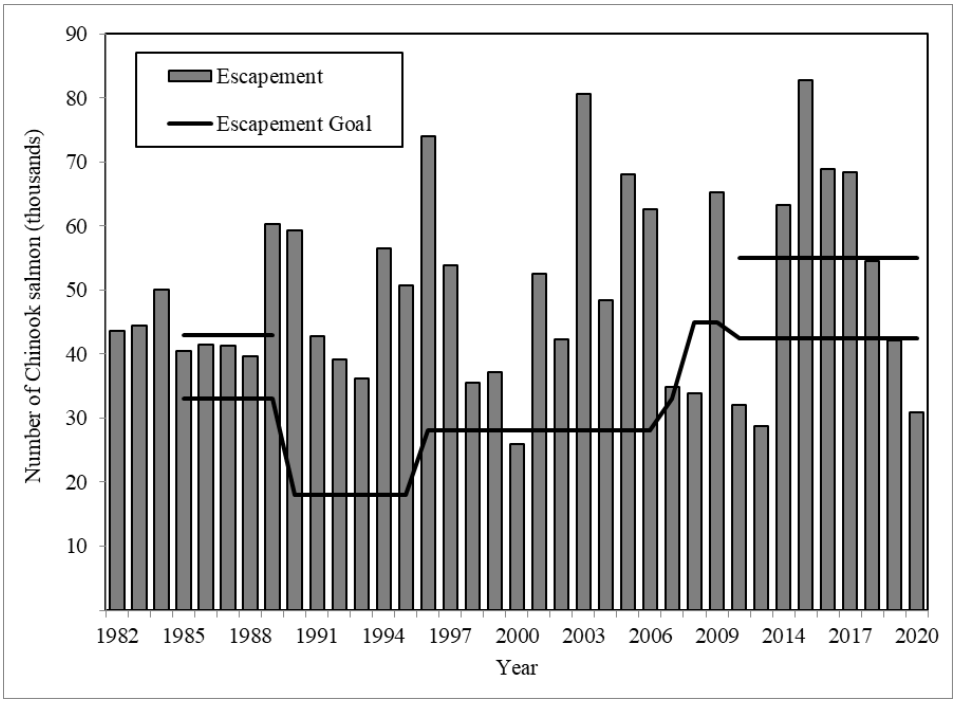


**Figure 3**: Canadian-origin Chinook Salmon run escapements (at the Canadian border) and escapement goals.

Recent fall Chum Salmon runs have been relatively large in most years, and very few years have required fishing restrictions. See **Figure 4**.

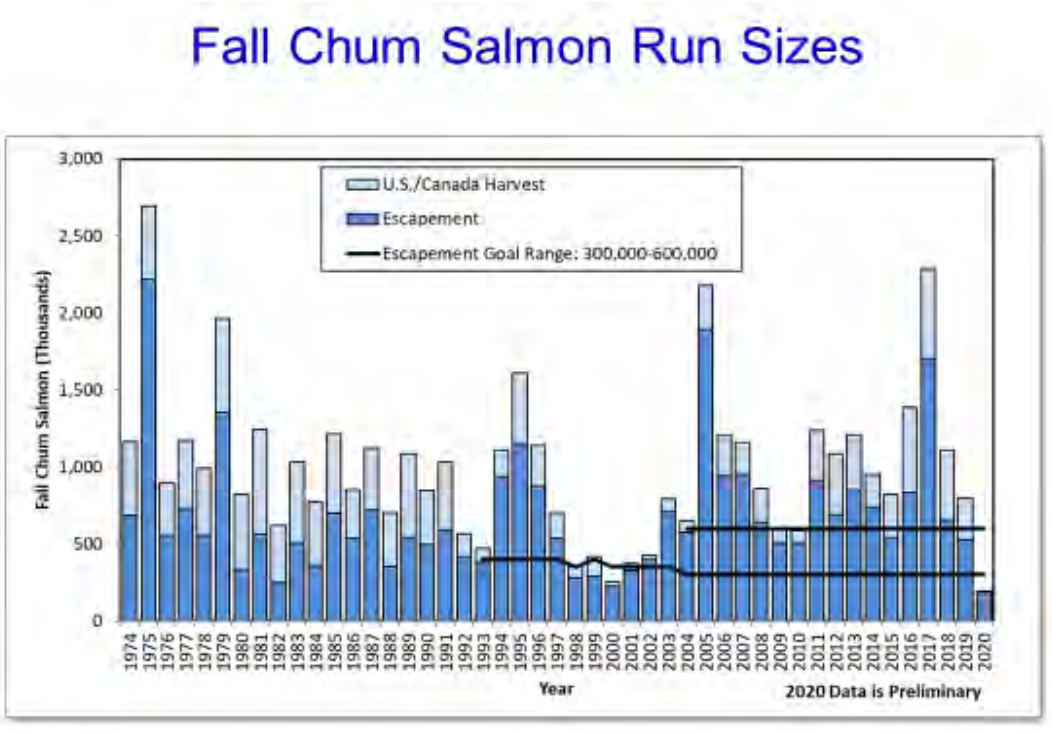

**Figure 4**: Fall Chum Salmon run sizes (including harvest) and the mainstem escapement goal at the Canadian Border.

Harvest of fall Chum has been relatively stable river-wide with recent 5-year average harvest (2014-2019) of about 77,000 fall Chum. **Figure 5** below shows District 5 subsistence fall Chum Salmon harvests from 1992 – 2020 using historical data from the ADG&G website: (https://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareayukon.subsistence_salmon_harvest)

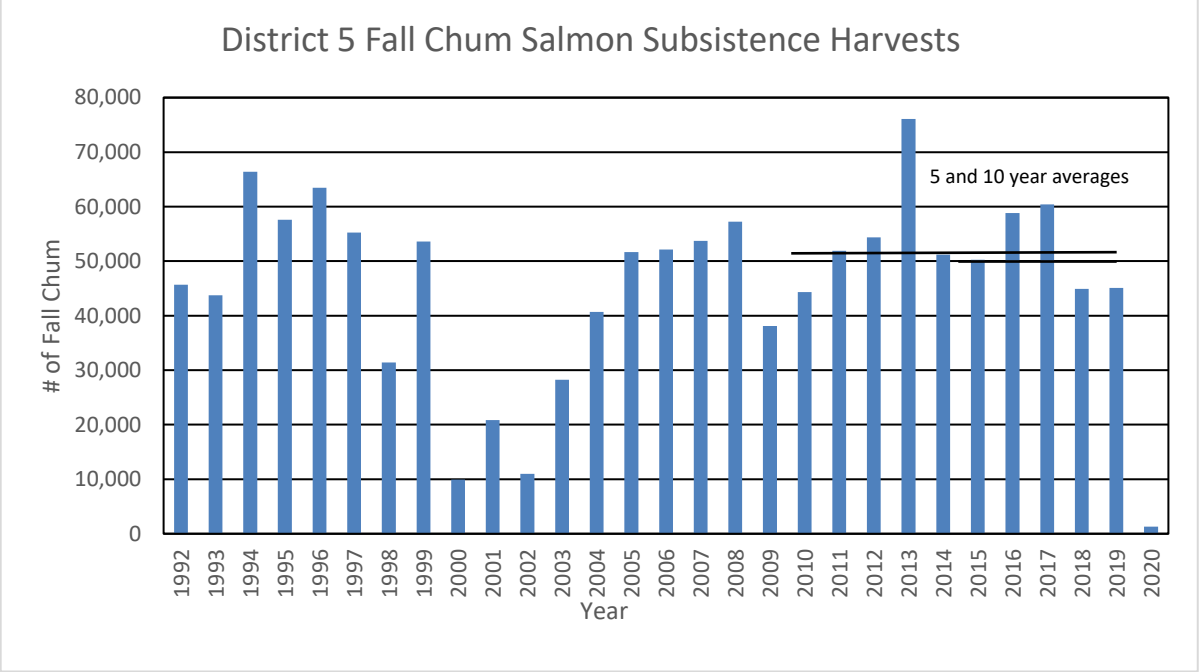


**Figure 5**: Fall Chum Salmon harvests in District 5. The 5-yr average harvest for this area is about 52,000 fish and is similar to the 10-yr average of about 54,000 fish).

District 5 fishermen rely heavily on fall Chum Salmon and their harvest accounts for about 34% of the total subsistence harvest of all fall Chum Salmon on the Yukon River. However, in 2020, the fall Chum Salmon run was the lowest on record and there was no harvestable surplus available and fishing was closed throughout the river early in the season when run projections indicated escapement goals would not be met. Subsistence salmon restrictions this severe have not occurred during fall season since 2002. (See **Figure 4**). This created a hardship for fishermen, particularly in District 5. When Chinook Salmon runs are low, fishermen in the upper river have stated they depend more on fall Chum Salmon to meet their subsistence needs. The subsistence harvest restrictions on Chinook Salmon combined with the closure on fall Chum Salmon harvest hit District 5 incredibly hard.

Local fisherman and biologist Stan Zuray has been sampling Chinook Salmon at his camp near Tanana for many years, and indicated in 2020 he saw the most severe level of *Ichthyophonus* in the salmon hearts that he's seen in many years. *Ichthyophonus hoferi* is a protozoan parasitic organism that infects adult Chinook Salmon in the Yukon River. This disease may be affecting migration and reproductive success of Chinook Salmon. If this disease was widespread in the river, that coupled with high water, would have made challenging migration conditions for Chinook Salmon. This could have led to sicker fish and thus, lower quality Chinook Salmon in subsistence harvests. USFWS is collaborating with Stan Zuray, ADF&G and other experts to design and implement renewed baseline sampling for *Ichthyophonus* to better understand the effects of this disease in the Yukon River.

Summer Chum Salmon harvests vary greatly over time but can be used for dog food in the lower reaches of District 5 and in District 6. In district 5 ABC, the use of summer Chum Salmon for dog food is not always preferred by mushers, despite fishing opportunity provided in most years, because summer Chum Salmon swim on the opposite bank from Chinook Salmon, and fishing both banks can be cumbersome, so most dog mushers have reported preferring to wait for fall Chum Salmon to fish for dog food. Fall Chum fishing is also preferred because of cooler temperatures and better preserving weather during the fall Chum Salmon season, and typically fewer fishing restrictions during the fall season because most Chinook Salmon have passed through the area. As stated above, 2020 notwithstanding, summer and fall Chum Salmon returns have been large since 2005. However, some fishermen in the upper river have concerns the fall Chum Salmon runs have been returning later in the season, making it difficult to harvest these fish when the river and their fish wheels are freezing. Fall season managers are aware of the need for fall Chum Salmon in District 5, particularly when Chinook Salmon runs are low and have made management efforts to pass early season fall Chum Salmon to the upper river. It may be advisable for dog mushers to harvest summer Chum Salmon if they are available in their area.

To avoid continuing declines in run size we need to ensure the viability of the stocks by getting enough fish to the spawning grounds each year. Most fall Chum and Chinook Salmon harvested in District 5 are Canadian-origin and are managed based on meeting the Interim Management Escapement Goal as a primary biological priority for sustaining the runs into the future, with subsistence fishing being the highest priority use when there is available surplus for harvest above escapement goals. Despite being a terminal fishery, Tanana stocks are managed similarly to the mainstem stocks. Tanana River origin stocks have escapement goals associated with them and for both Chinook and summer Chum Salmon, these stocks contribute nearly 30% to the drainage-wide runs, so are critically important to the abundance of the Yukon drainage runs. Drainage-wide, escapement goals for Chinook and summer Chum Salmon have not been consistently met in recent years. In 2020, summer and fall Chum Salmon runs were some of the lowest on record, and fall Chum Salmon failed to provide any harvestable surplus in Alaska, and failed to meet the escapement goal at the Canadian border.

Management of fisheries throughout the drainage has required subsistence restrictions (limitation on harvest) in most seasons for Chinook Salmon, and in recent years, reduction in harvest for Chums has also been necessary. These restrictions and closures are necessary to ensure viability of these salmon populations. When there is a harvestable surplus of fish, priority is always given to subsistence fishing.

The ADF&G performs a post season subsistence fish survey each year and has decades of data on the trends and harvest of communities for all species of salmon and non-salmon. Managers use this long-term data set to make sure that fishing opportunity and harvests are spread equitably among the districts based on their long-term proportions of total harvest. (e.g., the upper river uses more Chinook and fall Chum Salmon than other areas, because they can't rely on summer Chum Salmon.) Some of this data has been included here, to show how one region of river uses a proportion of the total, and how the harvests compare to amounts necessary for subsistence (Tables 1 and 2). The Federal management team uses the well-documented comprehensive community surveys and analyses of food and trade networks that are produced by ADF&G's Subsistence Division. The results of these studies can be found on ADF&G's website.

During salmon closures, regulations often provide for the use of selective gear, such as dip nets, beach seines, and manned fish wheels, to harvest summer Chum Salmon, while releasing Chinook Salmon, back into the river. Managers provide for these gear types whenever possible during necessary gillnet closures, however, not all fishermen have this gear, and in some areas it may not work efficiently, or be cost effective. In most years, subsistence fishermen on the Yukon River have been able to harvest fish other than salmon with 4-inch or smaller mesh gillnet gear, 24 hours per day, 7 days per week. In 2020, 4-inch mesh gillnets were closed or restricted throughout the drainage, but closed for up to 19 days of the fishing season in District 5. This was because, based on projected escapement at the border, there was no harvestable surplus of Chinook Salmon. However, because of the concerns expressed last year when the 4-inch gear was restricted, the Federal management team has worked with the ADF&G management team and in consultation with the US section of the Yukon River Panel to agree to a strategy that will allow the use of 4-inch gear during salmon closures unless: 1) there is deemed to be no harvestable surplus of Chinook Salmon, or 2) to only restrict its use if it appears there's widespread use of this gear to target salmon, which so far has not been a concern on the Yukon River. We have also decided to reduce the length of the nets to 60 feet maximum in the 2021 season, to allow the opportunity, while reducing the chance of incidental harvest of Chinook Salmon in this gear during Chinook Salmon subsistence closures.

# Federal Subsistence Board

**1011 East Tudor Road, MS 121**
**Anchorage, Alaska 99503 - 6199**

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

**FOREST SERVICE**

OSM 21029.KW

Gordon Brower, Chair
North Slope Subsistence
Regional Advisory Council
c/o Office of Subsistence Management
1101 East Tudor Road, MS 121
Anchorage, Alaska 99503-6119

Dear Chairman Brower:

This letter responds to the North Slope Subsistence Regional Advisory Council's (Council) fiscal year 2020 Annual Report. The Secretaries of the Interior and Agriculture have delegated to the Federal Subsistence Board (Board) the responsibility to respond to these reports. The Board appreciates your effort in developing the Annual Report. Annual Reports allow the Board to become aware of the issues outside of the regulatory process that affect subsistence users in your region. We value this opportunity to review the issues concerning your region.

**1. <u>Environmental change impacts to healthy subsistence resources and management strategies to address subsistence food security</u>**

*The Council feels it is imperative to again address climate change in this annual report to the Board. We have had extensive discussions about the importance of caribou, sheep, moose, fish, and other subsistence resources to communities across the North Slope Region and expressed concern about climate change and cumulative industrial development impacts on these critical resources. The Council is very concerned about these ongoing and increasing impacts to communities' subsistence resources and subsistence way of life. Many fish and wildlife populations across the North Slope Region are experiencing a decline or exhibiting signs of stress such as increased incidence of fish mold, seabird die-offs, and sick seals. The Council is very concerned that these ongoing changes to the lands and waters across the North Slope as well as in the marine environment will continue causing decline to critical subsistence fish and*

*wildlife populations and interfere with conducting subsistence safely. The Council will continue encourage the Board to recognize the need for food security in these uncertain times and ensure that subsistence priority is indeed prioritized in order to meet these needs.*

**Response**:

The Board hears the Council's concerns and recognizes the fundamental challenges posed by climate change. Shifts in the ranges, abundance, and seasonality of species traditionally harvested are threatening food security and the continuation of the subsistence ways of life. In addition, subsistence hunters and fishers are facing new safety risks while out on the land, water, and ice due to novel, unpredictable conditions.

The Board recognizes that food security has become an increasing concern for rural communities. We look to gain a better understanding of food security through definitions of the term developed by the United Nations and the Inuit Circumpolar Council-Alaska (ICC-A). The term food security is often taken to simply mean sufficient caloric and nutritional intake. The Board recognizes that in Alaska, food security further includes the right "to obtain, process, store and consume sufficient amounts of healthy and nutritious preferred food… It includes the responsibility and ability to pass on knowledge to younger generations, the taste of traditional foods rooted in place and season, knowledge of how to safely obtain and prepare traditional foods for medicinal use, clothing, housing, nutrients and, overall, how to be within one's environment"[1]. Climate change poses a challenge to food security.

The Federal Subsistence Management Program can support adaptation to changing conditions by using the various tools available that enable the program to be responsive to subsistence users' needs as conditions change. For example, the Special Action process enables the Board to respond quickly to out-of-cycle needs for regulatory actions. The Board has also used its ability to delegate authority to local land managers to enable managers to respond quickly to unforeseen circumstances such as unpredictable seasons and fluctuations in resource availability.

More persistent changes to the availability and seasonality of resources due to climate change can be accommodated through the regulatory process. When species become less abundant due to climate change, closures to non-Federally qualified users, or ANILCA section 804 prioritizations, may become necessary. Other species may become more abundant with shifts in environmental conditions, or new species may expand into the North Slope region. In this case,

[1] Inuit Circumpolar Council-Alaska. 2015. Alaskan Inuit Food Security Conceptual Framework: Summary and Recommendations Report. https://iccalaska.org/wp-icc/wp-content/uploads/2016/03/Food-Security-Summary-and-Recommendations-Report.pdf.

the Federal Subsistence Management Program can assist communities in delineating seasons, harvest limits, and methods and means for these newly available resources.

**2. <u>Challenges of multi-layered subsistence management and effective means for addressing subsistence information and concerns</u>**

*The Council works diligently to address the subsistence issues and concerns of North Slope Region communities. Yet, the Council is challenged in the limited scope of the Federal Subsistence Management Program, addressing only fish and wildlife management on Federal public lands. Subsistence foods and the subsistence way of life are holistic and integral to the community and culture of the region. Many Council members are engaged in subsistence management and participate in other advisory bodies in order to make sure their voices are heard in regards to all critical subsistence issues. Council members are volunteers and must participate in or monitor countless meetings affecting subsistence use: separate meetings for migratory birds, marine mammals, whaling, industrial development scoping under the National Environmental Policy Act, NPR-A drill permitting, pipeline and roads development, climate change research and monitoring, in addition to State Advisory Committee and Alaska Board of Game meetings for management on State lands, Bureau of Oceans and Energy Management and National Marine Fisheries Service meetings for marine fisheries and monitoring not under the jurisdiction of USFWS, and so on.*

*While the Council recognizes the limitations of the Board's authority due to the current structure of the Federal and State laws that govern natural resource management, the Council asks for greater understanding and awareness of the integrated nature of subsistence in the lives of people in the North Slope region. There are several aspects where the Federal Subsistence Management Program can be more engaged to better support the concerns of the Council and community and provide:*

1) *Consideration and understanding of local culture and communication norms and support the Council and public in this regard.*

2) *Consideration and inclusion of local and traditional knowledge in subsistence management. Council members are appointed based on their expert knowledge of the region and long-term engagement with subsistence; include the information shared by the Council, Tribes, and local public in management decision making.*

3) *Understanding and support for community, regional sharing and trade of subsistence foods and materials. Subsistence management approaches that support and uphold these traditional sharing practices essential to the wellbeing of our communities.*

4) *Understanding and awareness of the interaction of all subsistence foods and activities. For example, when important subsistence foods such as walrus or whale are not harvested, there is a greater need for other foods such as caribou and fish to sustain communities for the year. The Federal Subsistence Management Program must understand the interrelated nature of subsistence harvests – impacts to one affect the need for and subsequent management of another.*

5) *Understanding and awareness of the interaction of industrial development with subsistence activities. While the Federal Subsistence Management Program does not have direct jurisdiction over development activities on the North Slope, impacts to subsistence foods on Federal public lands is a direct concern of the program. These impacts include barriers to migratory routes, disturbances that deflect or stress animals, or contaminants that may impact subsistence foods. All of these have direct bearing on access to, harvest and safe consumption of important subsistence foods that the Federal Subsistence Management Program does manage. Additionally, the Federal Subsistence Management Program can look for better ways to engage with Federal agencies involved in those activities, which might assist with proper execution of the analyses and obligations mandated in ANILCA Section 810.*

6) *Awareness and monitoring of climate change impacts to subsistence. The Council and communities have shared observations and experiences of changes to the North Slope Region lands, waters, and weather that are already impacting subsistence activities, safe access, timing, and changes to critical habitat for many important subsistence species managed by the program. The Council asks for awareness on how these changes impact subsistence (e.g., flexible management approaches that can accommodate changing timing of subsistence activities due to storm severity or ice up/break-up or seasonality of harvest due to changing timing of migrations or rut). The Councils also asks for greater support and networking to monitor climate change and address research priorities identified by the Council.*

**Response**:

The Board acknowledges that the fragmented nature of Federal fish and wildlife management is incongruent with the holistic dependence on the environment that characterizes subsistence. The management of different species and lands by different agencies means that those practicing a subsistence lifestyle must navigate multiple laws, regulatory systems, and bureaucracies.

As hunters and fishers are required to understand this system, Federal managers continue to develop their understanding of local practices and communication norms. The Board recognizes the critical importance of Traditional Ecological Knowledge (TEK) in informing the Federal Subsistence Management Program. We rely on this knowledge and consider it alongside western scientific knowledge. Similar to western science-oriented research regimes, TEK is obtained through repeated interactions with the natural world over time. The Board understands that TEK may provide a spatial and temporal scale of knowledge that is otherwise unavailable to resource managers. TEK holders experience local landscapes and environmental phenomena throughout the seasons, and often over the span of many years.

OSM staff endeavor to include all relevant TEK in all aspects of analyses and rely on you, our Regional Advisory Councils, to help inform the program of local conditions and available knowledge on the subject matter. Transcripts from public meetings, Regional Advisory Council meetings, and Federal Subsistence Board meetings are sourced for TEK shared by the Council and public that can inform this program. We also rely on written public comments and conversations with local stakeholders and land managers. This Board also considers our government-to-government consultations with Tribes and Alaska Native Claims Settlement Act (ANCSA) Corporations imperative to our program.

The Board recognizes that when the availability of one subsistence resource is altered, pressure on other resources may increase in turn. Unpredictable shortfalls in resources are likely to continue to occur and will have ripple effects on need for other species. A responsive regulatory process can ensure that people continue to access healthy local and traditional foods during times of unexpected shortage. The existing regulatory process already has built-in options, such as the Special Action process or delegation of authority to local land managers that enable a quick response to the changing conditions. Other actions, for example, closure to non-Federally qualified users, ANILCA section 804 prioritization of Federally qualified subsistence users, or establishing of seasons, harvest limits, and methods and means for new resources, are available to the Board as well. This is described in more detail in the Board's reply to topic number 1.

**3. <u>Board decision making process and deference to Council's recommendations</u>**

*The Council is interested in learning more about the current members of the Board and how their background assists them in serving as the decision makers for the Federal Subsistence Management Program. The Council wishes to gain a better understanding of how decisions are made by the Board and the criteria used when taking action on Council recommendations regarding subsistence priority and continuation of subsistence uses. The Council is specifically interested in learning what "deference" to Council recommendations means to the Board and what has been done to expand that deference pursuant to the 2009 Secretarial Review.*

**Response**:

The Board thanks the Council for their interest in its members, and is sharing the information requested in an addendum, attached. The Federal Subsistence Board is comprised of directors from each of the four Federal land management agencies (US Fish and Wildlife Service, National Park Service, Bureau of Land Management, US Forest Service), the Bureau of Indian Affairs, and three rural subsistence public representatives, one of whom serves as the Chair of the Board.

The Board relies on Council recommendations to guide its decision-making process. Section 805 of ANILCA states that the Federal Subsistence Board shall consider the recommendations of the Regional Advisory Councils on matters concerning the taking of fish and wildlife unless a recommendation is (1) not supported by substantial evidence, (2) violates recognized principles of fish and wildlife conservation, or (3) would be detrimental to the satisfaction of subsistence needs. If a recommendation is not adopted, the Board shares the basis for this decision with Councils through annual "805(c)" reports. Following the 2009 Secretarial Review, the Board expanded its interpretation of the phrase "concerning the taking of fish and wildlife" to include customary and traditional use determinations. The Board also relies heavily on Councils for nonrural determinations, though deference does not apply in those circumstances.

In cross-over proposals, multiple Councils provide their recommendations. When these recommendations contradict one another, Board members cannot defer to all Councils. In these cases, deference is usually given to the Council whose constituents are most directly affected by the issue, for example, through geographical proximity or traditions of use of the area.

Council input has been sought when feasible on out-of-cycle requests, such as special actions and cultural and educational use permits, but Council recommendations on these actions—which require Council meetings—have not been consistently established and have not received deference in the same way as in-cycle requests.

In closing, I want to thank you and your Council for your continued involvement and diligence in matters regarding the Federal Subsistence Management Program. I speak for the entire Board in expressing our appreciation for your efforts and am confident that the subsistence users of the North Slope Region are well represented through your work.

Sincerely,

Anthony Christianson
Chair

Enclosure

cc: North Slope Subsistence Regional Advisory Council
Federal Subsistence Board
Sue Detwiler, Assistant Regional Director, Office of Subsistence Management
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Eva Patton, North Slope Council Coordinator, Office of Subsistence Management
Interagency Staff Committee
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Mark Burch, Special Project Coordinator, Alaska Department of Fish and Game
Administrative Record

# Federal Subsistence Board Members

(*current as of July 2021*)

**Anthony Christianson (Chair)**

Anthony Christianson was initially appointed by Interior Secretary Ken Salazar in 2012 to serve as one of two public members on the Federal Subsistence Board (Board), representing rural users. He has served as Chair of the Board since 2016, when he was appointed by U.S. Secretary of the Interior Sally Jewell. Christianson is a life-long Alaskan with deep personal knowledge and experience with subsistence needs and policies. Christianson is a resident of Southeast Alaska and currently serves as Natural Resource Director for the Hydaburg Cooperative Association, a federally recognized tribal entity. He also serves as Mayor of the City of Hydaburg. In his professional and volunteer capacities, Christianson has participated in a number of programs and studies related to fish and wildlife management in Southeast Alaska.

**Charles Brower (Public Member)**

Charles Brower is one of two rural subsistence public members on the Board. He has served since 2012. Brower is from Utqiagvik, Alaska. Brower serves as Alaska Native Commissioner Charles Brower with the Alaska Nannut Co-Management Council and represents the Alaskan Native people on the U.S. – Russia Polar Bear Commission under the Bilateral Polar Bear agreement. He is Chair of the Eskimo Walrus Commission that represents coastal walrus hunting communities in Alaska and co-manages walrus together with the U.S. Fish and Wildlife Service. Brower is Tribal Transportation Manager at the Native Village of Barrow, a position he has held since 2013. Brower served as General Manager at Utqiagvik Inupiat Corporation from 2006 to 2013. He was Wildlife Director at the Native Village of Barrow in 2006 and Wildlife Department Director at North Slope Borough from 1986 to 2005.

**Rhonda Pitka (Public Member)**

Rhonda Pitka was appointed in 2016 and is one of two rural subsistence public members on the Board. Pitka is a resident of the village of Beaver, located on the north bank of the Yukon River in the heart of the Yukon Flats National Wildlife Refuge. She has a strong record of public involvement in subsistence and natural resource management. Prior to joining the Board, Pitka served on the Federal Subsistence Management Program's Eastern Interior Alaska Subsistence Regional Advisory Council. Pitka is the First Chief of the Beaver Village Council, a federally recognized tribe, and serves on the Yukon River Panel, which makes recommendations to the governments of Canada and the United States on fisheries management along the Yukon River. In addition, Pitka is chairwoman of the Council of Athabascan Tribal Governments, a regional tribal service provider to ten villages in the Yukon Flats Region. She is also a school board member for the Yukon Flats School District.

**David Schmid (Forest Service)**

David E. Schmid was appointed Regional Forester for the Forest Service's Alaska Region in 2018. As Regional Forester, Schmid oversees management of more than 22 million acres of National Forest System lands in Southcentral and Southeast Alaska. Prior to his appointment, Schmid's experience included 23 years on the Chugach and Tongass National Forests. Schmid joined the Forest Service first as a volunteer in Minnesota. After graduating college, he worked as a Fisheries and Watershed Program Leader on the Chugach National Forest and as a District Ranger on the Tongass National Forest. Following his time in Alaska, he served as the National Fish Program Leader in Washington DC, and as the Director of Biological and Physical Resources in the Southern Region. Prior to returning to Alaska as Regional Forester, he served as the Deputy Regional Forester in the Northern Region based in Missoula, Montana.

**Chad Padgett (Bureau of Land Management)**

Chad Padgett became the Bureau of Land Management (BLM) State Director for Alaska in February 2019. Prior to joining the BLM, Padgett was the State Director for Alaska Representative Don Young for more than 10 years. From 2001 to 2009, Padgett served as a Presidential Appointee to the U.S. Department of Agriculture's (USDA's) Farm Service Agency, where he served as Alaska State Executive Director. For 2 years, he was a dual appointee, also serving as acting State Director for the USDA's Rural Development. Earlier in his career, Padgett worked in Representative Young's state office for 7 years, including 6 years as Deputy District Director, during which he oversaw five Alaskan offices while also working closely with many federal agencies, including the BLM. Padgett has a bachelor's degree in political science and international relations from Boise State University. He graduated from Seward High School in Seward, Alaska. Padgett is a former resident of Metlakatla where his mother taught school.

**Karen Cogswell (U.S. Fish & Wildlife Service)**

Karen Cogswell is the Acting Regional Director for the U.S. Fish & Wildlife Service in Alaska. She has served as Deputy Regional Director for Alaska since August 2014. In the Regional Director's office, Karen oversees the shared stewardship of over 78 million acres of National Wildlife Refuge System lands that are also Indigenous homelands, and is committed to collaboration and consultation with 229 federally recognized tribes and 200 Alaska Native Claims Settlement Act (ANCSA) Corporations. She also guides the Service's efforts to work with co-management councils and others under the Marine Mammal Protection Act (MMPA) and Migratory Bird Treaty Act (MBTA). Karen first came to Alaska in 2011, serving as an Assistant Regional Director for general business operations for Alaska. She began her career with the federal government as a Presidential Management Fellow, working in the Secretary of Health and Human Services Budget Office with a focus on legislative proposals and policy implications.

**Jeff Mow (National Park Service)**

Most of Jeff Mow's 33 year career with the National Park Service (NPS) has been in Alaska. Over the course of 23 years in Alaska, Mow served as a Park Ranger, Chief Ranger, Management Assistant, and Superintendent across seven NPS units in the state. He had assignments as the Acting Superintendent of Denali National Park and Preserve, superintendent of Kenai Fjords National Park, and Subsistence Coordinator for Gates of the Arctic National Park and Preserve and Yukon Charley Rivers National Preserve. During Mow's tenure in Alaska, he was actively engaged in the local communities, serving as the mayor of Bettles, SAR/EMS responder in Anaktuvuk Pass, and Rotary Club President in Seward. Mow was named superintendent of Glacier National Park in Montana in 2013. He has served as Acting Director of the NPS Alaska Region since 2021.

Mow has served on the U.S. Senate Energy and Natural Resources Committee and with the NPS Office of Legislative and Congressional Affairs. His additional experiences have included: 1) DOI Incident Commander on the Gulf of Mexico Deepwater Horizon Oil Spill, 2) investigator on the Exxon Valdez Oil Spill in Alaska, and 3) Policy Advisor to the fledgling NPS Climate Change Response Program.

**Gene Peltola (Bureau of Indian Affairs)**

The Regional Director for the Bureau of Indian Affairs (BIA) Alaska Region is a Bethel-born Orutsararmiut Native Council Tribal member, Gene "Buzzy" Peltola Jr. As Regional Director he oversees the BIA activities in Alaska. The BIA Alaska Region provides services to 227 Alaska Native tribes.

Peltola has 37 years of federal service, 34 with the U.S. Fish and Wildlife Service. While at the USFWS, for five years 2013-2018, Peltola coordinated and implemented subsistence management on all federal lands in Alaska as the Federal Subsistence Management Program lead. Peltola also has a background in business and local government. He's sat on the boards of Bethel Native Corporation and its subsidiaries Bethel Solutions, LLC, and Bethel Services Inc. For two years, from 2010 to 2012, Peltola also served as vice-mayor and council member for the City of Bethel. Additionally, Peltola was a federally qualified subsistence user until 2013, when his jobs required moving to Anchorage to head the Office of Subsistence Management, then the BIA Alaska Region.

# Interagency Staff Committee recommendations to the Federal Subsistence Board on 2021 Subsistence Regional Advisory Councils' charter change requests

The Subsistence Regional Advisory Councils (Councils) were chartered under the Federal Advisory Committee Act (FACA). The Councils' charters are reviewed and approved by the Secretary of the Interior every two years on odd-numbered years. During this time individual Councils may recommend changes to their charters. The Councils can only recommend the changes to the parts of the charter not mandated by FACA.

During 2021 Charter Review process the Councils recommended the following charter changes:

1. **The SEARAC, SCRAC, KARAC, BBRAC, YKDRAC, WIRAC, SPRAC, EIRAC, and NSRAC recommended to ADD a "carryover terms" clause to Section 12, Membership and Designation.**

   Justification: Over the last three years, all Councils experienced significant delays to Council appointments. Appointment terms expire on December 2 of each year. Secretarial appointments are expected to come on or before the expiration of the terms. In 2018, appointments were made February 28, 2019, which is almost 3 months late. In 2019, appointments were made February 25, 2020. In 2020, the first set of incomplete appointments was made January 15, 2021 (right before the final hour of outgoing administration) and the second set of out-of-cycle appointments was made on March 8, 2021. In the winter 2020, due to incomplete and late appointments some Councils met with only as few as four seated members and made decisions for their respective regions without adequate or balanced regional representation, which is required by FACA. Before the March 8, 2021 out-of-cycle appointments some Councils had between six to eight vacancies on 10 or 13 member Councils. This did not allow balanced representation of user groups across the regions and imposed hardship on the seated Council members, who are volunteers, to make decisions and provide recommendations for the parts of their region or for the user groups they were not familiar with.

   During winter 2021 meetings, nine out of ten Councils recommended to request an inclusion of a "carryover" clause in their charters to ensure that all or majority of Councils seats are filled and that the Councils are fully functional and represent user groups across entire regions. Several of the Councils proposed specific language to be added to Section 12, Membership and Designation:

   > *Any member of this Advisory Council may serve after the expiration of the Member's term until a successor is appointed.*

**The Interagency Staff Committee (ISC) reviewed the SEARAC, SCRAC, KARAC, BBRAC, YKDRAC, WIRAC, SPRAC, EIRAC, and NSRAC request and formed the following recommendation:**

***The ISC recommends the Board support Councils' recommendation to add a "carryover" terms clause to avoid temporary vacancies on the Councils that occur between the expiration of the current member terms and the annual set of Secretarial appointments. The ISC proposes to add the following language to Section 12, Membership and Designation of all Councils charters:***

> ***If the set of appointments for a given year have not yet been announced, a member may continue to serve on the Council following the expiration of his or her term until such appointments have been made. Unless reappointed, the member's service ends on the date of announcement even if that member's specific seat remains unfilled.***

***The ISC opines that the addition of this language will prevent unnecessary vacancies on the Councils in an event of the delayed appointments and ensure adequate user group representation on the Councils between the appointment cycles.***

**2. <u>The NSRAC recommends to AMEND the charter language by removing Subsections 4h and 4i of Section 4, Description of Duties from all Councils charters.</u>**

**"4. Description of Duties.** *Council duties and responsibilities, where applicable, are as follows:*

…

**h.** *Provide recommendations for implementation of Secretary's Order 3347: Conservation Stewardship and Outdoor Recreation, and Secretary's Order 3356: Hunting, Fishing, Recreational Shooting, and Wildlife Conservation Opportunities and Coordination with States, Tribes, and Territories. Recommendations shall include, but are not limited to:*

*( 1)Assessing and quantifying implementation of the Secretary's Orders, and recommendations to enhance and expand their implementation as identified;*
*(2) Policies and programs that:*
*(a) increase outdoor recreation opportunities for all Americans, with a focus on engaging youth, veterans, minorities, and other communities that traditionally have low participation in outdoor recreation;*
*(b) expand access for hunting and fishing on Bureau of Land Management, U.S. Fish and Wildlife Service, and National Park Service lands in a manner that respects the rights and privacy of the owners of non-public lands;*
*(c) increase energy, transmission, infrastructure, or other relevant projects while avoiding or minimizing potential negative impacts on wildlife; and*
*(d) create greater collaboration with States, Tribes, and/or Territories.*

**i.** *Provide recommendations for implementation of the regulatory reform initiatives and policies specified in section 2 of Executive Order 13777: Reducing Regulation end Controlling Regulatory Costs; Executive Order 12866: Regulatory Planning and Review, as amended; and section 6 of Executive Order 13563: Improving Regulation end Regulatory Review. Recommendations shall include, but are not limited to:*

*Identifying regulations for repeal, replacement, or modification considering, at a minimum, those regulations that:*
*(1) eliminate jobs, or inhibit job creation;*
*(2) are outdated, unnecessary, or ineffective;*
*(3) impose costs that exceed benefits;*
*(4) create a serious inconsistency or otherwise interfere with regulatory refonn initiative and policies;*
*{5) rely, in part or in whole, on data or methods that are not publicly available or insufficiently transparent to meet the standard for reproducibility; or*
*6) derive from or implement Executive Orders or other Presidential and Secretarial directives that have been subsequently rescinded or substantially modified."*

Justification: The sections proposed for removal were inserted during 2017 Councils charter renewal into every single FACA advisory committee regardless of the language relevancy to the duties of each advisory committee. FACA requires a description of the duties for which the advisory committee is responsible to be included into their charters. The NSRAC is very concerned that these added duties are not relevant to the Subsistence Regional Advisory Councils mission and mandate as established under ANILCA, undermine the Councils work, and pose potential harm to the subsistence communities the Council serves. The Councils considers that this charter review cycle is an opportunity to request the Secretary of the Interior to remove this arbitrary language from all Subsistence Regional Advisory Council Charters.

**The ISC reviewed the NSRAC request and formed the following recommendation:**

***The ISC support the NSRAC to remove Subsections 4h and 4i of Section 4, Description of Duties from all Councils charters and recommends that the Board forward this recommendation to the Secretary of the Interior for her consideration. The ISC believes that the Department of the Interior should conduct a through review of the language in Subsections 4h and 4i to make sure that it is relevant to the Councils mission and ANILCA mandates. This review is especially important because of the Executive Orders, specifically EO 13777, Enforcing the Regulatory Reform Agenda, listed in Section 4, Description of Duties, Subsection i, of Councils charters was revoked by the Executive Order 13992, Revocation of Certain Executive Orders Concerning Federal Regulation (published in Federal Register on January 25, 2021), thus making the current charter language out-of-date.***

**3. The YKDRAC recommends to ADD additional balanced membership criteria under Section 12, Membership and Designation as follows:**

***Ensure balanced membership and representation on the Council by appointing representatives from across the Yukon-Kuskokwim Delta Region and strive for equal representation from communities on both the Yukon and Kuskokwim Rivers.***

Justification: The Yukon-Kuskokwim Delta Subsistence Regional Advisory Council serves a large and diverse region with over 40 communities, including several of the largest rivers and

coastal deltas in both size and importance for subsistence fishing. The Council cannot adequately represent the many communities of the region and address resource management on the diverse subsistence hunting and fishing issues from the Yukon to the Kuskokwim, Kenektok, and Goodnews rivers and deltas and everything in between without a full membership of the 13-seat Council with a balanced representation from each part of the region. The complexity of fisheries management on the Yukon and Kuskokwim rivers in particular requires having at least several representatives who are residents from several villages along each river and coastal areas to adequately inform the Council's recommendations. The recent lack of sufficient Yukon River and coastal representatives has hampered the Council's ability to fully inform management on subsistence issues specific to communities in these regions of the Yukon-Kuskokwim Delta.

**The ISC reviewed the YKDRAC request and formed the following recommendation:**

***The ISC recommends supporting Council's request to add geographic membership balance for the region based on 13 member Council with an understanding that this goal might not be met depending on the actually submitted applications and rating of applicants. Based on the language of the Council's request, the ISC proposes to add the following modified language into the Section 12, Membership and Designation of the charter:***

> ***To ensure that there is geographic membership balance and balanced representation on the Council the Secretary will strive to appoint members to equally represent the communities across the Yukon-Kuskokwim Delta Region and on both the Yukon and Kuskokwim rivers.***

**4. <u>The NWARAC requests to increase the number of seats on the Council from 10 to 12.</u>**

<u>Justification</u>: There are 11 communities in the Northwest Arctic Region, and right now some of the communities are not represented on the Council. The Council feels that by increasing the number of seats on the Council to 12, it would allow all communities throughout the region to be equally represented.

**The ISC reviewed the NWARAC request and formed the following recommendation:**

***The ISC recommends opposing the Council's request to increase the number of members to 12 at this time due to the Council not providing adequate justification for increasing the number of seats and also due to the declining budgets and increasing costs. The ISC considers that increasing the number of seats on the Council would not ensure the adequate representation of all communities across the region. The ISC would like to encourage the Council continue to be ambassadors for the Federal Subsistence Management Program and to reach out to the communities in underrepresented areas to invite the users in these communities to apply to serve of the Council.***

**5. <u>The KARAC requests to appoint alternate members to fill vacancies that occur due to resignations or retires from the Council.</u>**

<u>Justification</u>: To have all Council seats filled at all times.

**The ISC reviewed the KARAC request and formed the following recommendation:**

***The ISC recommends not forwarding this request to the Secretary because the ISC considers this request moot. The primary reason for this is, in 2019 during the biannual Councils' charter renewal, the Secretaries added new language to the charters, "Alternate members may be appointed to the Council to fill vacancies if they occur out of cycle. An alternate member must be approved and appointed by the Secretary before attending the meeting as a representative. The term for an appointed alternate member will be the same as the term of the member whose vacancy is being filled." Therefore, all Councils' charters contain the language on the appointment of alternate members.***

***For practical purposes, for a Council in order to have alternates appointed the Council's subsistence region needs to have a sufficient number of applications. If a Council seat is vacated because of a member passing, resigning, or moving out of the region, then an appointed alternate would receive a letter from the Secretary of the Interior indicating their appointment to the vacant seat. During 2021 appointment cycle, Kodiak Aleutians subsistence region received only 2 applications to fill 4 open seats. As a result, it would be impossible to designated alternate members for the Council.***

# Federal Subsistence Board

**1011 East Tudor Road, MS121**
**Anchorage, Alaska 99503-6199**

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

**FOREST SERVICE**

OSM XXXX.XX

Eastern Interior Field Office Manager
Bureau of Land Management
222 University Avenue
Fairbanks, Alaska 99709

Dear Field Office Manager:

This letter delegates specific regulatory authority from the Federal Subsistence Board (Board) to the manager of the Bureau of Land Management (BLM) Eastern Interior Field Office to issue emergency or temporary special actions if necessary to ensure the conservation of a healthy wildlife population, to continue subsistence uses of wildlife, for reasons of public safety, or to assure the continued viability of a wildlife population. This delegation only applies to the Federal public lands subject to Alaska National Interest Lands Conservation Act (ANILCA) Title VIII jurisdiction within Units 20E, 20F and 25C for the management of caribou on these lands.

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

## DELEGATION OF AUTHORITY

**1. Delegation:** The BLM Eastern Interior Field Office manager is hereby delegated authority to issue emergency or temporary special actions affecting caribou on Federal lands as outlined under the **Scope of Delegation**. **In preparing special actions, BLM will consult with the NPS Yukon-Charley Rivers Preserve Superintendent and attempt to achieve concurrence.**

Any action greater than 60 days in length (temporary special action) requires a public hearing before implementation. Special actions are governed by Federal regulation at 36 CFR 242.19 and 50 CFR 100.19.

**2. Authority:** This delegation of authority is established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6), which state: "The Board may delegate to agency field officials the authority to set harvest and possession limits, define harvest areas, specify methods or means of harvest, specify permit requirements, and open or close specific fish or wildlife harvest seasons within frameworks established by the Board."

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

To modify or restrict harvest limits, including sex restrictions, season dates, and methods and means for caribou on Federal public lands in Units 20E, 20F and 25C. Prior to any modifications to any methods and means, you will seek pre-approval from OSM to assure that such modifications are allowed under the existing Code of Federal Regulations.

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

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

The Federal public lands subject to this delegated authority are those within Units 20E, 20F and 25C.

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

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

You will review special action requests or situations that may require a special action and all supporting information to determine (1) consistency with 50 CFR 100.19 and 36 CFR 242.19, (2) if the request/situation falls within the scope of authority, (3) if significant conservation problems or subsistence harvest concerns are indicated, and (4) what the consequences of taking an action or no action may be on potentially affected Federally qualified subsistence users and non-Federally qualified users. Requests not within your delegated authority will be

forwarded to the Board for consideration. You will maintain a record of all special action requests and rationale for your decision. A copy of this record will be provided to the Administrative Records Specialist in OSM no later than sixty days after development of the document.

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

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

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

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

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

**6. <u>Support Services:</u>** Administrative support for regulatory actions will be provided by OSM.

Sincerely,

Anthony Christianson
Chair

Enclosures

cc: Federal Subsistence Board
Assistant Regional Director, Office of Subsistence Management
Deputy Assistant Regional Director, Office of Subsistence Management
Subsistence Policy Coordinator, Office of Subsistence Management
Wildlife Division Supervisor, Office of Subsistence Management
Eastern Interior Alaska Subsistence Council Coordinator,
Office of Subsistence Management
Chair, Eastern Interior Alaska Subsistence Regional Advisory Council
Deputy Commissioner, Alaska Department of Fish and Game
Special Projects Coordinator, Alaska Department of Fish and Game
Interagency Staff Committee
Administrative Record

# 2021 Nonrural Determination Cycle