Federal Subsistence Board Public Meeting

Meeting Materials: Volume I
(Consensus Agenda Proposals)

April 20-23, 2020

Via Teleconference

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Volume I (Consensus Agenda Proposals)

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FEDERAL SUBSISTENCE BOARD
PUBLIC MEETING AGENDA
April 20-23, 2020

April 20, 2020: 1:30 p.m. to 5:00 p.m. (or until recessed)
April 21-23, 2020: 9:00 a.m. to 5:00 p.m. (or until recessed) daily

The meeting will convene by **teleconference only**
To participate, dial toll free **(888) 566-1030**, (passcode **3344290**)

On April 20th, prior to start of the Public Meeting, the Federal Subsistence Board will meet at 9:00 a.m. to conduct Tribal Government-to-Government and ANCSA Corporation consultations regarding proposals to change Federal Subsistence Regulations. The Public Meeting will begin at 1:30 p.m. Updates on the Board's progress through the agenda can be obtained by calling (800) 478-1456 or (907) 786-3888 or visit https://www.doi.gov/subsistence/board/ or www.facebook.com/subsistencealaska.

Public Meeting

***Asterisk denotes Action Item**

1. **Call to Order and Welcome**
2. **Review and Adopt Agenda***
3. **Federal Subsistence Board Information Sharing**
4. **Regional Advisory Council Chairs Discuss Topics of Concern with the Board**
5. **Public Comment Period on Non-Agenda Items** *(This opportunity is available at the beginning of each day)*
6. **Old Business**
7. **2020–2022 Subparts C&D Proposals and Closure Reviews** *(Wildlife Regulations)*
   a. Announcement of Consensus Agenda *(see detailed agenda that follows)*
   b. Public Comment Period on Consensus Agenda Items (*This opportunity is available at the beginning of each subsequent day prior to the final action*)
   c. Board deliberation and action on Non-Consensus Agenda items* (*See detailed agenda that follows*)
   d. Adoption of Consensus Agenda*
8. **Deferred Proposal WP18-19***
9. **RFR15-01**

10. Fortymile Caribou Herd Harvest Plan*

11. Schedule of Upcoming Board meetings*

a. 2020 Summer Work Session (*Date and topics to be determined*)

b. 2021 Winter Public Meeting (*Fish and Shellfish Regulations – late January?*)

12. Other Business

13. Adjourn

FEDERAL SUBSISTENCE BOARD
CONSENSUS AGENDA PROPOSALS

The following proposals have been included on the consensus agenda. These are proposals for which there is agreement among Federal Subsistence Regional Advisory Councils, the Federal Interagency Staff Committee, and the Alaska Department of Fish and Game concerning Board action. Anyone may request that the Board remove a proposal from the consensus agenda and place it on the regular agenda. The Board retains final authority for removal of proposals from the consensus agenda. The Board will take final action on the consensus agenda after deliberation and decisions on all other proposals.

Proposal	Region/Unit/Species	Recommendation	Page
WP20-03	Southeast/Unit 2/Deer	Oppose	1
WP20-04	Southeast/Unit 2/Deer	Oppose	31
WP20-05	Southeast/Unit 2/Deer	Oppose	61
WP20-08	Statewide/All units/All trapping species	Oppose	88
WP20-09	Southeast/Units 1-4/Beaver	Support	105
WP20-10	Statewide /Units 1-5/Black Bear	Support	114
WP20-11	Statewide/Units 1-5/Brown Bear	Support	147
WP20-12	Southeast/Unit 3/Deer	Support	185
WP20-13	Statewide/Unit 3/Elk	Support	207
WP20-14	Statewide/Units 1-5/Goat	Support	227
WP20-15	Statewide/Units 1-5/Moose	Support	247
WP20-16/17	Statewide/Unit 2/Wolf	Support	267
WP20-18a	Southcentral/Unit 7/Goat	Support with modification	300
WP20-19	Southcentral, Eastern Interior/Unit 11/Sheep	Oppose	328
WP20-20	Southcentral/Unit 7/All species	Oppose	356
WP20-22a	Statewide/Unit 15/Caribou	Support with modification	366
WP20-23a	Statewide/Unit 15/Goat	Support with modification	385
WP20-24a	Southcentral/Unit 15/Sheep	Support	406
WP20-28/29	Bristol Bay, YK Delta/Unit 17/Moose	Support	416

Proposal	Region/Unit/Species	Recommendation	Page
WP20-31	Statewide/Unit 9/Ptarmigan	Support	430
WP20-32/33	YK Delta/Unit 18/Moose	Support	445
WP20-34	Statewide/Unit 18/Mink, Weasel	Support	466
WP20-35	YK Delta/Unit 18/Moose	Oppose	478
WP20-39	Western Interior, YK Delta/Unit 19/Moose	Take no action	500
WP20-48	Eastern Interior/Units 20, 25/ Caribou	Support	514
WP20-51	Eastern Interior, Southcentral/Unit 12/Sheep	Support	552

FEDERAL SUBSISTENCE BOARD
NON-CONSENSUS AGENDA

Procedure for considering proposals:

Analysis (*Lead Author*)
Summary of public comments (*Regional Council Coordinator*)
Open floor to public testimony
Regional Advisory Council recommendation(s) (*Chair or designee*)
Tribal/Alaska Native Corporation comments (*Native Liaison*)
Alaska Department of Fish and Game comments (*State Liaison*)
Interagency Staff Committee comments (*ISC Chair*)
Board discussion with Council Chairs and State Liaison
Federal Subsistence Board action

Note that all Wildlife Closure Reviews have been included on the non-consensus agenda. Although some of these reviews meet the criteria of a consensus item, they are included here for deliberation and for transparency during this transitional cycle. In future cycles, closure reviews will be reviewed in a manner identical to regulatory proposals, and may be assigned to the consensus agenda when there is agreement among Federal Subsistence Regional Advisory Councils, the Federal Interagency Staff Committee, and the Alaska Department of Fish and Game concerning Board action.

Proposal	Region/Unit/Species	Page
WP20-01	Southeast/Unit 1/Moose	565
WP20-02	Southeast/Unit 2/Deer	593
WP20-06	Southeast/Unit 2/Deer	631
WP20-07	Southeast/Unit 2/Deer	659
WP20-18b	Southcentral/Unit 7/Goat	687
WP20-22b	Statewide/Unit 15/Caribou	712
WP20-23b	Statewide/Unit 15/Goat	737
WP20-24b	Southcentral/Unit 15/Sheep	765
WCR20-03	Southcentral/Unit 7/Moose	791
WCR20-41	Southcentral/Unit 6/Moose	801
WP20-25	Kodiak-Aleutians/Unit 10/Caribou	814
WP20-26	Statewide/Units 9, 17/Wolf, Wolverine	847

Proposal	Region/Unit/Species	Page
WP20-27	Bristol Bay, YK Delta, Western Interior/Unit 17/Caribou	870
WP20-30	Statewide/Unit 9/Hare	891
WCR20-04/06	Bristol Bay, Kodiak-Aleutians/Unit 9/Caribou	904
WCR20-38	YK Delta/Unit 18/Moose	920
WCR20-40	YK Delta/Unit 18/Moose	932
WP20-36/37	Western Interior/Unit 21/Moose	940
WCR20-20	Western Interior/Unit 24/Moose	979
WCR20-39	Western Interior, YK Delta/Unit 19/Moose	993
WCR20-43	Western Interior, YK Delta/Unit 19/Moose	1008
WP20-38	Seward Peninsula/Unit 22/Moose	1029
WP20-40	Seward Peninsula/Unit 22/Moose	1053
WP20-41	Seward Peninsula/Unit 22/Moose	1070
WP20-42	Seward Peninsula/Unit 22/Moose	1087
WCR20-10	Seward Peninsula/Unit 22/Muskox	1110
WCR20-28	Seward Peninsula/Unit 22/Muskox	1121
WCR20-29	Seward Peninsula/Unit 22/Muskox	1138
WCR20-30	Seward Peninsula/Unit 22/Muskox	1155
WCR20-44	Seward Peninsula/Unit 22/Muskox	1171
WP20-43/44/45/46	Northwest Arctic, Seward Peninsula, Western Interior, North Slope/Unit23/Caribou	1188
WP20-47	Northwest Arctic, North Slope/Unit23/Caribou	1239
WCR20-19	Northwest Arctic/Unit 23/Muskox	1267
WP20-49	Eastern Interior, North Slope/Unit 25/Sheep	1280
WP20-50	Eastern Interior, Southcentral/Unit 12/Moose	1314
WCR20-42	Easter Interior, Southcentral/Unit 12/Caribou	1344
WCR20-31	North Slope/Unit 26/Moose	1368

WP20–03 Executive Summary	
General Description	Proposal WP20–03 requests the elimination of female deer harvest in Unit 2 and to only harvest antlered deer. *Submitted by: East Prince of Wales Fish and Game Advisory Committee.*
Proposed Regulation	**Unit 2—Deer** *5 **antlered** deer~~; however, no more than one may be a female deer. Female deer may be taken only during the period Oct. 15–Jan. 31. A registration permit is required to take a female deer. Harvest ticket number five must be used when recording the harvest of a female deer, but may be used for recording the harvest of a male deer. Harvest tickets must be used in order except when recording a female deer on tag number five.~~* — *July 24 – Jan 31* *The Federal public lands on Prince of Wales Island, excluding the southeastern portion (lands south of the West Arm of Cholmondeley Sound draining into Cholmondeley Sound or draining eastward into Clarence Strait), are closed to hunting of deer from Aug. 1 to Aug. 15, except by Federally qualified subsistence users hunting under these regulations. Non-Federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.*
OSM Conclusion	**Oppose**
Southeast Alaska Subsistence Regional Advisory Council Recommendation	**Oppose**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council

WP20–03 Executive Summary	
	recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**1 Oppose**

STAFF ANALYSIS
WP20-03

ISSUES

Proposal WP20-03, submitted by the East Prince of Wales Fish and Game Advisory Committee, requests the elimination of female deer harvest in Unit 2 and to only harvest antlered deer.

DISCUSSION

The proponent believes that this regulation change is necessary because the harvest of female deer in Unit 2 is under reported and biologists are not getting factual information.

The proponent states that this regulation change is desperately needed to allow for future harvest of deer on POW Island, and that all resource users of Unit 2 have expressed a concern for the low deer population in recent years.

The proponent mentioned that the Alaska Board of Game (BOG) recently adopted regulations to increase the harvest of wolf and black bear on Prince of Wales, and that the next step is for the deer to repopulate. The proponent believes that in order for this to occur, the harvest of does should not be allowed.

The proponent also has added the term "antlered" into their proposed change following the harvest limit. During clarification over this addition, the proponent indicated they did not know why there had been a prior regulatory change from "*antlered/antlerless*" to "*male/female*". The proponent believes most hunters will be looking for antlers as well for determining deer gender. Because of this factor, they are providing this proposed option for the Federal Subsistence Board (Board) to consider.

Existing Federal Regulation

Unit 2—Deer

5 deer; however, no more than one may be a female deer. Female deer may be taken only during the period Oct. 15–Jan. 31. Harvest ticket number five must be used when recording the harvest of a female deer, but may be used for recording the harvest of a male deer. Harvest tickets must be used in order except when recording a female deer on tag number five.	*July 24-Jan. 31*
The Federal public lands on Prince of Wales Island, excluding the southeastern portion (lands south of the West Arm of Cholmondeley Sound draining into Cholmondeley Sound or draining eastward into	

Clarence Strait), are closed to hunting of deer from Aug. 1 to Aug. 15, except by Federally qualified subsistence users hunting under these regulations. Non-Federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.

Proposed Federal Regulation

Unit 2—Deer

*5 **antlered** deer; ~~however, no more than one may be a female deer. Female deer may be taken only during the period Oct. 15–Jan. 31. A registration permit is required to take a female deer. Harvest ticket number five must be used when recording the harvest of a female deer, but may be used for recording the harvest of a male deer. Harvest tickets must be used in order except when recording a female deer on tag number five.~~*	*July 24-Jan. 31*

The Federal public lands on Prince of Wales Island, excluding the southeastern portion (lands south of the West Arm of Cholmondeley Sound draining into Cholmondeley Sound or draining eastward into Clarence Strait), are closed to hunting of deer from Aug. 1 to Aug. 15, except by Federally qualified subsistence users hunting under these regulations. Non-Federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.

Existing State Regulation

Unit 2 – Deer

Residents and non-residents: Four bucks	*Aug. 1 – Dec. 31*

Harvest tickets must be validated in sequential order, and unused tickets must be carried when you hunt.

Extent of Federal Public Lands

Unit 2 is comprised of 74% Federal public lands and consist of 73% U.S. Forest Service (USFS) managed lands and less than 1% U.S. Fish and Wildlife Service (USFWS) managed lands (**see Unit Map**).

Customary and Traditional Use Determinations

Rural residents of Units 1, 2, 3, 4 and 5 have a customary and traditional use determination for deer in Unit 2.

Regulatory History

Hunting regulations have permitted the harvest of deer in Unit 2 since 1925 (**Appendix 1**). During this period, season closing dates have varied between November and December, with December 31 being the most common closing date since 1988. Seasons and harvest limits for Federally qualified subsistence users in Unit 2 are more liberal than State regulations. Federal regulations have allowed the harvest of one female deer in Unit 2 since 1995, as well as the harvest of five deer beginning in 2006.

Following years of numerous Unit 2 related deer proposals (**Appendix 2**) submitted to the Federal Subsistence Board (Board), the Unit 2 Deer Planning Subcommittee (Subcommittee) was formed in 2004 to address contentious deer management issues in Unit 2. At the request of the Board, the Council established the 12-member Subcommittee to address concerns that Federally qualified subsistence users in Unit 2 were unable to harvest enough deer to meet their needs. The Subcommittee included residents of Craig, Hydaburg, Ketchikan, Petersburg, Point Baker, and Wrangell, to reflect the range of users of Unit 2 deer, along with representatives from State and Federal wildlife management agencies.

The Subcommittee developed management recommendations at a series of five public meetings held in communities that depend upon Unit 2 deer. Both Federally and non-Federally qualified users participated at these meetings. The Subcommittee recommended that deer harvest management tools could be applied in Unit 2 as deer population trends and hunting use patterns changed. The degree to which these tools would be employed would be decided through the established public regulatory processes (SEASRAC 2006).

In 2006, the Board implemented two major changes to the Unit 2 deer hunt by adopting Proposals WP06-08 and WP06-09, both with modification. Adoption of WP06-08 as modified, reopened a portion of Federal public lands to non-Federally qualified users on the southeast side of Prince of Wales Island. Adoption of WP06-09 as modified, established the current five deer harvest limit for Federally qualified subsistence users (FSB 2006). Two other proposals, WP06-06 and WP06-10, related to the use of harvest tickets in Unit 2 and were unanimously opposed by the Council and rejected by the Board (FSB 2006).

Three proposals related to Unit 2 deer were submitted from 2007-2012. Proposal WP07-07 requested the female deer season be closed, Proposal WP10-19 requested a change to the female deer season, and Proposal WP10-20 requested the August closure to non-Federally qualified users be lifted. The Council opposed and the Board rejected these proposals (FSB 2007, 2010).

Also during 2010, the Board adopted WP10-22 with modification delegating management authority for wildlife by letter to the ten District Rangers located in Units 1-5. As a result, the delegated authority in Unit 2 changed from the Tongass Forest Supervisor to the District Rangers of both the Craig and Thorne Bay Ranger Districts. For deer, their scope of delegation allows them to set harvest quotas; to close, reopen or adjust Federal subsistence deer seasons; and to adjust harvest and possession limits for that species. Most likely, this type of action would occur prior to the season. Any action greater than 60 days in length requires a public hearing before implementation. They may also close Federal Public lands to the take of this species to all users. This type of action would most likely take place during the season. Action on the proposal also removed the requirement for consultation with the both Council Chair and ADF&G, as this was already defined protocol within the Special Action process (FSB 2010).

Two proposals were considered for deer in Unit 2 in 2013. Proposal WP14-03 requested the female deer season be eliminated whereas Proposal WP14-04 asked for an earlier season to be established for Federally qualified subsistence users over the age of 60 or physically disabled. The Council unanimously opposed and the Board rejected these proposals (SEASRAC 2013; FSB 2014).

Three proposals were considered for deer in Unit 2 in 2015. Proposal WP16-01 requested a harvest limit reduction for non-Federally qualified users as well as an extension of the Federal season through the month of January. This proposal was broken into two sub-proposals by the Council who opposed the harvest limit reduction but supported the season extension with the following justifications: 1) the Unit 2 deer population was stable; 2) January harvest was a traditional practice according to testimony; 3) any additional female deer harvest was believed to be minimal and sustainable; and 4) the USFS District Ranger in Unit 2 has delegated authority to close the season early if conservation needs arise. The Board adopted the proposal as modified by the Council. Proposal WP16-05 requested removal of language regarding a harvest limit reduction during times of conservation because that authority is included by delegation to the Federal in-season manager and WP16-08 requested harvest ticket #5 be used out of sequence when harvesting a female deer. Both proposals were unanimously supported by the Council and adopted by the Board (SEASRAC 2015; FSB 2016).

Proposal WP18-01 was considered during the 2018 regulatory cycle. The proposal requested a reduction of both the season length and the harvest limit for non-Federally qualified users. The Council divided the proposal into two action items where they supported the harvest limit reduction but opposed the shortening of the season. The Board adopted the harvest limit reduction as recommended by the Council based on testimony from Federally qualified subsistence users that they were not meeting their needs. The Board rejected the season date reduction because they believed the harvest limit reduction would not provide additional benefits as harvests in December were minimal by both user groups and that subsistence users already had additional priorities available in the form of; the week in July, the closure to non-Federally qualified users in August, the ability to harvest a female deer starting October 15th, a season extension into the month of January and the ability to harvest up to five deer total (SEASRAC 2017; FSB 2018a).

Due to administrative delays in the Federal Rule Making Process, on August 8, 2018, the Board approved temporary delegated authority to some Federal land managers to enact temporary changes to Federal Subsistence Regulations adopted by the Board during the April 2018 regulatory meeting (FSB 2018b). This delegation of authority was established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6). As a result, emergency special action 13-BD-06-18 was issued on August 16, 2018 by the USFS District Ranger restricting the harvest of deer by non-Federally qualified users to two male deer on Federal Public lands in Unit 2. The action was set to expire on October 15, 2018 or when the 2018-2020 Federal Subsistence Wildlife Regulations were published in the Federal Register.

Proposal WP18-02, requesting the Customary and Traditional use determination for deer in Units 1-5 be modified to include all rural residents of Units 1-5, was also considered during the 2018 regulatory cycle. This proposal had unanimous support from the Council and was adopted by the Board as a consensus agenda item (SEASRAC 2017; FSB 2018a).

Current Events

The proponent also submitted WP20-04, -05, -06 and -07 regarding deer in Unit 2. The proponent was contacted to clarify the intent and reasoning of each proposal. The proponent stated that the overall intent was to provide the Board with a suite of management options to increase the deer population and hunter success in Unit 2. Additionally, WP20-02 was submitted by the Alaska Department of Fish and Game (ADF&G) requesting removal of the harvest limit reduction for non-Federally qualified users.

Biological Background

Sitka black-tailed deer spend the winter and early spring at low elevation on steep slopes where there is less snow accumulation, and old-growth forests provide increased intermixing of snow-intercept and foraging opportunities. Fawning occurs in late May and early June as vegetation greens-up, providing abundant forage to meet energetic needs of lactating does. Some deer migrate and follow the greening vegetation up to alpine for the summer, while others remain at lower elevations. The breeding season, or rut, generally occurs late October through late November (ADF&G 2009) generally peaking around mid- November. Wolves and black bears are the primary predators present in Unit 2, and may reduce deer populations or increase recovery times after severe winters.

Deer populations in Southeast Alaska fluctuate and are primarily influenced by winter snow depths (Olson 1979). Deer in Southeast Alaska typically have trouble meeting their energy needs in winter (Hanley and McKendrick 1985, Parker et al. 1999), and winters with long periods of deep snow that restrict the availability of forage can result in deer depleting their energy reserves to the point of starvation (Olson 1979).

Summer nutrition is important for building body reserves to sustain deer through the winter (Stewart et al. 2005). Few studies have been conducted on summer habitat conditions because winter habitat carrying capacity is generally considered to be the limiting factor for deer in Southeast Alaska. However, deer populations at or above habitat carrying capacity are affected by intra-specific competition for food and may enter winter in reduced body condition compared to deer populations

below carrying capacity (Kie et al. 2003, Stewart et al. 2005). This can result in higher susceptibility to severe winters and lower productivity (Kie et al. 2003, Stewart et al. 2005). In addition, nutritionally stressed does produce smaller and fewer fawns (Olson 1979).

Recent population indices

There are no methods to directly count deer in Southeast Alaska, so ADF&G conducts deer pellet surveys as an index to the relative abundance of the deer population. Relating pellet group data to population levels is difficult, however, because factors other than changes in deer population size can affect deer pellet-group density. Snowfall patterns influence the annual distribution and density of deer pellets, and snow persisting late into the spring at elevations below 1,500 feet limits the ability to consistently survey the same zones each year. In mild winters, deer can access forage in a greater variety of habitats, not all of which are surveyed. Conversely, in severe winters, deep snow concentrates deer (McCoy 2011).

Brinkman et al. (2013) questioned the value of pellet-group surveys for monitoring population trends due to the variability in the data compared to DNA based pellet counts. Pellet group transects were designed to detect large (>30%) changes in abundance and are not and appropriate tool for monitoring smaller year to year changes. Although pellet-group surveys remain the only widely available deer population data, the results should be interpreted with caution. Pellet-group data in Unit 2 suggests a generally increasing population trend since a low during the late 1990s and early 2000s (**Figure 1**). This contrasts with Brinkman et al. (2011) who used a DNA based technique and estimated a 30% population decrease from 2006–2008 which they attributed to three consecutive winters with deep snow. Brinkman's study was limited to three watersheds, and the population changes during the study varied by watershed. It appears that populations subsequently increased after those severe winters and Bethune (2011) felt that by 2010 the Unit 2 deer population was healthy, stable to increasing, and at a 12-15 year high.

ADF&G began testing alpine deer aerial survey techniques in 2013 (**Figure 2**). 2017 was the first year with an established protocol and consistent surveys across southeast Alaska. ADF&G is still researching the correlation between alpine surveys and actual deer populations. Aerial survey numbers seem to reflect the relative abundances expected among various locations, but correlations with population trends are unkown at this time.

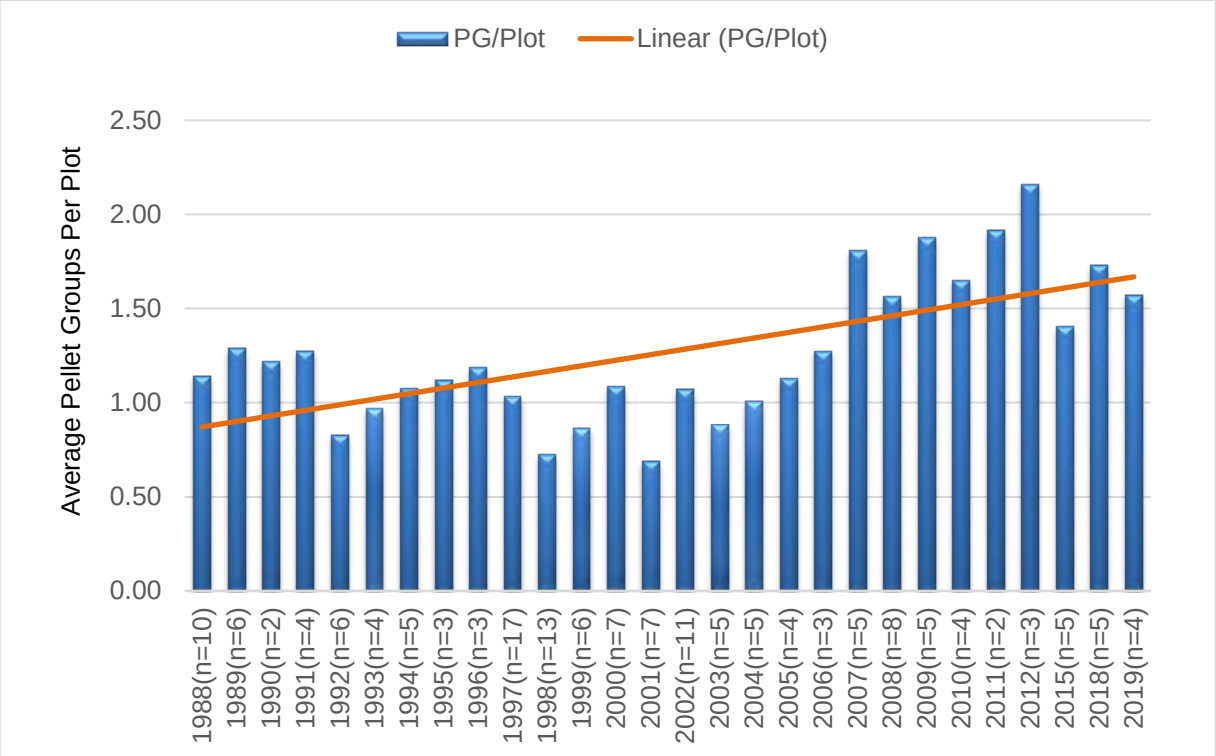

Figure 1**:** Annual average pellet group counts and general trend for deer in Unit 2 through 2019 (McCoy 2019a).

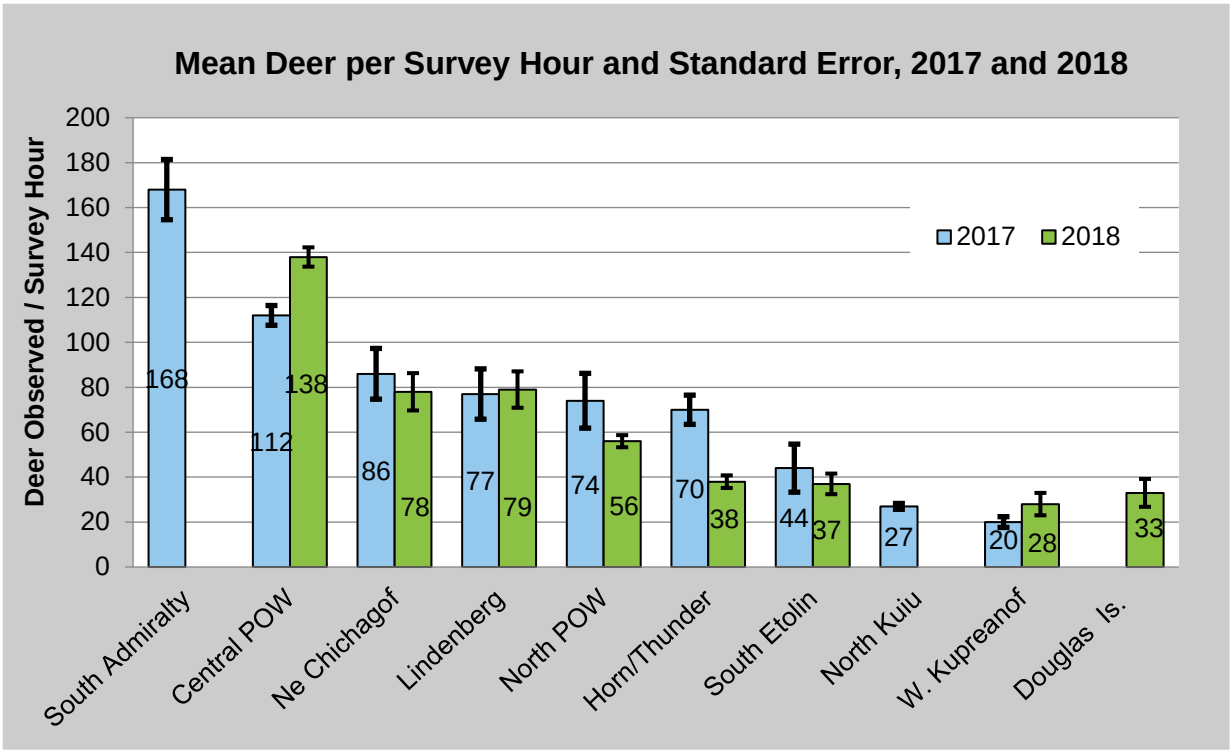

Figure 2: Aerial alpine surveys across southeast Alaska for 2017 and 2018 (McCoy 2019b).

Habitat

Old-growth forests are considered primary deer winter range, in part because the complex canopy cover allows sufficient sunlight through for forage plants to grow and intercepts snow, making it easier for deer to move and forage during winters when deep snow hinders access to other habitats. Deep snow deer winter range is defined as high value productive old growth (size class 5, 6, 7) on south facing slopes below 800 feet, and this is considered to be the limiting habitat for deer in Southeast Alaska. Some areas of Unit 2 have been impacted by large scale changes in habitat due to timber harvest, while the habitat is largely intact in other areas. Young-growth forest treatments (e.g., thinning, small gap creation, branch pruning) can benefit deer forage development in previously harvested stands. Regardless, areas with substantial timber harvest are expected to have lower long-term carrying capacity compared to pre-harvest conditions.

There is 62% of deer winter habitat remaining in GMU 2 (**Table 1**) with WAAs 1214, 1315, 1317, 1318, 1420, 1421, 1525, 1529, 1530, 1531 having below 50% habitat remaining. This is from past timber harvest and road building. In the case of a severe winter, these will be the areas hit hardest with deer mortality since there is little habitat left to sustain them. Habitat conditions would not improve as the areas harvested have reached stem exclusion which can last from 25 year post harvest to 150 years post-harvest. **Figure 3** can be used to see where the least amount of habitat remains and if you compare it to **Table 1** you can see where harvest is greatest compared to available habitat. Most wildlife analysis areas (WAA) with less than 50% deep snow deer winter habitat have the highest harvest rates.

Conditions on the ground within the last few years have remained stable because of mild winters and later arrival of snow in Unit 2 allowing the deer to forage longer at altitude and in areas such as muskegs. Prolonged snowpack during a severe winter or within later stages of winter could have a greater effect on deer populations going forward since there is far less habitat available during those periods.

Table 1: Overall percent of historical habitat since 1954 (beginning of large scale logging) remaining by wildlife analysis area (WAA) in GMU 2 for deep snow deer winter habitat and all productive old growth, average harvest since 2005, and harvest trend.

WAA	Productive Old Growth	Deep Snow Deer Winter Habitat (HPOG below 800 feet on south facing slopes)	Average Reported Harvest by WAA since 2005 and trend
901	89	85	69 ↑
902	100	100	79 ↓
1003	51	49	46 ↑
1105	99	99	84 ↑
1106	100	100	25 ↓
1107	97	93	138 ↑
1108	99	99	17 ↑
1209	100	100	10 ↑
1210	99	99	50 ↑
1211	83	78	36 ↑
1213	99	99	21 ↑
1214	67	48	245 ↑
1315	55	29	350 ↑
1316	99	100	27 ↓
1317	56	23	145 ↑
1318	78	49	220 ↑
1319	74	61	229 ↓
1323	90	76	18 ↓
1332	80	72	76 →
1420	54	27	308 ↑
1421	71	44	107 ↓
1422	51	29	386 ↓
1525	51	40	21 ↑
1526	93	83	18 ↑
1527	67	61	23 ↓
1528	82	84	37 →
1529	55	46	144 ↓
1530	50	37	145 ↑
1531	55	49	37 ↓

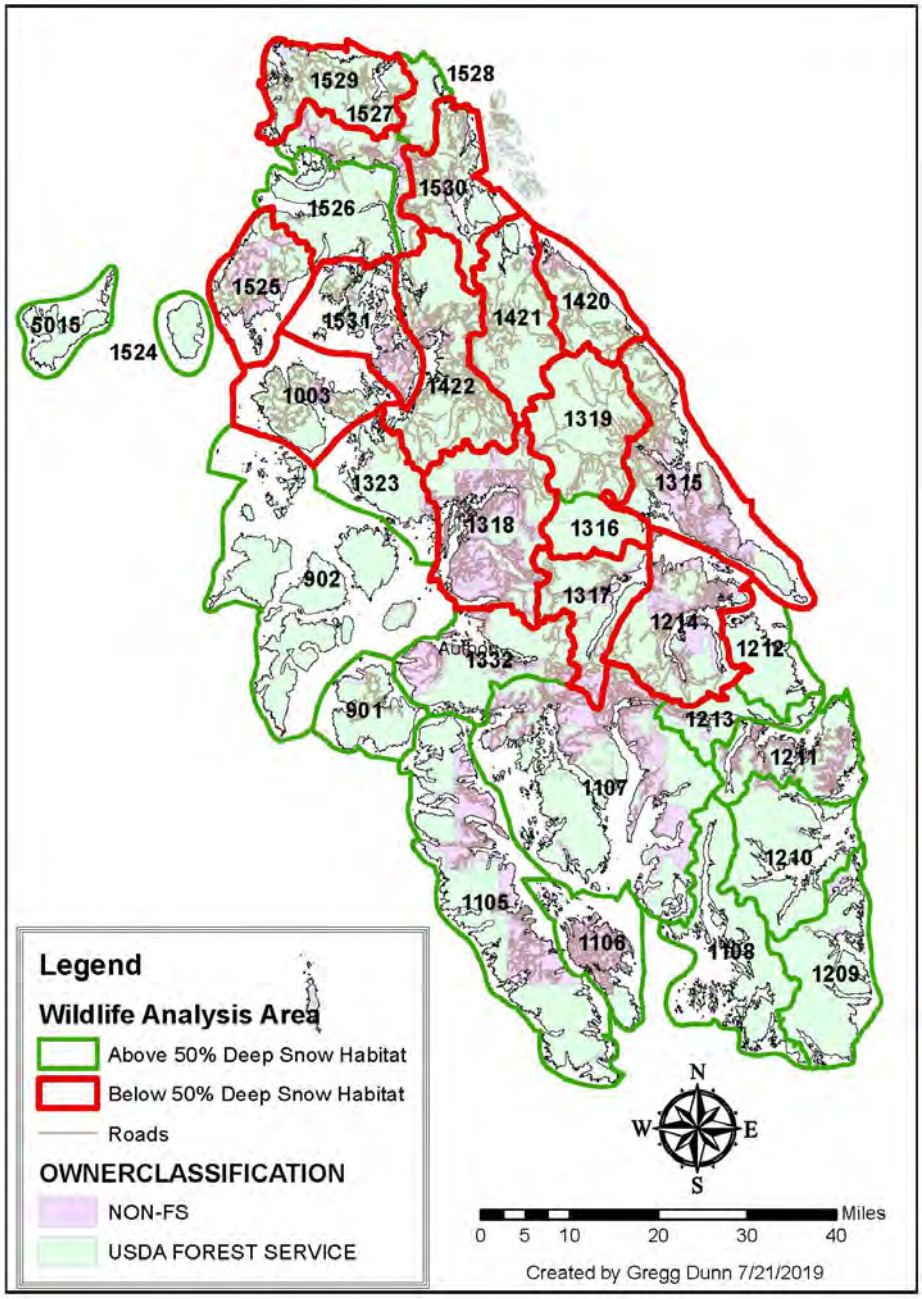

Figure 3: Map of Unit 2 showing deep snow deer winter habitat availability and where habitat is below 50% in WAAs. Note: WAA 5015 is not part of Unit 2.

Harvest History

Harvest data reported below are provided by ADF&G (McCoy 2019b) and are gathered by several reporting systems including the Region 1 (Southeast Alaska) deer survey, Unit 2 deer harvest report, and the State-wide deer harvest report. The Region 1 deer survey is the most consistent report, covering the years 1997–2010 and is based on a sample of hunters. In general, 35% of hunters from each community were sampled annually and while response rates vary by community, the overall

response rate across communities was approximately 60% each year. Harvest numbers were extrapolated using expansion factors that are calculated as the total number of harvest tickets issued to a community divided by the total number of survey responses for that community. If response was low from a community, an individual hunter may have a disproportionate effect on the data. As confidence intervals are not available for these data, harvest numbers should be considered estimates and interpreted with caution. Trends, however, should be fairly accurate, especially at larger scales. The Unit 2 deer report was in place from 2005–2010 and was instituted specifically for reporting deer harvest in Unit 2. In 2011, the statewide deer report replaced the other deer harvest reporting systems and requires reporting of harvest by all deer hunters. Different expansion factors are used for the various data sets so that total harvest estimates between years are comparable (McCoy 2013).

Action taken by the Alaska Board of Game in fall 2000 established a harvest objective of 2,700 deer for Unit 2 as they identified the population as important for satisfying high levels of human consumptive use (Bethune 2013). Estimated deer harvest in Unit 2 from 2005–2017 can be found in **Figure 4**. The estimated average total annual harvest is 3,467 deer. Harvests have been at or above ADF&G's Unit 2 harvest objective from 2005-2015 and fell below harvest objectives 2016-2017. Deer harvest and number of hunters reached historically high levels in 2015 and then began to decline through 2017.

Prior to implementation of Federal regulations, opportunity to harvest female or antlerless deer was available under State regulations from 1955-1972. From 1973-1977, opportunity for female deer was still available; however, the harvest limit was reduced. During the 1987 season, the opportunity to harvest one female deer under State regulations was re-implemented, but did not get extended due to the unpopularity of the hunt in many local communities. Harvest data for these years are not available.

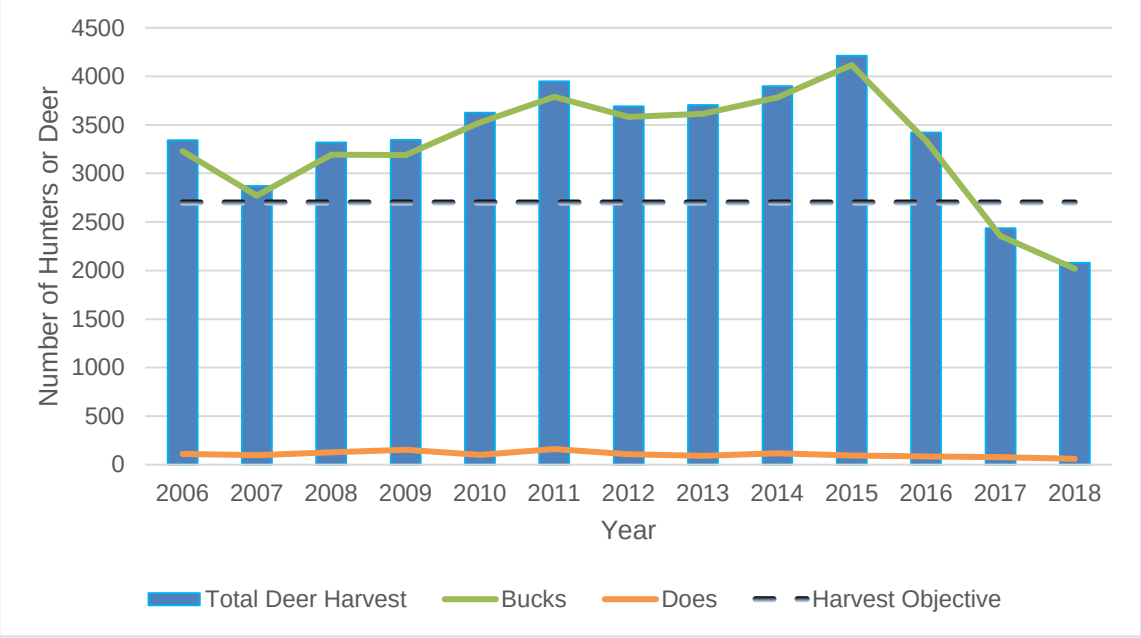

Figure 4: Unit 2 total deer harvest and numbers of does and bucks harvested through 2018 (McCoy 2019b)

Reported deer harvests of female deer in Unit 2 (**Table 2**) have ranged from 60 to 119 animals. While the average reported female deer harvest increased to 107 since 2005, the female deer harvest percentage has actually decreased to 3.2% of the total reported deer harvest.

Table 2: Female deer harvest compared to overall deer harvest, Unit 2 2005-2018 (McCoy 2019b)

Regulatory year	Female deer harvest	Total deer harvest	Percent of harvest (female)
2005	103	2642	3.9
2006	90	3105	2.9
2007	87	2795	3.1
2008	112	3222	3.5
2009	107	3145	3.4
2010	88	3428	2.6
2011	106	3746	2.8
2012	96	3696	2.6
2013	77	3677	2.1
2014	119	3931	3.0
2015	96	4243	2.3
2016	84	3534	2.4
2017	79	2433	3.2
2018	60	2079	2.9
Average	**107**	**3329**	**3.2**

Other Mortality

It is believed that Unit 2 has one of the highest illegal and unreported harvest rates in the region, estimated to be equal to the legal harvest (Table 5 in Bethune 2015). That estimate is based on anecdotal reports, interviews with law enforcement personnel, and fates of radio-collared deer. If that estimate is correct, over 4% of the estimated 75,000 deer in Unit 2 may be illegally harvested each year. This high illegal take is likely due in large part to the extensive and remote road system and few law enforcement personnel patrolling the unit.

Flynn and Suring (1989) reported that actual mortality from legal hunting could be 38% greater than the estimated harvest because of unknown or unreported crippling loss. Field observations and voluntary reports of wounding loss suggest that this estimate might be conservative.

Historically and prior to extensive road paving on the island, deer/vehicle collisions were rare (10–25 deer/year) and were not considered a significant source of mortality. However, the collision risk increased with completion in 2003 of extensive new POW highway paving projects, which now extend from Craig to Coffman Cove and east to Thorne Bay. Construction and paving of the main 30 road to Coffman Cove was completed in 2008. Construction is currently underway to extend the paved surface of Road 20 to Whale Pass. Higher vehicle speeds, as well as an attractive food source created

by planting grass for erosion control near the roads will likely cause more deer/vehicle collisions, prompting managers to raise estimates to 30-50 deer per year beginning in 2004.

Effects of the Proposal

If the proposal is adopted, harvest opportunity for Federally qualified subsistence users will decrease. Besides prohibiting the harvest of female deer, adopting the proposal also implements an antler requirement for harvesting deer which could further decrease harvest opportunity of both yearling bucks throughout the season, as well as some mature bucks later in the season that have either dropped their antlers or lose their antlers during the act of harvesting the animal. It is not uncommon in December for antlers to separate from male deer during harvest, which could unintentionally put Federally qualified subsistence users in violation of Federal regulation. The antler requirement would result in Federal regulations being more restrictive than State regulations, contrary to the rural priority mandated by ANILCA.

Buck-only harvest may alter buck/doe ratios and the age structure of the male population. It does not reduce the reproductive potential of the population because the same number of does are still bred by remaining bucks. Hunters sometimes blame declines in the number of fawns per doe on a scarcity of bucks or a lack of mature bucks available to do the breeding. However, research has failed to support a biologically meaningful relationship; the number of bucks per 100 does is unrelated to fawn recruitment the following year (Zwank 1976, Erickson et al. 2003). Therefore, harvest management of "bucks only" has the potential to maintain a larger population available for harvest, though this is subject to limiting factors such as current and future habitat carrying capacity of Unit 2 and possible severe weather events.

Adoption of the proposal could benefit deer populations by making more deer available for reproduction. While harvest data suggests that female deer harvest is on average 3.2% of the total harvest (McCoy 2019b), the data does not indicate whether harvested male deer were antlered or not. It is believed the majority of male deer taken are antlered at time of harvest, so the number of additional male deer made unavailable is most likely very low. With such low levels of additional deer made available for reproduction, adoption of the proposal will not have any positive effects on the health of deer populations in Unit 2, as deer populations are more greatly affected by available habitat and winter weather conditions rather than harvest.

OSM CONCLUSION

Oppose Proposal WP20-03.

Justification

Continued availability of the female deer season is important for maintaining harvest opportunity for Federally qualified subsistence users. During past wildlife regulatory cycles, the Board has opposed the elimination of antlerless harvest of deer in Unit 2 many times. The Board has justified this opposition as testimony has indicated the harvest of female deer is customary and traditional, and deer

populations have been stable (FSB 1995, OSM 1995). Although some smaller geographical areas in Unit 2 may have slight declines, current pellet count data suggests the majority of the deer population across Unit 2 is stable, so female deer harvest does not need to be prohibited for conservation.

Implementing an antler requirement for male deer will further reduce harvest opportunity, while potentially creating unintentional violations in Unit 2. Based on current definitions of antlered and antlerless, adopting the proposal will make the harvest of any male deer without antlers illegal, and would include any male deer that loses their antlers in the act of harvest.

Reported female deer harvest is only averaging 3.2% of the overall deer harvest in Unit 2. With such low levels of harvest, adoption of the proposal will not have any positive effects on the health of deer populations in Unit 2, as deer populations are more greatly affected by available habitat and winter weather conditions rather than harvest.

LITERATURE CITED

ADF&G. 2009. Deer Trails. Issue 1.

Bethune, S. 2011. Unit 2 deer management report. Pages 31–44 in P. Harper, editor. Deer management report of survey and inventory activities 1 July 2008-30 June 2010. ADF&G. Juneau, AK.

Bethune, S. 2013. Unit 2 deer management report. Pages 33–47 in P. Harper, editor. Deer management report of survey and inventory activities 1 July 2010-30 June 2012. ADF&G. Juneau, AK.

Bethune, S. 2015. Unit 2 deer. Chapter 4, pages 4–1 through 4–15 [In] P. Harper and L. A. McCarthy, editors. Deer management report of survey and inventory activities 1 July 2012–30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-3, Juneau.

Brinkman, T.J., D.K. Person, F.S. Chapin III, W. Smith, and K.J. Hundertmark. 2011. Estimating abundance of Sitka black-tailed deer using DNA from fecal pellets. J. Wildlife Manage. 75(1): 232–242.

Brinkman, T.J., D.K. Person, W. Smith, F.S. Chapin, III, K. McCoy, M. Leonawicz, K.J. Hundertmark. 2013. Using DNA to test the utility of pellet-group counts as an index of deer counts. Wildlife Society Bulletin; DOI: 10.1002/wsb.270.

Flynn, R. W. and L. Suring. 1989. Harvest rates of Sitka black-tailed deer populations in Southeast Alaska for land-use planning. Unpublished report.

FSB. 1995. Transcripts of Federal Subsistence Board proceedings, April 10, 1995. Office of Subsistence Management, FWS. Anchorage, AK.

FSB. 2006. Transcripts of Federal Subsistence Board proceedings, May 16, 2006. Office of Subsistence Management, FWS. Anchorage, AK.

FSB. 2007. Transcripts of Federal Subsistence Board proceedings, April 30, 2007. Office of Subsistence Management, FWS. Anchorage, AK.

FSB. 2010. Transcripts of Federal Subsistence Board proceedings, May 18, 2012. Office of Subsistence Management, FWS. Anchorage, AK.

FSB. 2014. Transcripts of Federal Subsistence Board proceedings, April 18, 2014. Office of Subsistence Management, FWS. Anchorage, AK.

FSB. 2016. Transcripts of Federal Subsistence Board proceedings, April 12, 2016. Office of Subsistence Management, FWS. Anchorage, AK.

FSB. 2018a. Transcripts of Federal Subsistence Board proceedings, April 11, 2018. Office of Subsistence Management, FWS. Anchorage, AK.

FSB. 2018b. Transcripts of Federal Subsistence Board proceedings, August 8, 2018. Office of Subsistence Management, USFWS. Anchorage, AK.

Hanley, T.A., and J.D. McKendrick. 1985. Potential nutritional limitations for black-tailed deer in a spruce-hemlock forest, Southeastern Alaska. Journal of Wildlife Management 49:103–114.

Kie, J.G., R.T. Bowyer, and K.M. Stewart. 2003. Ungulates in western forests: habitat relationships, population dynamics, and ecosystem processes. Pages 296–340 in: Zabel, C., and R. Anthony, editors. Mammal community dynamics in western coniferous forests: management and conservation. The Johns Hopkins University Press, Baltimore.

McCoy, K. 2011. Sitka black-tailed deer pellet-group surveys in southeast Alaska, 2011 report. ADF&G, Juneau, AK. 47 pages.

McCoy, K. 2013. Wildlife Biologist. Personal communication: email to J. Reeves (USFS) containing ADF&G deer pellet count data. ADF&G, Craig, AK.

McCoy, K. 2019a. Wildlife Biologist. Personal communication: email to J. Reeves (USFS) containing ADF&G deer pellet count data. ADF&G, Craig, AK.

McCoy, K. 2019b. Wildlife Biologist. Personal communication: email to G. Dunn (USFS) containing ADF&G deer harvest data. ADF&G, Sitka, AK.

Olson, S.T. 1979. The life and times of the black-tailed deer in southeast Alaska. Pages 160–168 in O.C. Wallmo and J.W. Schoen, editors. Sitka black-tailed deer: Proceedings of a conference in Juneau, Alaska. USFS, Alaska Region, in cooperation with the ADF&G. Series No. R10-48, May 1979.

OSM. 1995. Staff Analysis P95-01. Subsistence permit database –OSM Proposal Document Library. Office of Subsistence Management, FWS. Anchorage, AK. 9 pages.

Parker, K.L., M.P. Gillingham, T.A. Hanley, and C.T. Robbins. 1999. Energy and protein balance of free-ranging black-tailed deer in a natural forest environment. Wildlife Monographs 143:3–48.

Schumacher, T. 2017. Regional Management Coordinator. Personal communication: email to J. Reeves (USFS) containing ADF&G deer harvest data. ADF&G, Craig, AK.

SEASRAC. 2006. Unit 2 Deer Management Final Report from the Unit 2 Deer Planning Subcommittee of the Southeast Subsistence Regional Advisory Council.

SEASRAC. 2013. Transcripts of the Southeast Subsistence Regional Advisory Council, October 23, 2013 in Wrangell, Alaska. Office of Subsistence Management, FWS. Anchorage, AK.

SEASRAC. 2015. Transcripts of the Southeast Subsistence Regional Advisory Council, October 27, 2015 in Yakutat, Alaska. Office of Subsistence Management, FWS. Anchorage, AK.

SEASRAC. 2017. Transcripts of the Southeast Subsistence Regional Advisory Council, October 31, 2017 in Juneau, Alaska. Office of Subsistence Management, FWS. Anchorage, AK.

Stewart, K.M., R.T. Bowyer, B.L. Dick, B.K. Johnson, and J.G. Kie. 2005. Density-dependent effects on physical condition and reproduction in North American elk: an experimental test. Oecologia 143:85–93.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southeast Alaska Subsistence Regional Advisory Council

Oppose WP20-03. The Council considers the doe harvest to be customary and traditional resource use in Unit 2. At one point, the use of harvest tags was implemented in Unit 2 on Forest Service lands, which provided an accountability for does harvested but, at the same time, showed that this take does not create any conservation concerns. The Council stated that eliminating doe harvest would take away harvest opportunities from Federally qualified subsistence users and restrict them. The Council noted that the Title VIII of ANILCA specifically gives a priority to subsistence uses and, if it is necessary to restrict the taking of wildlife population, all other uses shall be restricted first.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-03: This proposal, submitted by the East Prince of Wales Fish and Game Advisory Committee, would prohibit federally qualified hunters from harvesting antlerless deer in Game Management Unit 2.

Introduction: This proposal would eliminate antlerless deer harvest from Game Management Unit 2. Current regulations allow federally qualified hunters to harvest up to one doe on federally managed lands after October 15 as part of their five deer bag limit, whereas non-federally qualified hunters are limited to harvesting two bucks on federal land and four bucks on state and private land. If this proposal is adopted, the bag limit for federally qualified hunters on federally managed lands in Unit 2 would change to 5 antlered deer. The authors aim to increase the deer population by eliminating doe harvest. From 2008-2017, annual estimated doe harvest ranged 77-119 does and was 3% of the total average estimated deer harvest. Therefore, this proposal would eliminate only a small portion of the total annual harvest.

Impact on Subsistence Users: This proposal would allow federally qualified hunters to maintain their current bag limit and season length but would limit harvest to antlered deer. This may result in slightly less harvest opportunity for federally qualified hunters.

Impact on Other Users: If adopted this proposal will have no direct impact on other users.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made positive customary and traditional use findings for Sitka black-tailed deer in Unit 2.

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for Sitka black-tailed deer in Unit 2 is 1500 - 1600 animals. The season and bag limit for deer is:

		Open Season (Permit/Hunt #)	
Unit/Area	Bag Limit	Resident	Nonresident
2	*4 bucks*	*Aug. 1 – Dec. 31* (*GD000*)	*Aug. 1 – Dec. 31* (*GD000*)

Special instructions: Evidence of sex must remain naturally attached to the meat or antlers must remain naturally attached to the entire carcass, with or without viscera. Hunters must submit a mandatory harvest report within 30 days of the close of the season.

Conservation Issues: There are no conservation concerns.

Enforcement Issues: There are no enforcement issues associate with this proposal.

Recommendation: ADF&G is **NEUTRAL** on this proposal because doe harvest averages 3% of estimated annual harvest and we do not believe there is a conservation concern. We also believe this proposal would have a negligible effect on the Unit 2 deer population.

WRITTEN PUBLIC COMMENTS

Ketchikan Advisory Committee
June 6th, 2019
ADF&G Conference Room

I. **Call to Order**: 5:40pm by Matt Allen, Secretary

II. **Roll Call**: 8 voting members present, 1 via phone
Members Present: Allen, Crittenden, Dale, James, Westlund, Roth, Shaw, Bezneck, Fox, Scoblic (Phone)
Members Absent (Excused): Doherty, McQuarrie, Skan, Franulovich, Miller
Members Absent (Unexcused):
Number Needed for Quorum on AC: 8
List of User Groups and Public Present: Public, Sportfish Charter, ADFG (Sport Fish, Wildlife)
Motion: Bezneck, motion to make **Allen** meeting Chair, **Roth**, second. 9-0 in favor. **Allen** sits as meeting Chair

III. **Approval of Agenda:**
Allen, motion to amend agenda to include discussion of Federal Subsistence Proposals 10, 11, 13,14. **Westlund** seconded. Motion passed unanimously (9-0). **Westlund**, moved to approve agenda, **Dale** seconded. Motion passed unanimously (9-0)

IV. **Approval of Previous Meeting Minutes:**
Previous meeting minutes incomplete at this time

V. **Fish and Game Staff Present:**
Kelly Reppert, Ross Dorendorf, Tessa Hasbrouck

VI. **Guests Present: Jim Moody, Nick Hashagan, Martin Caplan, Tony Azure**

VII. **Chairman Report: Allen** read co-chair letter from Scoblic/Doherty

VIII. **ADF&G Sportfish Report: Reppert**, report regarding catch and release chinook fishing. Discussion and comment followed report.

IX. **Old Business:**
Federal Subsistence Proposals 2020-2022, WP20-01-08, WP20-10-15

X. **New Business:**
Catch and Release of chinook by Charter fishermen
Set next meeting date, September 12th, 2019, 5:30pm ADFG Conference Room

Federal Subsistence Management Program
2020-2022 Wildlife Proposal Comments

Proposal Number	Proposal Description		
Support, Support as Amended, Oppose, No Action	Number Support	Number Oppose /Abstain	Comments, Discussion (list Pros and Cons), Amendments to Proposal, Voting Notes
WP20-01	Southeast, Moose, Unit 1C, Eliminate Unit 1C – Berners Bay moose hunt		
Support	8	0/1 abstain	A biological concern does not currently exist necessitating a subsistence priority. Majority of traditional use comes from Juneau area. A fair system is currently in place to provide for opportunity
WP20-02	Southeast, Deer, Unit 2, Remove harvest limits to non-federally qualified users		
Support	9	0	We support State managers in their assessment of the deer population and the opportunity it can support.
WP20-03	Southeast, Deer, Unit 2, Eliminate doe harvest		
Oppose	1	8	Though the AC does not agree with doe harvest, we do not support this proposal because it would have minimal impact.
WP20-04	Southeast, Deer, Unit 2, Revise harvest limit		
Oppose	3	6	Some AC members support cessation of doe harvest if only for a short period of time.
WP20-05	Southeast, Deer, Unit 2, Establish a registration permit for does		
Support	7	1/1	AC supports the proposal as it may lead to better data for management.
WP20-06	Southeast, Deer, Unit 2, Revise season		
Support	9	0	AC supports removal of January hunt due to small amount of harvest, reduced quality of meat and difficulty in distinguishing bucks and does.
WP20-07	Southeast, Deer, Unit 2, Revise harvest limit		
Support	9	0	
WP20-08	Statewide, All Trapping Species, Require traps or snares to be marked with name or State Identification number		
Oppose	1	8	Though some type of compromise should be reached in regards to labelling of traps/snares a one size fits all regulation could be overly burdensome in some areas
WP20-09	Southeast, Beaver, Units 1-4, Revise trapping season		
No Action			
WP20-10	Statewide, Black Bear, Units 1-5, Revise Customary and Traditional Use Determination		

Oppose	2	6	Hunting of Black Bear is not customary and traditional in all units residing in Southeast
WP20-11	Statewide, Brown Bear, Units 1-5, Revise Customary and Traditional Use Determination		
	3	4	Hunting of Brown Bear is not customary and traditional in all units residing in Southeast.
WP20-12	Southeast, Deer, Unit 3, Revise hunt areas, season dates, and harvest limits		
WP20-13	Statewide, Elk, Unit 3, Establish Customary and Traditional Use Determination		
	0	9	This is a population introduced by the State in 1986, due to this fact we do not believe this population is traditional and customary for any Unit in Southeast Alaska. The authors of this proposal do not demonstrate how this particular species in this area has been used to meet the definition as customary and traditional.
WP20-14	Statewide, Goat, Unit 1-5, Revise Customary and Traditional Use Determination		
	4	4	Hunting of Mountain Goat is not Customary and Traditional in all Units residing in Southeast.
WP20-15	Statewide, Moose, Unit 1-5, Revise Customary and Traditional Use Determination		
	0	8	Hunting of Moose is not customary and traditional in all units residing in Southeast.
WP20-16	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			
WP20-17	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			

Adjournment:

Minutes Recorded By: _____
Minutes Approved By: _____
Date: _____

APPENDIX

Appendix 1: Regulatory framework of State and Federal deer seasons by year since 1925

Year	Type of Season	Season	Limit	Conditions & Limitations
1925	Open	Sept 15-Dec 16	3	Buck, 3” antlers or longer
1925-1929	Open	Sept 1-Nov 30	3	Buck, 3” antlers or longer
1930-1941	Open	Aug 20-Nov 15	2	Buck, 3” antlers or longer
1942-1943	Resident	Sept 16-Nov 15	2	Buck, 3” antlers or longer
1942-1943	Non-resident	Sept 16-Nov 15	1	Buck, 3” antlers or longer
1944-1948	Resident	Sept 1-Nov 7	2	Buck, 3” antlers or longer
1944-1948	Non-resident	Sept 1-Nov 7	1	Buck, 3” antlers or longer
1949	Resident	Sept 1-Nov 15	2	Buck, 3” antlers or longer
1949	Non-resident	Sept 1-Nov 15	1	Buck, 3” antlers or longer
1950-1951	Resident	Aug 20-Nov 15	2	Buck, 3” antlers or longer
1950-1951	Non-resident	Aug 20-Nov 15	1	Buck, 3” antlers or longer
1952	Open	Aug 20-Nov 22	2	Buck, 3” antlers or longer
1953-1954	Open	Aug 20-Nov 22	3	Buck, 3” antlers or longer
1955	Open	Aug 20-Nov 22	3	3 bucks or 2 bucks and one antlerless, bucks 3” antlers or longer, antlerless may be taken Nov 15-Nov 22
1956	Open	Aug 20-Nov 26	3	3 bucks or 2 bucks and one antlerless, bucks 3” antlers or longer, antlerless may be taken Nov 13-Nov 26
1957-1959	Open	Aug 20-Nov 30	4	4 deer, does may be taken Oct 15-Nov 30
1960	Open	Aug 20-Dec 15	4	4 deer, does may be taken Oct 15-Nov 30

Year	Type of Season	Season	Limit	Conditions & Limitations
1961	Open	Aug 20-Nov 30	4	4 deer, antlerless deer may be taken Sept 15-Nov 30
1962	Open	Aug 1-Dec 15	4	4 deer, antlerless deer may be taken Sept 15-Dec 15
1963-1967	Open	Aug 1-Dec 31	4	4 deer, antlerless deer may be taken Sept 15-Dec 31
1968	Open	Aug 1-Dec 15	4	4 deer, antlerless deer may be taken Sept 15-Dec 15
1969-1971	Open	Aug 1-Dec 31	4	4 deer, antlerless deer may be taken Sept 15-Dec 31
1972	Open	Aug 1-Dec 31	3	3 deer, antlerless deer may be taken Nov 1-Nov 30
1973-1977	Open	Aug 1-Nov 30	3	1 antlerless deer may be taken Nov 1-Nov 30
1978-1984	Open	Aug 1-Nov 30	3	Antlered deer
1985-1986	State General	Aug 1-Nov 30	3	Antlered deer
1987	State General	Aug 1-Nov 30	4	1 antlerless deer may be taken Oct 10-Oct 31
1988-2018	State General	Aug 1-Dec 31	4	Antlered deer/bucks
1991-1994	Federal Subsistence	Aug 1-Dec 31	4	Antlered deer
1995-1997	Federal Subsistence	Aug 1-Dec 31	4	No more than one may be an antlerless deer, antlerless deer may be taken only during Oct 15-Dec 31
1998-2002	Federal Subsistence	Aug 1-Dec 31	4	No more than one may be an antlerless deer, antlerless deer may be taken Oct 15-Dec 31 by Federal registration permit only

Year	Type of Season	Season	Limit	Conditions & Limitations
2003-2005	Federal Subsistence	July 24-Dec 31	4	No more than one may be an antlerless deer, antlerless deer may be taken Oct 15-Dec 31 by Federal registration permit only
2006-2009	Federal Subsistence	July 24-Dec 31	5	No more than one may be an antlerless deer; antlerless deer may be taken Oct 15-Dec 31
2010-2015	Federal Subsistence	July 24-Dec 31	5	No more than one may be a female deer; female deer may be taken Oct 15-Dec 31
2016-2018	Federal Subsistence	July 24-Jan 31	5	No more than one may be a female deer; female deer may be taken Oct 15-Jan 31.

Appendix 2: History of Federal regulatory actions related to deer in Unit 2 taken by the Federal Subsistence Board

Proposal number	Reg Year	FSB action	Proposal request
P95-01	1995	Adopt w/ mod to require harvest report requirement	Create an antlerless season in Unit 2
R95-09	1995	Reject	Requested rescinding antlerless deer season created by adoption of P95-01
P97-07	1997	Reject	Reduce deer season from Aug. 1-Dec. 31 to Sept. 1-Dec. 31, and eliminate harvest of antlerless deer in Unit 2.
P98-09	1998	Reject	Eliminate antlerless season
P98-10	1998	Reject	Eliminate antlerless season and apply antler restriction of forked horn or larger
P98-11	1998	Reject	Shorten deer season from Sept 1 -Nov. 30
P98-12	1998	Reject	Eliminate antlerless season
P00-005	2000	Reject	Eliminate antlerless season

Proposal number	Reg Year	FSB action	Proposal request
P00-05	2000	Reject	Eliminate antlerless deer season
P00-06	2000	Reject	Community harvest permit request of 500 deer per Unit 2 community
WP01-03	2001	Reject	Eliminate antlerless deer season
WP02-08	2002	Reject	Request increase of deer harvest limit for Unit 2 residents and reduction for Unit 1A and 3 residents
WP02-09	2002	Took no action	Restrict non-Federally qualified users from hunting on Federal lands between Aug. 1-31 and Oct. 16-Nov. 14
WRFR02-01	2002	Reject	Requested reconsideration of the Board rejecting WP02-09 to close Federal lands in Unit 2.
WP03-04	2003	Adopt with modification adding one week in July at front of season (July 24-31)	Requested earlier extension of deer season for Federally qualified users
WP03-05	2003	Adopt with modification restricting non-Federally qualified users from Aug 1-21 on Federal Public Lands on Prince of Wales Island (closure for 1 year)	Requested closure of Federal public lands from Aug 1-Sept. 1 and reduction of harvest limit to 2 deer for non-Federally qualified subsistence users.
WP04-03	2004	Took no action	Requested closure be changed from Aug 1-21 to Oct. 16-Nov. 14 and reduction of harvest limit for non-Federally qualified users
WP04-04	2004	Took no action	Requested antlerless deer season be modified from Oct. 15-Dec. 31 to Aug. 1-Sept. 15
WP04-05	2004	Took no action	Requested closure to non-Federally qualified users be reduced by one week
WP04-06	2004	Took no action	Requested elimination of August closure to non-Federally qualified users.
WP04-07	2004	Took no action	Requested elimination of August closure to non-Federally qualified users.

Proposal number	Reg Year	FSB action	Proposal request
WP04-08	2004	Took no action	Requested elimination of August closure to non-Federally qualified users.
WP04-09	2004	Took no action	Requested removal of the antlerless deer season and the July 24 start date for subsistence users and to replace closure with antler restrictions for non-Federally qualified users.
WP04-10	2004	Took no action	Requested removal of the antlerless deer season and the July 24 start date for subsistence users and to replace closure with a 3 buck harvest limit for non-Federally qualified users.
WP04-11	2004	Took no action	Requested removal of the July 24 start date for subsistence users and to modify closure from Aug. 1-21 to Oct. 16-Dec. 31 and implement a 2 buck harvest limit for non-Federally qualified users.
WP04-12	2004	Took no action	Requested modifying Federal season from July 24-Dec. 31 to Aug. 1-Jan. 31 for subsistence users and modified the August closure to the month of January to all but Unit 2 residents
WP04-13	2004	Took no action	Requested modifying Federal season from July 24-Dec. 31 to Aug. 1-10 and removing the antlerless deer season for subsistence users and reducing the August closure from Aug. 1-10 for non-Federally qualified users.
WP04-14	2004	Took no action	Reduce deer season from July24-Dec. 31 to Aug. 1-Dec. 31for Federally qualified users in Unit 2.
WP04-15	2004	Adopt with modification restricting non-Federally qualified users from Aug 1-15 on Federal Public Lands on Prince of Wales Island	Requested continuation of the one year closure as passed by the FSB during the 2003 regulatory cycle.

Proposal number	Reg Year	FSB action	Proposal request
WP05-04	2005	Adopt with modification removing registration requirement, but required use of a joint State/Federal harvest report as recommended by the Unit 2 Deer Subcommittee	Requested that all hunters obtain a Federal registration permit to hunt deer in Unit 2.
WP06-06	2006	Reject	Requested removing sequential use of harvest tickets and possession of all unused harvest ticket requirements.
WP06-07	2006	Took no action	Requested expansion of closure area to non-Federally qualified users.
WP06-08	2006	Adopt with modificaton. Modifications included: 1) removal of the August clousure on SE portion of Prince of Wales Island; 2) rejected closure to non-Federally qualified users on Suemez Island; and 3) rejected a closure to non-Federally qualified users on the islands located along the SW coast of Prince of Wales Island.	Requested expansion of closure area to non-Federally qualified users.
WP06-09	2006	Adopt with modification. The Board modified the Council recommendation by eliminating the need to have a Federal permit for harvesting a 5th deer. The Board also delegated the Forest Supervisor the ability to lower the harvest limit to 4 deer if needed.	Requested increasing the deer harvest limit to 6 deer.
WP06-10	2006	Reject	Requested use of harvest ticket #1 to record harvest of a female deer.
WP07-07	2007	Reject	Requested either elimination of antlerless deer hunt or to only allow for antlerless deer harvest every other year.
WP10-19	2010	Reject	Requested modification of female deer season from Oct. 15-Dec. 31 to Sept. 15-Oct. 15
WP10-20	2010	Reject	Requested modification of the non-Federally qualified closure from Aug. 1-15 to July 24-31.
WSA11-01	2011	Adopted	To rescind requirement of joint State/Federal harvest report

Proposal number	Reg Year	FSB action	Proposal request
WP12-08	2012	Adopted	To rescind requirement of joint State/Federal harvest report
WP14-03	2014	Reject	Eliminate antlerless deer season
WP14-04	2014	Reject	Request early start date for Federally qualified users over 60 or disabled.
WP16-01	2016	Adopt with mod adding January season, but rejected non-qualified harvest reduction	Requested non-Federally qualified users be restricted to two deer and extension season closing date from Dec. 31 to Jan. 31
WP16-05	2016	Adopted	Requests the language stating the Unit 2 deer harvest limit may be reduced to four deer in times of conservation be removed
WP16-08	2016	Adopted	Requests deer harvest ticket #5 be validated out of sequence to record female deer taken in Unit 2.
WP18-01	2018	Adopt w/ mod to accept harvest limit restriction but oppose season reduction	Limit harvest to two deer from Federal public lands the reduce season by one week or more for non-Federally qualified subsistence users
WP18-02	2018	Adopted	Requested modification of deer C&T for Units 1-5 to all rural residents of Units 1-5.

WP20–04 Executive Summary	
General Description	Proposal WP20–04 requests the elimination of female deer harvest and to only harvest antlered deer for one regulatory cycle in Unit 2. *Submitted by: East Prince of Wales Fish and Game Advisory Committee.*
Proposed Regulation	**Unit 2—Deer** *5 **antlered** deer; however**, unless otherwise specified,** no more than one may be a female deer. ~~Female deer may be taken only during the period Oct. 15–Jan. 31.~~ **From July 1st, 2020 until June 30th, 2022 the harvest of female deer is prohibited. Beginning July 1, 2022, female deer may be taken only during the period Oct. 15–Jan. 31.** Harvest ticket number five must be used when recording the harvest of a female deer, but may be used for recording the harvest of a male deer. Harvest tickets must be used in order except when recording a female deer on tag number five.* — *July 24 – Jan. 31* *The Federal public lands on Prince of Wales Island, excluding the southeastern portion (lands south of the West Arm of Cholmondeley Sound draining into Cholmondeley Sound or draining eastward into Clarence Strait), are closed to hunting of deer from Aug. 1 to Aug. 15, except by Federally qualified subsistence users hunting under these regulations. Non-Federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.*
OSM Conclusion	**Oppose**
Southeast Alaska Subsistence Regional Advisory Council Recommendation	**Oppose**

WP20–04 Executive Summary	
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**1 Oppose**

STAFF ANALYSIS
WP20-04

ISSUES

Wildlife Proposal WP20-04, submitted by the East Prince of Wales Fish and Game Advisory Committee, requests that Unit 2 deer harvest be changed to five antlered deer for the 2020-2022 regulatory cycle, after which the harvest of one female deer per season be permitted after October 15 if five subsistence deer have not been harvested.

DISCUSSION

The proponent believes the change is desperately needed to allow for future harvest of deer on Prince of Wales Island. For several years, the predator populations have been drastically increasing, while the deer populations have been decreasing. The harvest data shows over 4,500 deer were harvested in 2015 in Unit 2. The harvest decreased to fewer than 2,500 deer by 2017. The estimated reported doe harvest was almost 100 in 2015 and was reduced to 80 in 2017.

The proponent offers that all users of Unit 2 have expressed a concern for the low deer population in recent years. The Alaska Board of Game recently adopted regulations to increase the harvest of wolf and black bear on Prince of Wales. The next step is for the deer to re-populate. In doing so, the harvest of does cannot occur. The doe season will have a negative effect on rebuilding the deer population in Unit 2. A healthy deer population is a key part of life on Prince of Wales Island.

With very little support for the doe harvest to continue, the regulation needs to be changed to read for an antlered deer harvest only during the next regulation cycle of July 1, 2020 through June 30, 2022. This closure will aid in rebuilding the Unit 2 deer population and automatically allow the take of one female deer beginning October 15, 2022. The proponent desires the doe hunt be automatically reintroduced after Jun. 30, 2022 if a hunter has not already harvested five antlered deer.

Existing Federal Regulation

Unit 2—Deer

5 deer; however, no more than one may be a female deer. Female deer may be taken only during the period Oct. 15–Jan. 31. Harvest ticket number five must be used when recording the harvest of a female deer, but may be used for recording the harvest of a male deer. Harvest tickets must be used in order except when recording a female deer on tag number five.	*July 24-Jan. 31*

The Federal public lands on Prince of Wales Island, excluding the southeastern portion (lands south of the West Arm of Cholmondeley Sound draining into Cholmondeley Sound or draining eastward into Clarence Strait), are closed to hunting of deer from Aug. 1 to Aug. 15, except by Federally qualified subsistence users hunting under these regulations. Non-Federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.

Proposed Federal Regulation

Unit 2—Deer

5 ***antlered*** *deer; however****, unless otherwise specified,*** *no more than one may be a female deer.* ~~*Female deer may be taken only during the period Oct. 15–Jan. 31.*~~ ***From July 1st, 2020 until June 30th, 2022 the harvest of female deer is prohibited. Beginning July 1, 2022, female deer may be taken only during the period Oct. 15–Jan. 31.*** *Harvest ticket number five must be used when recording the harvest of a female deer, but may be used for recording the harvest of a male deer. Harvest tickets must be used in order except when recording a female deer on tag number five.*	*July 24-Jan. 31*

The Federal public lands on Prince of Wales Island, excluding the southeastern portion (lands south of the West Arm of Cholmondeley Sound draining into Cholmondeley Sound or draining eastward into Clarence Strait), are closed to hunting of deer from Aug. 1 to Aug. 15, except by Federally qualified subsistence users hunting under these regulations. Non-Federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.

Existing State Regulation

Unit 2 – Deer

Residents and non-residents: Four bucks	*Aug. 1 – Dec. 31*

Harvest tickets must be validated in sequential order, and unused tickets must be carried when you hunt.

Extent of Federal Public Lands

Unit 2 is comprised of 74% Federal public lands and consist of 73% U.S. Forest Service (USFS) managed lands and less than 1% U.S. Fish and Wildlife Service (USFWS) managed lands (**see Unit Map**).

Customary and Traditional Use Determinations

Rural residents of Units 1, 2, 3, 4 and 5 have a customary and traditional use determination for deer in Unit 2.

Regulatory History

Hunting regulations have permitted the harvest of deer in Unit 2 since 1925 (**Appendix 1**). During this period, season closing dates have varied between November and December, with December 31 being the most common closing date since 1988. Seasons and harvest limits for Federally qualified subsistence users in Unit 2 are more liberal than State regulations. Federal regulations have allowed the harvest of one female deer in Unit 2 since 1995, as well as the harvest of five deer beginning in 2006.

Following years of numerous Unit 2 related deer proposals (**Appendix 2**) submitted to the Federal Subsistence Board (Board), the Unit 2 Deer Planning Subcommittee (Subcommittee) was formed in 2004 to address contentious deer management issues in Unit 2. At the request of the Board, the Council established the 12-member Subcommittee to address concerns that Federally qualified subsistence users in Unit 2 were unable to harvest enough deer to meet their needs. The Subcommittee included residents of Craig, Hydaburg, Ketchikan, Petersburg, Point Baker, and Wrangell, to reflect the range of users of Unit 2 deer, along with representatives from State and Federal wildlife management agencies.

The Subcommittee developed management recommendations at a series of five public meetings held in communities that depend upon Unit 2 deer. Both Federally and non-Federally qualified users participated at these meetings. The Subcommittee recommended that deer harvest management tools could be applied in Unit 2 as deer population trends and hunting use patterns changed. The degree to which these tools would be employed would be decided through the established public regulatory processes (SEASRAC 2006).

In 2006, the Board implemented two major changes to the Unit 2 deer hunt by adopting Proposals WP06-08 and WP06-09, both with modification. Adoption of WP06-08 as modified, reopened a portion of Federal public lands to non-Federally qualified users on the southeast side of Prince of Wales Island. Adoption of WP06-09 as modified, established the current five deer harvest limit for Federally qualified subsistence users (FSB 2006). Two other proposals, WP06-06 and WP06-10, related to the use of harvest tickets in Unit 2 and were unanimously opposed by the Council and rejected by the Board (FSB 2006).

Three proposals related to Unit 2 deer were submitted from 2007-2012. Proposal WP07-07 requested the female deer season be closed, Proposal WP10-19 requested a change to the female deer season, and Proposal WP10-20 requested the August closure to non-Federally qualified users be lifted. The Council opposed and the Board rejected these proposals (FSB 2007, 2010).

Also during 2010, the Board adopted WP10-22 with modification delegating management authority for wildlife by letter to the ten District Rangers located in Units 1-5. As a result, the delegated authority in Unit 2 changed from the Tongass Forest Supervisor to the District Rangers of both the Craig and Thorne Bay Ranger Districts. For deer, their scope of delegation allows them to set harvest quotas; to close, reopen or adjust Federal subsistence deer seasons; and to adjust harvest and possession limits for that species. Most likely, this type of action would occur prior to the season. Any action greater than 60 days in length requires a public hearing before implementation. They may also close Federal Public lands to the take of this species to all users. This type of action would most likely take place during the season. Action on the proposal also removed the requirement for consultation with the both Council Chair and ADF&G, as this was already defined protocol within the Special Action process (FSB 2010).

Two proposals were considered for deer in Unit 2 in 2013. Proposal WP14-03 requested the female deer season be eliminated whereas Proposal WP14-04 asked for an earlier season to be established for Federally qualified subsistence users over the age of 60 or physically disabled. The Council unanimously opposed and the Board rejected these proposals (SEASRAC 2013; FSB 2014).

Three proposals were considered for deer in Unit 2 in 2015. Proposal WP16-01 requested a harvest limit reduction for non-Federally qualified users as well as an extension of the Federal season through the month of January. This proposal was broken into two sub-proposals by the Council who opposed the harvest limit reduction but supported the season extension with the following justifications: 1) the Unit 2 deer population was stable; 2) January harvest was a traditional practice according to testimony; 3) any additional female deer harvest was believed to be minimal and sustainable; and 4) the USFS District Ranger in Unit 2 has delegated authority to close the season early if conservation needs arise. The Board adopted the proposal as modified by the Council. Proposal WP16-05 requested removal of language regarding a harvest limit reduction during times of conservation because that authority is included by delegation to the Federal in-season manager and WP16-08 requested harvest ticket #5 be used out of sequence when harvesting a female deer. Both proposals were unanimously supported by the Council and adopted by the Board (SEASRAC 2015; FSB 2016).

Proposal WP18-01 was considered during the 2018 regulatory cycle. The proposal requested a reduction of both the season length and the harvest limit for non-Federally qualified users. The Council divided the proposal into two action items where they supported the harvest limit reduction but opposed the shortening of the season. The Board adopted the harvest limit reduction as recommended by the Council based on testimony from Federally qualified subsistence users that they were not meeting their needs. The Board rejected the season date reduction because they believed the harvest limit reduction would not provide additional benefits as harvests in December were minimal by both user groups and that subsistence users already had additional priorities available in the form of; the

week in July, the closure to non-Federally qualified users in August, the ability to harvest a female deer starting October 15th, a season extension into the month of January and the ability to harvest up to five deer total (SEASRAC 2017; FSB 2018a).

Due to administrative delays in the Federal Rule Making Process, on August 8, 2018, the Board approved temporary delegated authority to some Federal land managers to enact temporary changes to Federal Subsistence Regulations adopted by the Board during the April 2018 regulatory meeting (FSB 2018b). This delegation of authority was established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6). As a result, emergency special action 13-BD-06-18 was issued on August 16, 2018 by the USFS District Ranger restricting the harvest of deer by non-Federally qualified users to two male deer on Federal Public lands in Unit 2. The action was set to expire on October 15, 2018 or when the 2018-2020 Federal Subsistence Wildlife Regulations were published in the Federal Register.

Proposal WP18-02, requesting the Customary and Traditional use determination for deer in Units 1-5 be modified to include all rural residents of Units 1-5, was also considered during the 2018 regulatory cycle. This proposal had unanimous support from the Council and was adopted by the Board as a consensus agenda item (SEASRAC 2017; FSB 2018a).

Current Events

The proponent also submitted WP20-03, -05, -06 and -07 regarding deer in Unit 2. The proponent was contacted to clarify the intent and reasoning of each proposal. The proponent stated that the overall intent was to provide the Board with a suite of management options to increase the deer population and hunter success in Unit 2. Additionally, WP20-02 was submitted by the Alaska Department of Fish and Game (ADF&G) requesting removal of the harvest limit reduction for non-Federally qualified users.

Biological Background

Sitka black-tailed deer spend the winter and early spring at low elevation on steep slopes where there is less snow accumulation, and old-growth forests provide increased intermixing of snow-intercept and foraging opportunities. Fawning occurs in late May and early June as vegetation greens-up, providing abundant forage to meet energetic needs of lactating does. Some deer migrate and follow the greening vegetation up to alpine for the summer, while others remain at lower elevations. The breeding season, or rut, generally occurs late October through late November (ADF&G 2009) generally peaking around mid- November. Wolves and black bears are the primary predators present in Unit 2, and may reduce deer populations or increase recovery times after severe winters.

Deer populations in Southeast Alaska fluctuate and are primarily influenced by winter snow depths (Olson 1979). Deer in Southeast Alaska typically have trouble meeting their energy needs in winter (Hanley and McKendrick 1985, Parker et al. 1999), and winters with long periods of deep snow that restrict the availability of forage can result in deer depleting their energy reserves to the point of starvation (Olson 1979).

Summer nutrition is important for building body reserves to sustain deer through the winter (Stewart et al. 2005). Few studies have been conducted on summer habitat conditions because winter habitat carrying capacity is generally considered to be the limiting factor for deer in Southeast Alaska. However, deer populations at or above habitat carrying capacity are affected by intra-specific competition for food and may enter winter in reduced body condition compared to deer populations below carrying capacity (Kie et al. 2003, Stewart et al. 2005). This can result in higher susceptibility to severe winters and lower productivity (Kie et al. 2003, Stewart et al. 2005). In addition, nutritionally stressed does produce smaller and fewer fawns (Olson 1979).

Recent population indices

There are no methods to directly count deer in Southeast Alaska, so ADF&G conducts deer pellet surveys as an index to the relative abundance of the deer population. Relating pellet group data to population levels is difficult, however, because factors other than changes in deer population size can affect deer pellet-group density. Snowfall patterns influence the annual distribution and density of deer pellets, and snow persisting late into the spring at elevations below 1,500 feet limits the ability to consistently survey the same zones each year. In mild winters, deer can access forage in a greater variety of habitats, not all of which are surveyed. Conversely, in severe winters, deep snow concentrates deer (McCoy 2011).

Brinkman et al. (2013) questioned the value of pellet-group surveys for monitoring population trends due to the variability in the data compared to DNA based pellet counts. Pellet group transects were designed to detect large (>30%) changes in abundance and are not and appropriate tool for monitoring smaller year to year changes. Although pellet-group surveys remain the only widely available deer population data, the results should be interpreted with caution. Pellet-group data in Unit 2 suggests a generally increasing population trend since a low during the late 1990s and early 2000s (**Figure 1**). This contrasts with Brinkman et al. (2011) who used a DNA based technique and estimated a 30% population decrease from 2006–2008 which they attributed to three consecutive winters with deep snow. Brinkman's study was limited to three watersheds, and the population changes during the study varied by watershed. It appears that populations subsequently increased after those severe winters and Bethune (2011) felt that by 2010 the Unit 2 deer population was healthy, stable to increasing, and at a 12-15 year high.

ADF&G began testing alpine deer aerial survey techniques in 2013 (**Figure 2**). 2017 was the first year with an established protocol and consistent surveys across southeast Alaska. ADF&G is still researching the correlation between alpine surveys and actual deer populations. Aerial survey numbers seem to reflect the relative abundances expected among various locations, but correlations with population trends are unkown at this time.

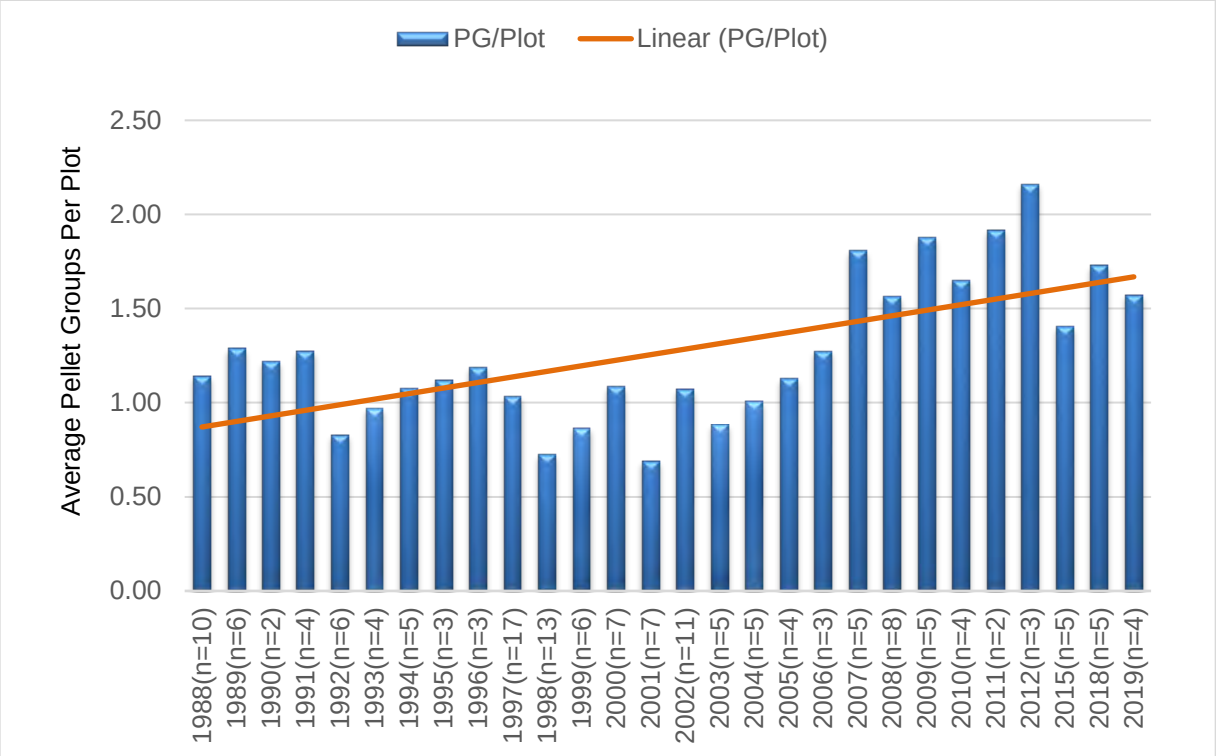

Figure 1**:** Annual average pellet group counts and general trend for deer in Unit 2 through 2019 (McCoy 2019a).

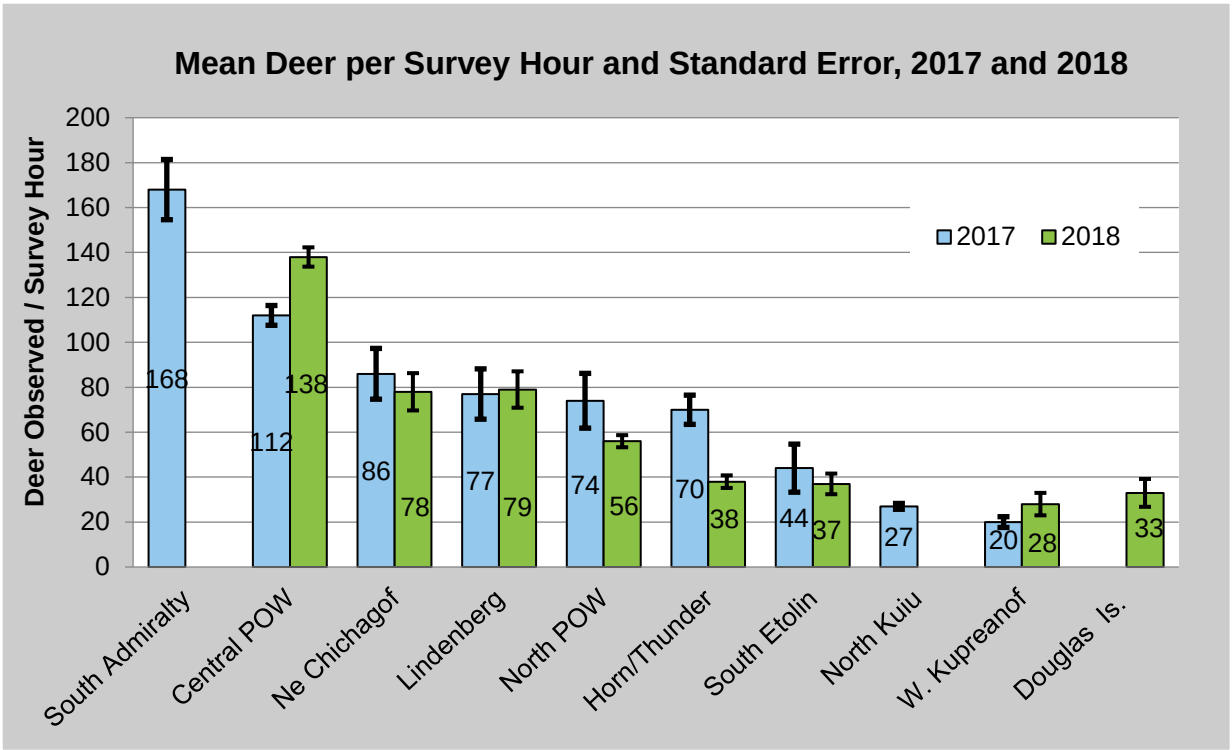

Figure 2: Aerial alpine surveys across southeast Alaska for 2017 and 2018 (McCoy 2019b).

Habitat

Old-growth forests are considered primary deer winter range, in part because the complex canopy cover allows sufficient sunlight through for forage plants to grow and intercepts snow, making it easier for deer to move and forage during winters when deep snow hinders access to other habitats. Deep snow deer winter range is defined as high value productive old growth (size class 5, 6, 7) on south facing slopes below 800 feet, and this is considered to be the limiting habitat for deer in Southeast Alaska. Some areas of Unit 2 have been impacted by large scale changes in habitat due to timber harvest, while the habitat is largely intact in other areas. Young-growth forest treatments (e.g., thinning, small gap creation, branch pruning) can benefit deer forage development in previously harvested stands. Regardless, areas with substantial timber harvest are expected to have lower long-term carrying capacity compared to pre-harvest conditions.

There is 62% of deer winter habitat remaining in GMU 2 (**Table 1**) with WAAs 1214, 1315, 1317, 1318, 1420, 1421, 1525, 1529, 1530, 1531 having below 50% habitat remaining. This is from past timber harvest and road building. In the case of a severe winter, these will be the areas hit hardest with deer mortality since there is little habitat left to sustain them. Habitat conditions would not improve as the areas harvested have reached stem exclusion which can last from 25 year post harvest to 150 years post-harvest. **Figure 3** can be used to see where the least amount of habitat remains and if you compare it to **Table 1** you can see where harvest is greatest compared to available habitat. Most wildlife analysis areas (WAA) with less than 50% deep snow deer winter habitat have the highest harvest rates.

Conditions on the ground within the last few years have remained stable because of mild winters and later arrival of snow in Unit 2 allowing the deer to forage longer at altitude and in areas such as muskegs. Prolonged snowpack during a severe winter or within later stages of winter could have a greater effect on deer populations going forward since there is far less habitat available during those periods.

Table 1: Overall percent of historical habitat since 1954 (beginning of large scale logging) remaining by wildlife analysis area (WAA) in GMU 2 for deep snow deer winter habitat and all productive old growth, average harvest since 2005, and harvest trend.

WAA	Productive Old Growth	Deep Snow Deer Winter Habitat (HPOG below 800 feet on south facing slopes)	Average Reported Harvest by WAA since 2005 and trend
901	89	85	69 ↑
902	100	100	79 ↓
1003	51	49	46 ↑
1105	99	99	84 ↑
1106	100	100	25 ↓
1107	97	93	138 ↑
1108	99	99	17 ↑
1209	100	100	10 ↑
1210	99	99	50 ↑
1211	83	78	36 ↑
1213	99	99	21 ↑
1214	67	48	245 ↑
1315	55	29	350 ↑
1316	99	100	27 ↓
1317	56	23	145 ↑
1318	78	49	220 ↑
1319	74	61	229 ↓
1323	90	76	18 ↓
1332	80	72	76 →
1420	54	27	308 ↑
1421	71	44	107 ↓
1422	51	29	386 ↓
1525	51	40	21 ↑
1526	93	83	18 ↑
1527	67	61	23 ↓
1528	82	84	37 →
1529	55	46	144 ↓
1530	50	37	145 ↑
1531	55	49	37 ↓

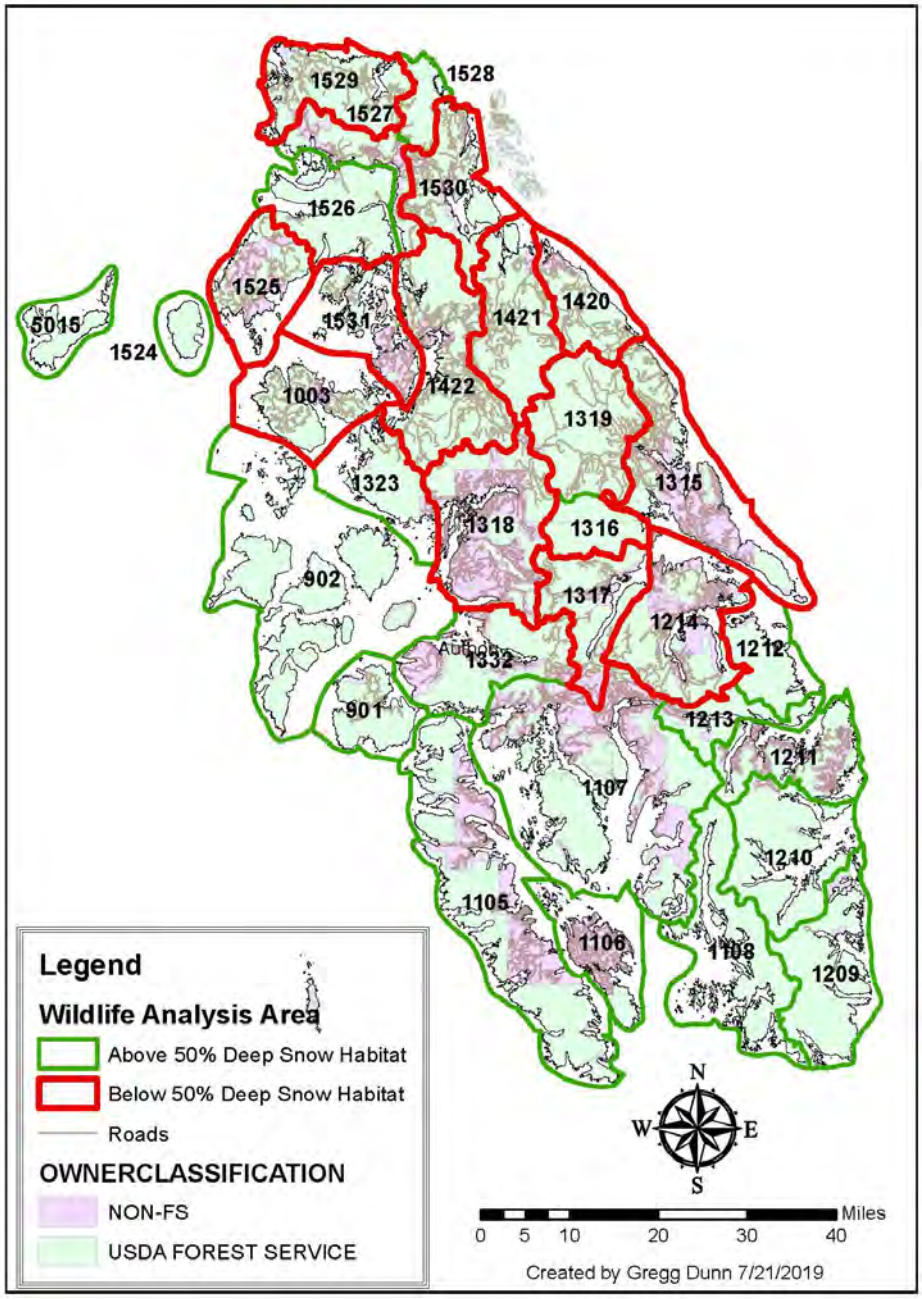

Figure 3: Map of Unit 2 showing deep snow deer winter habitat availability and where habitat is below 50% in WAAs. Note: WAA 5015 is not part of Unit 2.

Harvest History

Harvest data reported below are provided by ADF&G (McCoy 2019b) and are gathered by several reporting systems including the Region 1 (Southeast Alaska) deer survey, Unit 2 deer harvest report, and the State-wide deer harvest report. The Region 1 deer survey is the most consistent report, covering the years 1997–2010 and is based on a sample of hunters. In general, 35% of hunters from each community were sampled annually and while response rates vary by community, the overall

response rate across communities was approximately 60% each year. Harvest numbers were extrapolated using expansion factors that are calculated as the total number of harvest tickets issued to a community divided by the total number of survey responses for that community. If response was low from a community, an individual hunter may have a disproportionate effect on the data. As confidence intervals are not available for these data, harvest numbers should be considered estimates and interpreted with caution. Trends, however, should be fairly accurate, especially at larger scales. The Unit 2 deer report was in place from 2005–2010 and was instituted specifically for reporting deer harvest in Unit 2. In 2011, the statewide deer report replaced the other deer harvest reporting systems and requires reporting of harvest by all deer hunters. Different expansion factors are used for the various data sets so that total harvest estimates between years are comparable (McCoy 2013).

Action taken by the Alaska Board of Game in fall 2000 established a harvest objective of 2,700 deer for Unit 2 as they identified the population as important for satisfying high levels of human consumptive use (Bethune 2013). Estimated deer harvest in Unit 2 from 2005–2017 can be found in **Figure 4**. The estimated average total annual harvest is 3,467 deer. Harvests have been at or above ADF&G's Unit 2 harvest objective from 2005-2015 and fell below harvest objectives 2016-2017. Deer harvest and number of hunters reached historically high levels in 2015 and then began to decline through 2017.

Prior to implementation of Federal regulations, opportunity to harvest female or antlerless deer was available under State regulations from 1955-1972. From 1973-1977, opportunity for female deer was still available; however, the harvest limit was reduced. During the 1987 season, the opportunity to harvest one female deer under State regulations was re-implemented, but did not get extended due to the unpopularity of the hunt in many local communities. Harvest data for these years are not available.

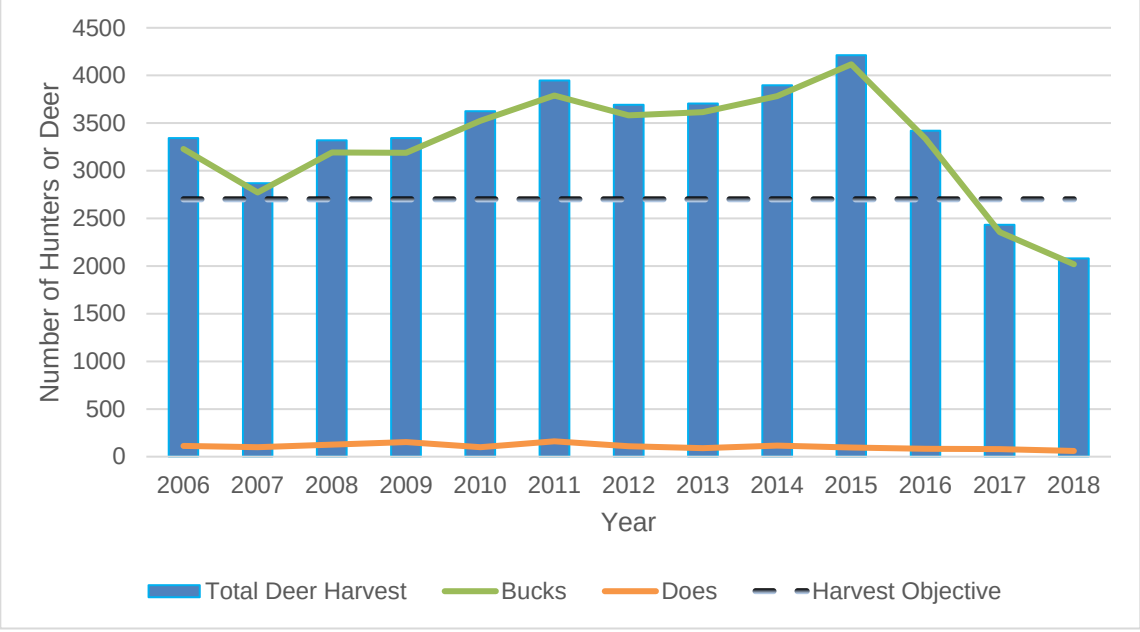

Figure 4: Unit 2 total deer harvest and numbers of does and bucks harvested through 2018 (McCoy 2019b)

Reported deer harvests of female deer in Unit 2 (**Table 2**) have ranged from 60 to 119 animals. While the average reported female deer harvest increased to 107 since 2005, the female deer harvest percentage has actually decreased to 3.2% of the total reported deer harvest.

Table 2: Female deer harvest compared to overall deer harvest, Unit 2 2005-2018 (McCoy 2019b)

Regulatory year	Female deer harvest	Total deer harvest	Percent of harvest (female)
2005	103	2642	3.9
2006	90	3105	2.9
2007	87	2795	3.1
2008	112	3222	3.5
2009	107	3145	3.4
2010	88	3428	2.6
2011	106	3746	2.8
2012	96	3696	2.6
2013	77	3677	2.1
2014	119	3931	3.0
2015	96	4243	2.3
2016	84	3534	2.4
2017	79	2433	3.2
2018	60	2079	2.9
Average	**107**	**3329**	**3.2**

Other Mortality

It is believed that Unit 2 has one of the highest illegal and unreported harvest rates in the region, estimated to be equal to the legal harvest (Table 5 in Bethune 2015). That estimate is based on anecdotal reports, interviews with law enforcement personnel, and fates of radio-collared deer. If that estimate is correct, over 4% of the estimated 75,000 deer in Unit 2 may be illegally harvested each year. This high illegal take is likely due in large part to the extensive and remote road system and few law enforcement personnel patrolling the unit.

Flynn and Suring (1989) reported that actual mortality from legal hunting could be 38% greater than the estimated harvest because of unknown or unreported crippling loss. Field observations and voluntary reports of wounding loss suggest that this estimate might be conservative.

Historically and prior to extensive road paving on the island, deer/vehicle collisions were rare (10–25 deer/year) and were not considered a significant source of mortality. However, the collision risk increased with completion in 2003 of extensive new POW highway paving projects, which now extend from Craig to Coffman Cove and east to Thorne Bay. Construction and paving of the main 30 road to Coffman Cove was completed in 2008. Construction is currently underway to extend the paved surface of Road 20 to Whale Pass. Higher vehicle speeds, as well as an attractive food source created

by planting grass for erosion control near the roads will likely cause more deer/vehicle collisions, prompting managers to raise estimates to 30-50 deer per year beginning in 2004.

Effects of the Proposal

If the proposal is adopted, harvest opportunity for Federally qualified subsistence users will decrease. Besides prohibiting the harvest of female deer, adopting the proposal also implements an antler requirement for harvesting deer which could further decrease harvest opportunity of both yearling bucks throughout the season, as well as some mature bucks later in the season that have either dropped their antlers or lose their antlers during the act of harvesting the animal. It is not uncommon in December for antlers to separate from male deer during harvest, which could unintentionally put Federally qualified subsistence users in violation of Federal regulation. The antler requirement would result in Federal regulations being more restrictive than State regulations, contrary to the rural priority mandated by ANILCA.

Buck-only harvest may alter buck/doe ratios and the age structure of the male population. It does not reduce the reproductive potential of the population because the same number of does are still bred by remaining bucks. Hunters sometimes blame declines in the number of fawns per doe on a scarcity of bucks or a lack of mature bucks available to do the breeding. However, research has failed to support a biologically meaningful relationship; the number of bucks per 100 does is unrelated to fawn recruitment the following year (Zwank 1976, Erickson et al. 2003). Therefore, harvest management of "bucks only" has the potential to maintain a larger population available for harvest, though this is subject to limiting factors such as current and future habitat carrying capacity of Unit 2 and possible severe weather events.

Adoption of the proposal could benefit deer populations by making more deer available for reproduction. While harvest data suggests that female deer harvest is on average 3.2% of the total harvest (McCoy 2019b), the data does not indicate whether harvested male deer were antlered or not. It is believed the majority of male deer taken are antlered at time of harvest, so the number of additional male deer made unavailable is most likely very low. With such low levels of additional deer made available for reproduction, adoption of the proposal will not have any positive effects on the health of deer populations in Unit 2, as deer populations are more greatly affected by available habitat and winter weather conditions rather than harvest.

OSM CONCLUSION

Oppose Proposal WP20-04.

Justification

Continued availability of the female deer season is important for maintaining harvest opportunity for Federally qualified subsistence users. During past wildlife regulatory cycles, the Board has opposed the elimination of antlerless harvest of deer in Unit 2 many times. The Board has justified this opposition as testimony has indicated the harvest of female deer is customary and traditional, and deer

populations have been stable (FSB 1995, OSM 1995). Although some smaller geographical areas in Unit 2 may have slight declines, current pellet count data suggests the majority of the deer population across Unit 2 is stable, so female deer harvest does not need to be prohibited for conservation.

Implementing an antler requirement for male deer will further reduce harvest opportunity, while potentially creating unintentional violations in Unit 2. Based on current definitions of antlered and antlerless, adopting the proposal will make the harvest of any male deer without antlers illegal, and would include any male deer that loses their antlers in the act of harvest.

Reported female deer harvest is only averaging 3.2% of the overall deer harvest in Unit 2. With such low levels of harvest, adoption of the proposal will not have any positive effects on the health of deer populations in Unit 2, as deer populations are more greatly affected by available habitat and winter weather conditions rather than harvest.

LITERATURE CITED

ADF&G. 2009. Deer Trails. Issue 1.

Bethune, S. 2011. Unit 2 deer management report. Pages 31–44 in P. Harper, editor. Deer management report of survey and inventory activities 1 July 2008-30 June 2010. ADF&G. Juneau, AK.

Bethune, S. 2013. Unit 2 deer management report. Pages 33–47 in P. Harper, editor. Deer management report of survey and inventory activities 1 July 2010-30 June 2012. ADF&G. Juneau, AK.

Bethune, S. 2015. Unit 2 deer. Chapter 4, pages 4–1 through 4–15 [In] P. Harper and L. A. McCarthy, editors. Deer management report of survey and inventory activities 1 July 2012–30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-3, Juneau.

Brinkman, T.J., D.K. Person, F.S. Chapin III, W. Smith, and K.J. Hundertmark. 2011. Estimating abundance of Sitka black-tailed deer using DNA from fecal pellets. J. Wildlife Manage. 75(1): 232–242.

Brinkman, T.J., D.K. Person, W. Smith, F.S. Chapin, III, K. McCoy, M. Leonawicz, K.J. Hundertmark. 2013. Using DNA to test the utility of pellet-group counts as an index of deer counts. Wildlife Society Bulletin; DOI: 10.1002/wsb.270.

Flynn, R. W. and L. Suring. 1989. Harvest rates of Sitka black-tailed deer populations in Southeast Alaska for land-use planning. Unpublished report.

FSB. 2006. Transcripts of Federal Subsistence Board proceedings, May 16, 2006. Office of Subsistence Management, FWS. Anchorage, AK.

FSB. 2007. Transcripts of Federal Subsistence Board proceedings, April 30, 2007. Office of Subsistence Management, FWS. Anchorage, AK.

FSB. 2010. Transcripts of Federal Subsistence Board proceedings, May 18, 2012. Office of Subsistence Management, FWS. Anchorage, AK.

FSB. 2014. Transcripts of Federal Subsistence Board proceedings, April 18, 2014. Office of Subsistence Management, FWS. Anchorage, AK.

FSB. 2016. Transcripts of Federal Subsistence Board proceedings, April 12, 2016. Office of Subsistence Management, FWS. Anchorage, AK.

FSB. 2018. Transcripts of Federal Subsistence Board proceedings, April 11, 2018. Office of Subsistence Management, FWS. Anchorage, AK.

Hanley, T.A., and J.D. McKendrick. 1985. Potential nutritional limitations for black-tailed deer in a spruce-hemlock forest, Southeastern Alaska. Journal of Wildlife Management 49:103–114.

Kie, J.G., R.T. Bowyer, and K.M. Stewart. 2003. Ungulates in western forests: habitat relationships, population dynamics, and ecosystem processes. Pages 296–340 in: Zabel, C., and R. Anthony, editors. Mammal community dynamics in western coniferous forests: management and conservation. The Johns Hopkins University Press, Baltimore.

McCoy, K. 2011. Sitka black-tailed deer pellet-group surveys in southeast Alaska, 2011 report. ADF&G, Juneau, AK. 47 pages.

McCoy, K. 2013. Wildlife Biologist. Personal communication: email to J. Reeves (USFS) containing ADF&G deer pellet count data. ADF&G, Craig, AK.

McCoy, K. 2019a. Wildlife Biologist. Personal communication: email to J. Reeves (USFS) containing ADF&G deer pellet count data. ADF&G, Craig, AK.

McCoy, K. 2019b. Wildlife Biologist. Personal communication: email to G. Dunn (USFS) containing ADF&G deer harvest data. ADF&G, Sitka, AK.

Olson, S.T. 1979. The life and times of the black-tailed deer in southeast Alaska. Pages 160–168 in O.C. Wallmo and J.W. Schoen, editors. Sitka black-tailed deer: Proceedings of a conference in Juneau, Alaska. USFS, Alaska Region, in cooperation with the ADF&G. Series No. R10-48, May 1979.

Parker, K.L., M.P. Gillingham, T.A. Hanley, and C.T. Robbins. 1999. Energy and protein balance of free-ranging black-tailed deer in a natural forest environment. Wildlife Monographs 143:3–48.

Schumacher, T. 2017. Regional Management Coordinator. Personal communication: email to J. Reeves (USFS) containing ADF&G deer harvest data. ADF&G, Craig, AK.

SEASRAC. 2006. Unit 2 Deer Management Final Report from the Unit 2 Deer Planning Subcommittee of the Southeast Subsistence Regional Advisory Council.

SEASRAC. 2013. Transcripts of the Southeast Subsistence Regional Advisory Council, October 23, 2013 in Wrangell, Alaska. Office of Subsistence Management, FWS. Anchorage, AK.

SEASRAC. 2015. Transcripts of the Southeast Subsistence Regional Advisory Council, October 27, 2015 in Yakutat, Alaska. Office of Subsistence Management, FWS. Anchorage, AK.

SEASRAC. 2017. Transcripts of the Southeast Subsistence Regional Advisory Council, October 31, 2017 in Juneau, Alaska. Office of Subsistence Management, FWS. Anchorage, AK.

Stewart, K.M., R.T. Bowyer, B.L. Dick, B.K. Johnson, and J.G. Kie. 2005. Density-dependent effects on physical condition and reproduction in North American elk: an experimental test. Oecologia 143:85–93.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southeast Alaska Subsistence Regional Advisory Council

Oppose WP20-04. The Council felt that while it is possible to put a regulation in place that would only apply for two seasons, this was an unusual request and not a normal part of the Council's business or wildlife management. There are mechanisms in ANILCA Title VIII to eliminate all other users should the resource become diminished to the point requiring a restriction and then bag limits would be limited for local rural users. It is expected that biologists and people with traditional ecological knowledge will watch for this so it never gets to that point. The Council also noted that much of the analysis points given in its justification for recommendation on WP20-02 would apply to this proposal as well.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-04: This proposal, submitted by the East Prince of Wales Fish and Game Advisory Committee, would prohibit federally qualified hunters from harvesting does or antlerless bucks in Game Management Unit 2 for the next 2 regulatory years (RY2020- RY2021).

Introduction: Current regulations allow federally qualified hunters to harvest one doe after October 15 on federally managed lands in Unit 2 as part of their five deer bag limit, whereas non-federally qualified hunters are limited to harvesting two bucks on federal land and four bucks on private or state land. If this proposal is adopted, the bag limit for federally qualified hunters on federally managed lands in Unit 2 would change to 5 antlered deer during RYs 2020 and 2021 and in RY 2022 automatically revert to the current harvest regulations. The proponent's goal is to increase the deer population by eliminating doe harvest. From 2008-2017, annual reported doe harvest ranged 77-119 and was 3% of the total estimate average deer harvest. This proposal would impact a small portion of the harvested deer in Unit 2 and it is unlikely that a quantifiable increase in deer population would occur within this timeframe.

Impact on Subsistence Users: This proposal would allow federally qualified hunters to maintain their current bag limit and season length but would limit harvest to five antlered deer during the next two regulatory years. This may reduce harvest opportunity for a small portion (about 3%) of federally qualified hunters who harvest does or antlerless bucks.

Impact on Other Users: If adopted this proposal will have no direct impact on other users.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made positive customary and traditional use findings for Sitka black-tailed deer in Unit 2.

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for Sitka black-tailed deer in Unit 2 is 1,500 – 1,600 animals. The season and bag limit for deer is:

		Open Season (Permit/Hunt #)	
Unit/Area	Bag Limit	Resident	Nonresident
2	*4 bucks*	*Aug. 1 – Dec. 31* (*GD000*)	*Aug. 1 – Dec. 31* (*GD000*)

Special instructions: Evidence of sex must remain naturally attached to the meat or antlers must remain naturally attached to the entire carcass, with or without viscera. Hunters must submit a mandatory harvest report within 30 days of the close of the season.

Conservation Issues: None.

Enforcement Issues: None.

Recommendation: ADF&G is **NEUTRAL** on this proposal because we believe the proposed action would have no measurable effect on the Unit 2 deer population.

WRITTEN PUBLIC COMMENTS

Ketchikan Advisory Committee
June 6th, 2019
ADF&G Conference Room

I. **Call to Order**: 5:40pm by Matt Allen, Secretary

II. **Roll Call**: 8 voting members present, 1 via phone
Members Present: Allen, Crittenden, Dale, James, Westlund, Roth, Shaw, Bezneck, Fox, Scoblic (Phone)
Members Absent (Excused): Doherty, McQuarrie, Skan, Franulovich, Miller
Members Absent (Unexcused):
Number Needed for Quorum on AC: 8
List of User Groups and Public Present: Public, Sportfish Charter, ADFG (Sport Fish, Wildlife)
Motion: Bezneck, motion to make **Allen** meeting Chair, **Roth**, second. 9-0 in favor. **Allen** sits as meeting Chair

III. **Approval of Agenda:**
Allen, motion to amend agenda to include discussion of Federal Subsistence Proposals 10, 11, 13,14. **Westlund** seconded. Motion passed unanimously (9-0). **Westlund**, moved to approve agenda, **Dale** seconded. Motion passed unanimously (9-0)

IV. **Approval of Previous Meeting Minutes:**
Previous meeting minutes incomplete at this time

V. **Fish and Game Staff Present:**
Kelly Reppert, Ross Dorendorf, Tessa Hasbrouck

VI. **Guests Present: Jim Moody, Nick Hashagan, Martin Caplan, Tony Azure**

VII. **Chairman Report: Allen** read co-chair letter from Scoblic/Doherty

VIII. **ADF&G Sportfish Report: Reppert**, report regarding catch and release chinook fishing. Discussion and comment followed report.

IX. **Old Business:**
Federal Subsistence Proposals 2020-2022, WP20-01-08, WP20-10-15

X. **New Business:**
Catch and Release of chinook by Charter fishermen
Set next meeting date, September 12th, 2019, 5:30pm ADFG Conference Room

Federal Subsistence Management Program
2020-2022 Wildlife Proposal Comments

Proposal Number	Proposal Description		
Support, Support as Amended, Oppose, No Action	**Number Support**	**Number Oppose /Abstain**	**Comments, Discussion (list Pros and Cons), Amendments to Proposal, Voting Notes**
WP20-01	Southeast, Moose, Unit 1C, Eliminate Unit 1C – Berners Bay moose hunt		
Support	8	0/1 abstain	A biological concern does not currently exist necessitating a subsistence priority. Majority of traditional use comes from Juneau area. A fair system is currently in place to provide for opportunity
WP20-02	Southeast, Deer, Unit 2, Remove harvest limits to non-federally qualified users		
Support	9	0	We support State managers in their assessment of the deer population and the opportunity it can support.
WP20-03	Southeast, Deer, Unit 2, Eliminate doe harvest		
Oppose	1	8	Though the AC does not agree with doe harvest, we do not support this proposal because it would have minimal impact.
WP20-04	Southeast, Deer, Unit 2, Revise harvest limit		
Oppose	3	6	Some AC members support cessation of doe harvest if only for a short period of time.
WP20-05	Southeast, Deer, Unit 2, Establish a registration permit for does		
Support	7	1/1	AC supports the proposal as it may lead to better data for management.
WP20-06	Southeast, Deer, Unit 2, Revise season		
Support	9	0	AC supports removal of January hunt due to small amount of harvest, reduced quality of meat and difficulty in distinguishing bucks and does.
WP20-07	Southeast, Deer, Unit 2, Revise harvest limit		
Support	9	0	
WP20-08	Statewide, All Trapping Species, Require traps or snares to be marked with name or State Identification number		
Oppose	1	8	Though some type of compromise should be reached in regards to labelling of traps/snares a one size fits all regulation could be overly burdensome in some areas
WP20-09	Southeast, Beaver, Units 1-4, Revise trapping season		
No Action			
WP20-10	Statewide, Black Bear, Units 1-5, Revise Customary and Traditional Use Determination		

Oppose	2	6	Hunting of Black Bear is not customary and traditional in all units residing in Southeast
WP20-11	Statewide, Brown Bear, Units 1-5, Revise Customary and Traditional Use Determination		
	3	4	Hunting of Brown Bear is not customary and traditional in all units residing in Southeast.
WP20-12	Southeast, Deer, Unit 3, Revise hunt areas, season dates, and harvest limits		
WP20-13	Statewide, Elk, Unit 3, Establish Customary and Traditional Use Determination		
	0	9	This is a population introduced by the State in 1986, due to this fact we do not believe this population is traditional and customary for any Unit in Southeast Alaska. The authors of this proposal do not demonstrate how this particular species in this area has been used to meet the definition as customary and traditional.
WP20-14	Statewide, Goat, Unit 1-5, Revise Customary and Traditional Use Determination		
	4	4	Hunting of Mountain Goat is not Customary and Traditional in all Units residing in Southeast.
WP20-15	Statewide, Moose, Unit 1-5, Revise Customary and Traditional Use Determination		
	0	8	Hunting of Moose is not customary and traditional in all units residing in Southeast.
WP20-16	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			
WP20-17	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			

Adjournment:

Minutes Recorded By: _____
Minutes Approved By: _____
Date: _____

APPENDIX

Appendix 1: Regulatory framework of State and Federal deer seasons by year since 1925

Year	Type of Season	Season	Limit	Conditions & Limitations
1925	Open	Sept 15-Dec 16	3	Buck, 3" antlers or longer
1925-1929	Open	Sept 1-Nov 30	3	Buck, 3" antlers or longer
1930-1941	Open	Aug 20-Nov 15	2	Buck, 3" antlers or longer
1942-1943	Resident	Sept 16-Nov 15	2	Buck, 3" antlers or longer
1942-1943	Non-resident	Sept 16-Nov 15	1	Buck, 3" antlers or longer
1944-1948	Resident	Sept 1-Nov 7	2	Buck, 3" antlers or longer
1944-1948	Non-resident	Sept 1-Nov 7	1	Buck, 3" antlers or longer
1949	Resident	Sept 1-Nov 15	2	Buck, 3" antlers or longer
1949	Non-resident	Sept 1-Nov 15	1	Buck, 3" antlers or longer
1950-1951	Resident	Aug 20-Nov 15	2	Buck, 3" antlers or longer
1950-1951	Non-resident	Aug 20-Nov 15	1	Buck, 3" antlers or longer
1952	Open	Aug 20-Nov 22	2	Buck, 3" antlers or longer
1953-1954	Open	Aug 20-Nov 22	3	Buck, 3" antlers or longer
1955	Open	Aug 20-Nov 22	3	3 bucks or 2 bucks and one antlerless, bucks 3" antlers or longer, antlerless may be taken Nov 15-Nov 22
1956	Open	Aug 20-Nov 26	3	3 bucks or 2 bucks and one antlerless, bucks 3" antlers or longer, antlerless may be taken Nov 13-Nov 26
1957-1959	Open	Aug 20-Nov 30	4	4 deer, does may be taken Oct 15-Nov 30
1960	Open	Aug 20-Dec 15	4	4 deer, does may be taken Oct 15-Nov 30

Year	Type of Season	Season	Limit	Conditions & Limitations
1961	Open	Aug 20-Nov 30	4	4 deer, antlerless deer may be taken Sept 15-Nov 30
1962	Open	Aug 1-Dec 15	4	4 deer, antlerless deer may be taken Sept 15-Dec 15
1963-1967	Open	Aug 1-Dec 31	4	4 deer, antlerless deer may be taken Sept 15-Dec 31
1968	Open	Aug 1-Dec 15	4	4 deer, antlerless deer may be taken Sept 15-Dec 15
1969-1971	Open	Aug 1-Dec 31	4	4 deer, antlerless deer may be taken Sept 15-Dec 31
1972	Open	Aug 1-Dec 31	3	3 deer, antlerless deer may be taken Nov 1-Nov 30
1973-1977	Open	Aug 1-Nov 30	3	1 antlerless deer may be taken Nov 1-Nov 30
1978-1984	Open	Aug 1-Nov 30	3	Antlered deer
1985-1986	State General	Aug 1-Nov 30	3	Antlered deer
1987	State General	Aug 1-Nov 30	4	1 antlerless deer may be taken Oct 10-Oct 31
1988-2018	State General	Aug 1-Dec 31	4	Antlered deer/bucks
1991-1994	Federal Subsistence	Aug 1-Dec 31	4	Antlered deer
1995-1997	Federal Subsistence	Aug 1-Dec 31	4	No more than one may be an antlerless deer, antlerless deer may be taken only during Oct 15-Dec 31
1998-2002	Federal Subsistence	Aug 1-Dec 31	4	No more than one may be an antlerless deer, antlerless deer may be taken Oct 15-Dec 31 by Federal registration permit only

Year	Type of Season	Season	Limit	Conditions & Limitations
2003-2005	Federal Subsistence	July 24-Dec 31	4	No more than one may be an antlerless deer, antlerless deer may be taken Oct 15-Dec 31 by Federal registration permit only
2006-2009	Federal Subsistence	July 24-Dec 31	5	No more than one may be an antlerless deer; antlerless deer may be taken Oct 15-Dec 31
2010-2015	Federal Subsistence	July 24-Dec 31	5	No more than one may be a female deer; female deer may be taken Oct 15-Dec 31
2016-2018	Federal Subsistence	July 24-Jan 31	5	No more than one may be a female deer; female deer may be taken Oct 15-Jan 31.

Appendix 2: History of Federal regulatory actions related to deer in Unit 2 taken by the Federal Subsistence Board

Proposal number	Reg Year	FSB action	Proposal request
P95-01	1995	Adopt w/ mod to require harvest report requirement	Create an antlerless season in Unit 2
R95-09	1995	Reject	Requested rescinding antlerless deer season created by adoption of P95-01
P97-07	1997	Reject	Reduce deer season from Aug. 1-Dec. 31 to Sept. 1-Dec. 31, and eliminate harvest of antlerless deer in Unit 2.
P98-09	1998	Reject	Eliminate antlerless season
P98-10	1998	Reject	Eliminate antlerless season and apply antler restriction of forked horn or larger
P98-11	1998	Reject	Shorten deer season from Sept 1 -Nov. 30
P98-12	1998	Reject	Eliminate antlerless season
P00-005	2000	Reject	Eliminate antlerless season

Proposal number	Reg Year	FSB action	Proposal request
P00-05	2000	Reject	Eliminate antlerless deer season
P00-06	2000	Reject	Community harvest permit request of 500 deer per Unit 2 community
WP01-03	2001	Reject	Eliminate antlerless deer season
WP02-08	2002	Reject	Request increase of deer harvest limit for Unit 2 residents and reduction for Unit 1A and 3 residents
WP02-09	2002	Took no action	Restrict non-Federally qualified users from hunting on Federal lands between Aug. 1-31 and Oct. 16-Nov. 14
WRFR02-01	2002	Reject	Requested reconsideration of the Board rejecting WP02-09 to close Federal lands in Unit 2.
WP03-04	2003	Adopt with modification adding one week in July at front of season (July 24-31)	Requested earlier extension of deer season for Federally qualified users
WP03-05	2003	Adopt with modification restricting non-Federally qualified users from Aug 1-21 on Federal Public Lands on Prince of Wales Island (closure for 1 year)	Requested closure of Federal public lands from Aug 1-Sept. 1 and reduction of harvest limit to 2 deer for non-Federally qualified subsistence users.
WP04-03	2004	Took no action	Requested closure be changed from Aug 1-21 to Oct. 16-Nov. 14 and reduction of harvest limit for non-Federally qualified users
WP04-04	2004	Took no action	Requested antlerless deer season be modified from Oct. 15-Dec. 31 to Aug. 1-Sept. 15
WP04-05	2004	Took no action	Requested closure to non-Federally qualified users be reduced by one week
WP04-06	2004	Took no action	Requested elimination of August closure to non-Federally qualified users.
WP04-07	2004	Took no action	Requested elimination of August closure to non-Federally qualified users.

Proposal number	Reg Year	FSB action	Proposal request
WP04-08	2004	Took no action	Requested elimination of August closure to non-Federally qualified users.
WP04-09	2004	Took no action	Requested removal of the antlerless deer season and the July 24 start date for subsistence users and to replace closure with antler restrictions for non-Federally qualified users.
WP04-10	2004	Took no action	Requested removal of the antlerless deer season and the July 24 start date for subsistence users and to replace closure with a 3 buck harvest limit for non-Federally qualified users.
WP04-11	2004	Took no action	Requested removal of the July 24 start date for subsistence users and to modify closure from Aug. 1-21 to Oct. 16-Dec. 31 and implement a 2 buck harvest limit for non-Federally qualified users.
WP04-12	2004	Took no action	Requested modifying Federal season from July 24-Dec. 31 to Aug. 1-Jan. 31 for subsistence users and modified the August closure to the month of January to all but Unit 2 residents
WP04-13	2004	Took no action	Requested modifying Federal season from July 24-Dec. 31 to Aug. 1-10 and removing the antlerless deer season for subsistence users and reducing the August closure from Aug. 1-10 for non-Federally qualified users.
WP04-14	2004	Took no action	Reduce deer season from July24-Dec. 31 to Aug. 1-Dec. 31for Federally qualified users in Unit 2.
WP04-15	2004	Adopt with modification restricting non-Federally qualified users from Aug 1-15 on Federal Public Lands on Prince of Wales Island	Requested continuation of the one year closure as passed by the FSB during the 2003 regulatory cycle.

Proposal number	Reg Year	FSB action	Proposal request
WP05-04	2005	Adopt with modification removing registration requirement, but required use of a joint State/Federal harvest report as recommended by the Unit 2 Deer Subcommittee	Requested that all hunters obtain a Federal registration permit to hunt deer in Unit 2.
WP06-06	2006	Reject	Requested removing sequential use of harvest tickets and possession of all unused harvest ticket requirements.
WP06-07	2006	Took no action	Requested expansion of closure area to non-Federally qualified users.
WP06-08	2006	Adopt with modificaton. Modifications included: 1) removal of the August clousure on SE portion of Prince of Wales Island; 2) rejected closure to non-Federally qualified users on Suemez Island; and 3) rejected a closure to non-Federally qualified users on the islands located along the SW coast of Prince of Wales Island.	Requested expansion of closure area to non-Federally qualified users.
WP06-09	2006	Adopt with modification. The Board modified the Council recommendation by eliminating the need to have a Federal permit for harvesting a 5th deer. The Board also delegated the Forest Supervisor the ability to lower the harvest limit to 4 deer if needed.	Requested increasing the deer harvest limit to 6 deer.
WP06-10	2006	Reject	Requested use of harvest ticket #1 to record harvest of a female deer.
WP07-07	2007	Reject	Requested either elimination of antlerless deer hunt or to only allow for antlerless deer harvest every other year.
WP10-19	2010	Reject	Requested modification of female deer season from Oct. 15-Dec. 31 to Sept. 15-Oct. 15
WP10-20	2010	Reject	Requested modification of the non-Federally qualified closure from Aug. 1-15 to July 24-31.
WSA11-01	2011	Adopted	To rescind requirement of joint State/Federal harvest report

Proposal number	Reg Year	FSB action	Proposal request
WP12-08	2012	Adopted	To rescind requirement of joint State/Federal harvest report
WP14-03	2014	Reject	Eliminate antlerless deer season
WP14-04	2014	Reject	Request early start date for Federally qualified users over 60 or disabled.
WP16-01	2016	Adopt with mod adding January season, but rejected non-qualified harvest reduction	Requested non-Federally qualified users be restricted to two deer and extension season closing date from Dec. 31 to Jan. 31
WP16-05	2016	Adopted	Requests the language stating the Unit 2 deer harvest limit may be reduced to four deer in times of conservation be removed
WP16-08	2016	Adopted	Requests deer harvest ticket #5 be validated out of sequence to record female deer taken in Unit 2.
WP18-01	2018	Adopt w/ mod to accept harvest limit restriction but oppose season reduction	Limit harvest to two deer from Federal public lands the reduce season by one week or more for non-Federally qualified subsistence users
WP18-02	2018	Adopted	Requested modification of deer C&T for Units 1-5 to all rural residents of Units 1-5.

WP20–05 Executive Summary	
General Description	Proposal WP20–05 requests that female deer harvest in Unit 2 occur under a Federal registration permit. *Submitted by: East Prince of Wales Fish and Game Advisory Committee.*
Proposed Regulation	**Unit 2—Deer** *5 deer; however, no more than one may be a female deer. Female deer may be taken only during the period Oct. 15–Jan. 31.* ***A registration permit is required to take a female deer.*** ~~*Harvest ticket number five must be used when recording the harvest of a female deer, but may be used for recording the harvest of a male deer. Harvest tickets must be used in order except when recording a female deer on tag number five.*~~ *July 24-Jan. 31* *The Federal public lands on Prince of Wales Island, excluding the southeastern portion (lands south of the West Arm of Cholmondeley Sound draining into Cholmondeley Sound or draining eastward into Clarence Strait), are closed to hunting of deer from Aug. 1 to Aug. 15, except by Federally qualified subsistence users hunting under these regulations. Non-Federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.*
OSM Conclusion	**Oppose**
Southeast Alaska Subsistence Regional Advisory Council Recommendation	**Oppose**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**1 Support**

STAFF ANALYSIS
WP20-05

ISSUES

Wildlife Proposal WP20-05, submitted by the East Prince of Wales Fish and Game Advisory Committee, requests the female deer harvest in Unit 2 occur under a Federal registration permit.

DISCUSSION

The proponent believes that this regulation change is necessary because the harvest of female deer in Unit 2 is under reported and biologists are not getting factual information. They indicated that during a previous Federal subsistence regulatory cycle, a Prince of Wales village community leader testified "*they knew over 100 female deer had been harvested in their community the previous year*," while Alaska Department of Fish and Game (ADF&G) surveys only estimated a harvest of 18 bucks and no does harvested by community members during that same year.

The proponent believes a registration permit will allow biologists to better manage the deer population in Unit 2 and that it will clarify the regulations for subsistence users so they will not unknowingly violate State laws. The proponent believes that most Federally qualified subsistence users in Unit 2 are unaware of Federal subsistence regulations and some often harvest from State or private lands in Unit 2. A registration permit should help educate Federally qualified subsistence users on Federal regulations, while also gathering harvest data for biologists to properly manage the deer in the unit.

Existing Federal Regulation

Unit 2—Deer

5 deer; however, no more than one may be a female deer. Female deer may be taken only during the period Oct. 15–Jan. 31. Harvest ticket number five must be used when recording the harvest of a female deer, but may be used for recording the harvest of a male deer. Harvest tickets must be used in order except when recording a female deer on tag number five.	*July 24-Jan. 31*
The Federal public lands on Prince of Wales Island, excluding the southeastern portion (lands south of the West Arm of Cholmondeley Sound draining into Cholmondeley Sound or draining eastward into Clarence Strait), are closed to hunting of deer from Aug. 1 to Aug. 15, except by Federally qualified subsistence users hunting under these regulations. Non-Federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.	

Proposed Federal Regulation

Unit 2—Deer

5 deer; however, no more than one may be a female deer. Female deer may be taken only during the period Oct. 15–Jan. 31. ***A registration permit is required to take a female deer.*** ~~*Harvest ticket number five must be used when recording the harvest of a female deer, but may be used for recording the harvest of a male deer. Harvest tickets must be used in order except when recording a female deer on tag number five.*~~	*July 24-Jan. 31*
The Federal public lands on Prince of Wales Island, excluding the southeastern portion (lands south of the West Arm of Cholmondeley Sound draining into Cholmondeley Sound or draining eastward into Clarence Strait), are closed to hunting of deer from Aug. 1 to Aug. 15, except by Federally qualified subsistence users hunting under these regulations. Non-Federally qualified users may only harvest up to 2 male deer on Federal public lands in Unit 2.	

Existing State Regulation

Unit 2 – Deer

Residents and non-residents: Four bucks	*Aug. 1 – Dec. 31*
Harvest tickets must be validated in sequential order, and unused tickets must be carried when you hunt.	

Extent of Federal Public Lands/Waters

Unit 2 is comprised of 74% Federal public lands and consist of 73% U.S. Forest Service (USFS) managed lands and less than 1% U.S. Fish and Wildlife Service (USFWS) managed lands (**see Unit 2 Map**).

Customary and Traditional Use Determinations

Rural residents of Units 1, 2, 3, 4, and 5 have a customary and traditional use determination for deer in Unit 2.

Regulatory History

Hunting regulations have permitted the harvest of deer in Unit 2 since 1925 (**Appendix 1**). During this period, season closing dates have varied between November and December, with December 31 being the most common closing date since 1988. Seasons and harvest limits for Federally qualified

subsistence users in Unit 2 are more liberal than State regulations. Federal regulations have allowed the harvest of one female deer in Unit 2 since 1995, as well as the harvest of five deer beginning in 2006.

Following years of numerous Unit 2 related deer proposals (**Appendix 2**) submitted to the Federal Subsistence Board (Board), the Unit 2 Deer Planning Subcommittee (Subcommittee) was formed in 2004 to address contentious deer management issues in Unit 2. At the request of the Board, the Council established the 12-member Subcommittee to address concerns that Federally qualified subsistence users in Unit 2 were unable to harvest enough deer to meet their needs. The Subcommittee included residents of Craig, Hydaburg, Ketchikan, Petersburg, Point Baker, and Wrangell, to reflect the range of users of Unit 2 deer, along with representatives from State and Federal wildlife management agencies.

The Subcommittee developed management recommendations at a series of five public meetings held in communities that depend upon Unit 2 deer. Both Federally and non-Federally qualified users participated at these meetings. The Subcommittee recommended that deer harvest management tools could be applied in Unit 2 as deer population trends and hunting use patterns changed. The degree to which these tools would be employed would be decided through the established public regulatory processes (SEASRAC 2006).

In 2006, the Board implemented two major changes to the Unit 2 deer hunt by adopting Proposals WP06-08 and WP06-09, both with modification. Adoption of WP06-08 as modified, reopened a portion of Federal public lands to non-Federally qualified users on the southeast side of Prince of Wales Island. Adoption of WP06-09 as modified, established the current five deer harvest limit for Federally qualified subsistence users (FSB 2006). Two other proposals, WP06-06 and WP06-10, related to the use of harvest tickets in Unit 2 and were unanimously opposed by the Council and rejected by the Board (FSB 2006).

Three proposals related to Unit 2 deer were submitted from 2007-2012. Proposal WP07-07 requested the female deer season be closed, Proposal WP10-19 requested a change to the female deer season, and Proposal WP10-20 requested the August closure to non-Federally qualified users be lifted. The Council opposed and the Board rejected these proposals (FSB 2007, 2010).

Also during 2010, the Board adopted WP10-22 with modification delegating management authority for wildlife by letter to the ten District Rangers located in Units 1-5. As a result, the delegated authority in Unit 2 changed from the Tongass Forest Supervisor to the District Rangers of both the Craig and Thorne Bay Ranger Districts. For deer, their scope of delegation allows them to set harvest quotas; to close, reopen or adjust Federal subsistence deer seasons; and to adjust harvest and possession limits for that species. Most likely, this type of action would occur prior to the season. Any action greater than 60 days in length requires a public hearing before implementation. They may also close Federal Public lands to the take of this species to all users. This type of action would most likely take place during the season. Action on the proposal also removed the requirement for consultation with the both Council Chair and ADF&G, as this was already defined protocol within the Special Action process (FSB 2010).

Two proposals were considered for deer in Unit 2 in 2013. Proposal WP14-03 requested the female deer season be eliminated whereas Proposal WP14-04 asked for an earlier season to be established for Federally qualified subsistence users over the age of 60 or physically disabled. The Council unanimously opposed and the Board rejected these proposals (SEASRAC 2013; FSB 2014).

Three proposals were considered for deer in Unit 2 in 2015. Proposal WP16-01 requested a harvest limit reduction for non-Federally qualified users as well as an extension of the Federal season through the month of January. This proposal was broken into two sub-proposals by the Council who opposed the harvest limit reduction but supported the season extension with the following justifications: 1) the Unit 2 deer population was stable; 2) January harvest was a traditional practice according to testimony; 3) any additional female deer harvest was believed to be minimal and sustainable; and 4) the USFS District Ranger in Unit 2 has delegated authority to close the season early if conservation needs arise. The Board adopted the proposal as modified by the Council. Proposal WP16-05 requested removal of language regarding a harvest limit reduction during times of conservation because that authority is included by delegation to the Federal in-season manager and WP16-08 requested harvest ticket #5 be used out of sequence when harvesting a female deer. Both proposals were unanimously supported by the Council and adopted by the Board (SEASRAC 2015; FSB 2016).

Proposal WP18-01 was considered during the 2018 regulatory cycle. The proposal requested a reduction of both the season length and the harvest limit for non-Federally qualified users. The Council divided the proposal into two action items where they supported the harvest limit reduction but opposed the shortening of the season. The Board adopted the harvest limit reduction as recommended by the Council based on testimony from Federally qualified subsistence users that they were not meeting their needs. The Board rejected the season date reduction because they believed it would not provide additional benefits as harvests in December were minimal by both user groups and that subsistence users already had additional priorities available in the form of; the week in July, the closure to non-Federally qualified users in August, the ability to harvest a female deer starting October 15, a season extension into the month of January and the ability to harvest up to five deer total (SEASRAC 2017; FSB 2018a).

Due to administrative delays in the Federal Rule Making Process, on August 8, 2018, the Board approved temporary delegated authority to some Federal land managers to enact temporary changes to Federal Subsistence Regulations adopted by the Board during the April 2018 regulatory meeting (FSB 2018b). This delegation of authority was established pursuant to 36 CFR 242.10(d)(6) and 50 CFR 100.10(d)(6). As a result, emergency special action 13-BD-06-18 was issued on August 16, 2018 by the USFS District Ranger restricting the harvest of deer by non-Federally qualified users to two male deer on Federal Public lands in Unit 2. The action was set to expire on October 15, 2018 or when the 2018-2020 Federal Subsistence Wildlife Regulations were published in the Federal Register.

Proposal WP18-02, requesting the Customary and Traditional use determination for deer in Units 1-5 be modified to include all rural residents of Units 1-5, was also considered during the 2018 regulatory cycle. This proposal had unanimous support from the Council and was adopted by the Board as a consensus agenda item (SEASRAC 2017; FSB 2018a).

Current Events Involving the Species

The proponent also submitted Proposals WP20-03, -04, -06, and -07 regarding deer in Unit 2. The proponent was contacted to clarify the intent and reasoning of each proposal. The proponent stated their overall intent was to provide the Board with a suite of management options to increase the deer population and hunter success in Unit 2. Additionally, WP20-02 was submitted by ADF&G, requesting removal of the harvest limit reduction for non-Federally qualified users.

Biological Background

Sitka black-tailed deer spend the winter and early spring at low elevation on steep slopes where there is less snow accumulation, and old-growth forests provide increased intermixing of snow-intercept and foraging opportunities. Fawning occurs in late May and early June as vegetation greens-up, providing abundant forage to meet energetic needs of lactating does. Some deer migrate and follow the greening vegetation up to alpine for the summer, while others remain at lower elevations. The breeding season, or rut, generally occurs late October through late November (ADF&G 2009) generally peaking around mid- November. Wolves and black bears are the primary predators present in Unit 2, and may reduce deer populations or increase recovery times after severe winters.

Deer populations in Southeast Alaska fluctuate and are primarily influenced by winter snow depths (Olson 1979). Deer in Southeast Alaska typically have trouble meeting their energy needs in winter (Hanley and McKendrick 1985, Parker et al. 1999), and winters with long periods of deep snow that restrict the availability of forage can result in deer depleting their energy reserves to the point of starvation (Olson 1979).

Summer nutrition is important for building body reserves to sustain deer through the winter (Stewart et al. 2005). Few studies have been conducted on summer habitat conditions because winter habitat carrying capacity is generally considered to be the limiting factor for deer in Southeast Alaska. However, deer populations at or above habitat carrying capacity are affected by intra-specific competition for food and may enter winter in reduced body condition compared to deer populations below carrying capacity (Kie et al. 2003, Stewart et al. 2005). This can result in higher susceptibility to severe winters and lower productivity (Kie et al. 2003, Stewart et al. 2005). In addition, nutritionally stressed does produce smaller and fewer fawns (Olson 1979).

Recent population indices

There are no methods to directly count deer in Southeast Alaska, so ADF&G conducts deer pellet surveys as an index to the relative abundance of the deer population. Relating pellet group data to population levels is difficult, however, because factors other than changes in deer population size can affect deer pellet-group density. Snowfall patterns influence the annual distribution and density of deer pellets, and snow persisting late into the spring at elevations below 1,500 feet limits the ability to consistently survey the same zones each year. In mild winters, deer can access forage in a greater variety of habitats, not all of which are surveyed. Conversely, in severe winters, deep snow concentrates deer (McCoy 2011).

Brinkman et al. (2013) questioned the value of pellet-group surveys for monitoring population trends due to the variability in the data compared to DNA based pellet counts. Pellet group transects were designed to detect large (>30%) changes in abundance and are not and appropriate tool for monitoring smaller year to year changes. Although pellet-group surveys remain the only widely available deer population data, the results should be interpreted with caution. Pellet-group data in Unit 2 suggests a generally increasing population trend since a low during the late 1990s and early 2000s (**Figure 1**). This contrasts with Brinkman et al. (2011) who used a DNA based technique and estimated a 30% population decrease from 2006–2008 which they attributed to three consecutive winters with deep snow. Brinkman's study was limited to three watersheds, and the population changes during the study varied by watershed. It appears that populations subsequently increased after those severe winters and Bethune (2011) felt that by 2010 the Unit 2 deer population was healthy, stable to increasing, and at a 12-15 year high.

ADF&G began testing alpine deer aerial survey techniques in 2013 (**Figure 2**). 2017 was the first year with an established protocol and consistent surveys across southeast Alaska. ADF&G is still researching the correlation between alpine surveys and actual deer populations. Aerial survey numbers seem to reflect the relative abundances expected among various locations, but correlations with population trends are unkown at this time.

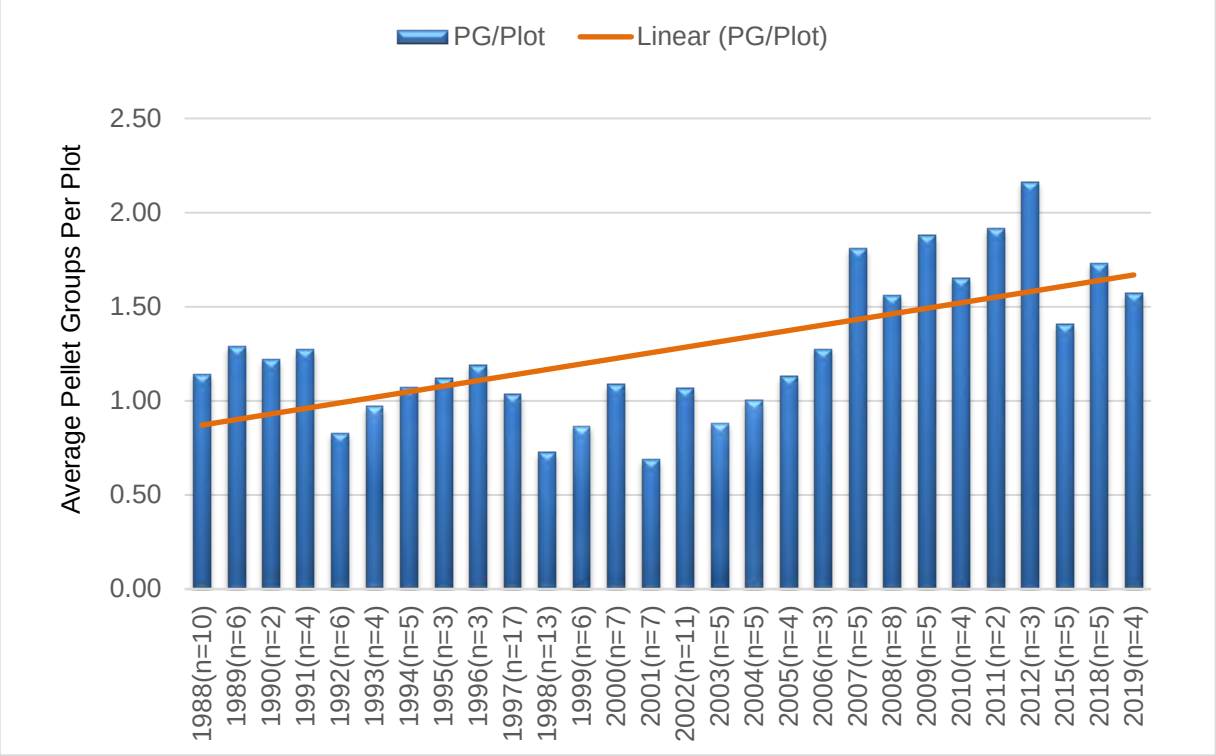

Figure 1: Annual average pellet group counts and general trend for deer in Unit 2 through 2019 (McCoy 2019a).

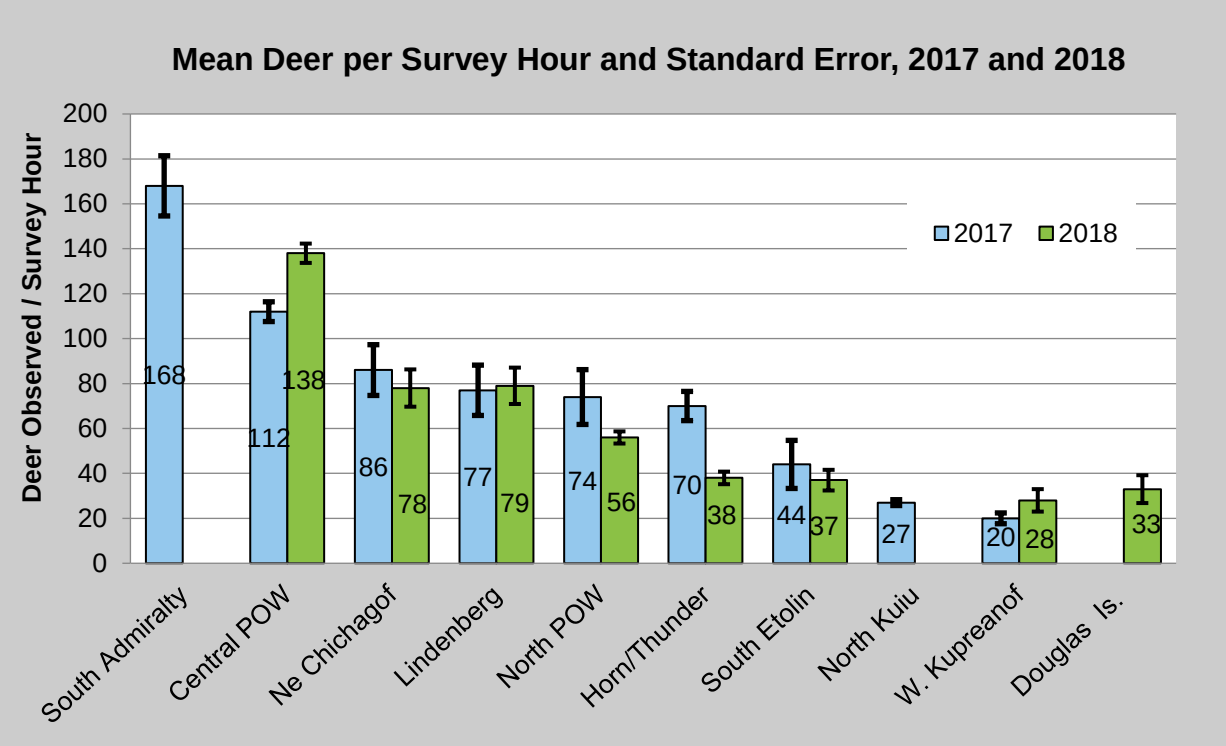

Figure 2: Aerial alpine surveys across southeast Alaska for 2017 and 2018 (McCoy 2019b).

Habitat

Old-growth forests are considered primary deer winter range, in part because the complex canopy cover allows sufficient sunlight through for forage plants to grow and intercepts snow, making it easier for deer to move and forage during winters when deep snow hinders access to other habitats. Deep snow deer winter range is defined as high value productive old growth (size class 5, 6, 7) on south facing slopes below 800 feet, and this is considered to be the limiting habitat for deer in Southeast Alaska. Some areas of Unit 2 have been impacted by large scale changes in habitat due to timber harvest, while the habitat is largely intact in other areas. Young-growth forest treatments (e.g., thinning, small gap creation, branch pruning) can benefit deer forage development in previously harvested stands. Regardless, areas with substantial timber harvest are expected to have lower long-term carrying capacity compared to pre-harvest conditions.

There is 62% of deer winter habitat remaining in GMU 2 (**Table 1**) with WAAs 1214, 1315, 1317, 1318, 1420, 1421, 1525, 1529, 1530, 1531 having below 50% habitat remaining. This is from past timber harvest and road building. In the case of a severe winter, these will be the areas hit hardest with deer mortality since there is little habitat left to sustain them. Habitat conditions would not improve as the areas harvested have reached stem exclusion which can last from 25 year post harvest to 150 years post-harvest. **Figure 3** can be used to see where the least amount of habitat remains and if you compare it to **Table 1** you can see where harvest is greatest compared to available habitat. Most wildlife analysis areas (WAA) with less than 50% deep snow deer winter habitat have the highest harvest rates.

Conditions on the ground within the last few years have remained stable because of mild winters and later arrival of snow in Unit 2 allowing the deer to forage longer at altitude and in areas such as muskegs. Prolonged snowpack during a severe winter or within later stages of winter could have a greater effect on deer populations going forward since there is far less habitat available during those periods.

Table 1: Overall percent of historical habitat since 1954 (beginning of large scale logging) remaining by wildlife analysis area (WAA) in GMU 2 for deep snow deer winter habitat and all productive old growth, average harvest since 2005, and harvest trend.

WAA	Productive Old Growth	Deep Snow Deer Winter Habitat (HPOG below 800 feet on south facing slopes)	Average Reported Harvest by WAA since 2005 and trend
901	89	85	69 ↑
902	100	100	79 ↓
1003	51	49	46 ↑
1105	99	99	84 ↑
1106	100	100	25 ↓
1107	97	93	138 ↑
1108	99	99	17 ↑
1209	100	100	10 ↑
1210	99	99	50 ↑
1211	83	78	36 ↑
1213	99	99	21 ↑
1214	67	48	245 ↑
1315	55	29	350 ↑
1316	99	100	27 ↓
1317	56	23	145 ↑
1318	78	49	220 ↑
1319	74	61	229 ↓
1323	90	76	18 ↓
1332	80	72	76 →
1420	54	27	308 ↑
1421	71	44	107 ↓
1422	51	29	386 ↓
1525	51	40	21 ↑
1526	93	83	18 ↑
1527	67	61	23 ↓
1528	82	84	37 →
1529	55	46	144 ↓
1530	50	37	145 ↑
1531	55	49	37 ↓

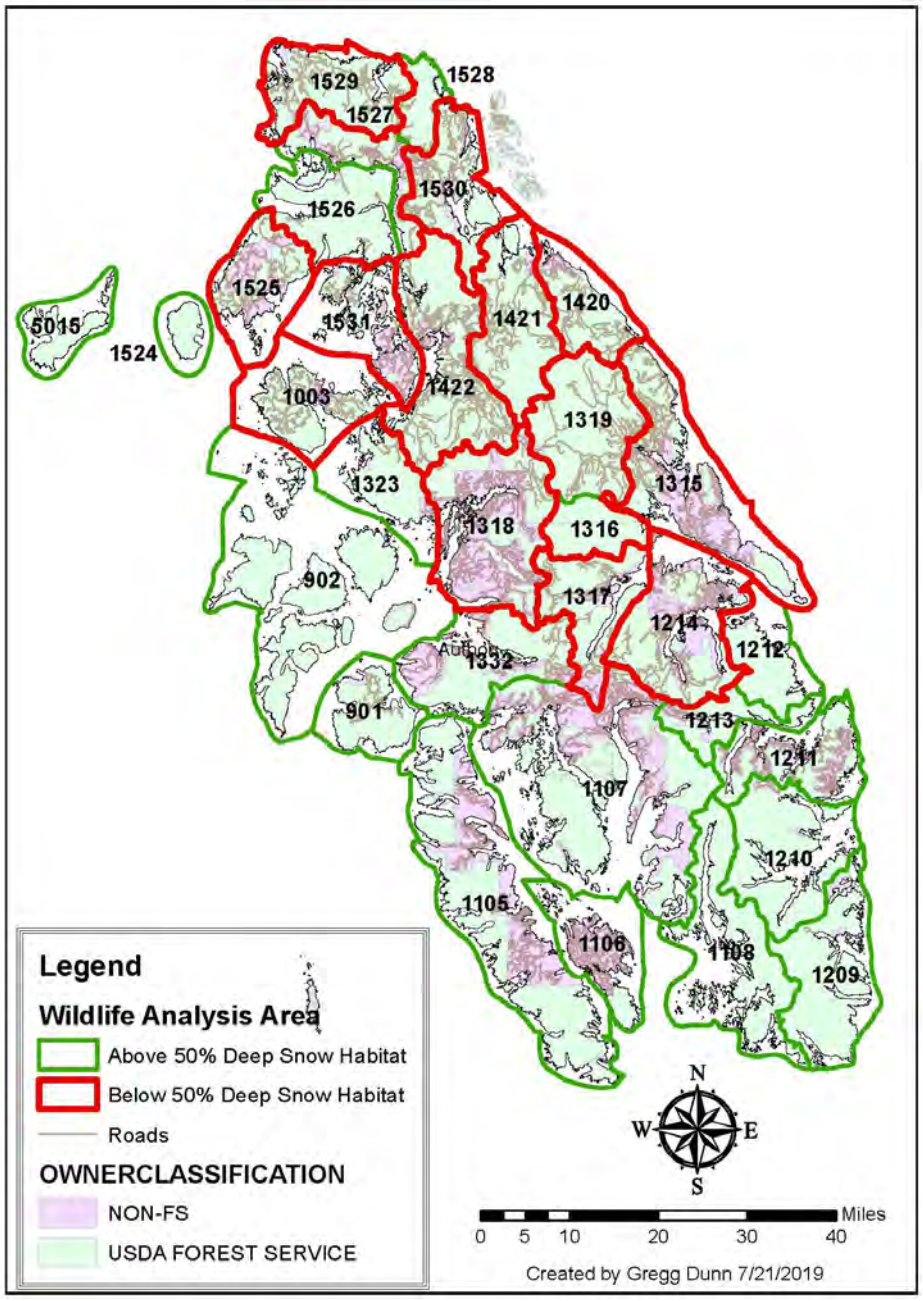

Figure 3: Map of Unit 2 showing deep snow deer winter habitat availability and where habitat is below 50% in WAAs. Note: WAA 5015 is not part of Unit 2.

Harvest History

Harvest data reported below are provided by ADF&G (McCoy 2019b) and are gathered by several reporting systems including the Region 1 deer survey, Unit 2 deer harvest report, and the State-wide deer harvest report. The Region 1 deer survey is the most consistent report, covering the years 1997–2010 and is based on a sample of hunters. In general, 35% of hunters from each community were

sampled annually and while response rates vary by community, the overall response rate across communities was approximately 60% each year. Harvest numbers were extrapolated using expansion factors that are calculated as the total number of harvest tickets issued to a community divided by the total number of survey responses for that community. If response was low from a community, an individual hunter may have a disproportionate effect on the data. As confidence intervals are not available for these data, harvest numbers should be considered estimates and interpreted with caution. Trends, however, should be fairly accurate especially at larger scales. The Unit 2 deer report was in place from 2005–2010 and was instituted specifically for reporting deer harvest in Unit 2. In 2011, the statewide deer report replaced the other deer harvest reporting systems and requires reporting of harvest by all deer hunters. Different expansion factors are used for the various data sets so that total harvest estimates between years are comparable (McCoy 2013).

Action taken by the Alaska Board of Game in fall 2000 established a harvest objective of 2,700 deer for Unit 2 as they identified the population as important for satisfying high levels of human consumptive use (Bethune 2013). Estimated deer harvest in Unit 2 from 2005–2018 can be found in **Figure 4**. The estimated average total annual harvest is 3,467 deer. Harvests have been at or above ADF&G's Unit 2 harvest objective from 2005-2016 and fell below harvest objectives during the2017 and 2018 seasons. Deer harvest reached historically high levels in 2015 and then began to decline since. The same pattern can also be seen with hunter numbers participating in Unit 2 (**Figure 4**).

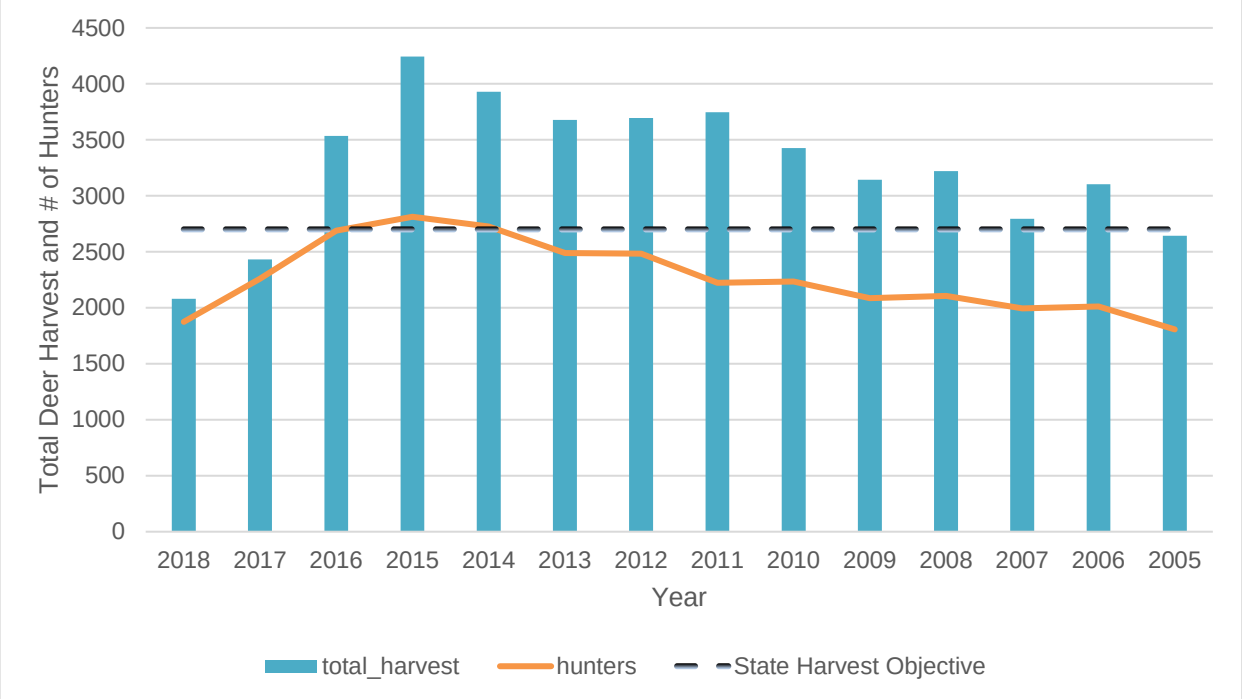

Figure 4: Total deer harvest and number of hunters during the 2005-2018 seasons in Unit 2 and showing the state harvest objective of 2,700 deer (McCoy 2019b).

Prior to implementation of Federal regulations, opportunity to harvest female or antlerless deer was available under State regulations from 1955-1972. From 1973-1977, opportunity for female deer was

still available, however, the harvest limit was reduced. During the 1987 season, the opportunity to harvest one female deer under State regulations was re-implemented, but did not get extended due to the unpopularity of the hunt in many local communities. Harvest data for these years are not available.

Although Federal regulations for hunting deer in Unit 2 started in 1991, the opportunity to harvest female or antlerless deer was not allowed until the 1995 season. Between 1998 and 2005, a Federal permit was required, however this requirement was removed with the establishment of first a unit-wide, then statewide harvest report attached to the deer harvest tickets. From 2001-2018, the reported female deer harvest in Unit 2 (**Table 2**) has ranged from 57 to 119 animals per year, with an overall annual average of 88 female deer. During this same period, the harvest of female deer has averaged only 3% of the total deer harvest (OSM 2019; McCoy 2019b). More recently, although the average reported female deer harvest increased to 101 since 2005, the female deer harvest percentage has actually decreased to 2.9% of the total reported deer harvest (McCoy 2019b).

Table 2: Female deer harvest compared to overall deer harvest, Unit 2 2001-2018 (McCoy 2019b)

Regulatory year	Female deer harvest	Total deer harvest	Percent of harvest (female)
2001	109	2775	3.9
2002	57	2054	2.8
2003	56	1747	3.2
2004	63	2008	3.1
2005	103	2642	3.9
2006	90	3105	2.9
2007	87	2795	3.1
2008	112	3222	3.5
2009	107	3145	3.4
2010	88	3428	2.6
2011	106	3746	2.8
2012	96	3696	2.6
2013	77	3677	2.1
2014	119	3931	3.0
2015	96	4243	2.3
2016	84	3534	2.4
2017	79	2433	3.2
2018	60	2079	2.9
Average	**88**	**3014**	**3.0**

Effects of the Proposal

If adopted, this proposal would require Federally qualified subsistence users to obtain a Federal registration permit before harvesting a female deer on Federal public lands in Unit 2. This requirement creates an unnecessary burden for subsistence users and contradicts past Board actions to simplify reporting requirements.

Adoption of the proposal could create confusion for Federally qualified subsistence users when reporting deer harvest. Currently, all deer harvest in the State is reported through the deer harvest report which is attached to deer harvest tickets at time of issuance. The State harvest report has been successful in providing harvest estimates for managers. Requirement of a registration permit may create dual reporting resulting in incorrect estimates for managing harvest, as well as misalignment of State and Federal regulations increasing regulatory complexity and user confusion.

Law enforcement personnel and State and Federal managers know that illegal harvest of female deer occurs. While adoption of the proposal may make enforcement of female deer harvest easier for law enforcement, switching to a registration permit will not prevent illegal harvest.

Adoption of the proposal will not have any positive effects on the health of deer populations in Unit 2, as deer populations are more greatly affected by available habitat and winter weather conditions rather than harvest. As such, requiring a registration permit strictly to harvest a female deer does not appear necessary for conservation of the resource.

The proposal does not affect State hunting regulation or harvests occurring on State and private lands, as State regulations do not allow for harvest of female deer in Unit 2.

OSM CONCLUSION

Oppose Proposal WP20-05.

Justification

Harvest of female deer in Unit 2 has averaged 3% of the total deer harvest from 2001-2017. With this low harvest of female deer, burdening Federally qualified subsistence users with a registration permit requirement is unnecessary. Implementation of a Federal permit is not likely to improve the reporting of female deer harvest beyond the current harvest reporting system and is unnecessary for conservation of deer in Unit 2 since deer populations in the unit are more greatly affected by habitat and winter weather conditions than by harvest.

LITERATURE CITED

ADF&G. 2009. Deer Trails. Issue 1. Juneau, AK. https://www.adfg.alaska.gov/static/hunting/deerhunting/pdfs/deer_trails_spring_2009.pdf. 7 pages.

Bethune, S. 2011. Unit 2 deer management report. Pages 31–44 in P. Harper, editor. Deer management report of survey and inventory activities 1 July 2008-30 June 2010. ADF&G. Juneau, AK.

Bethune, S. 2013. Unit 2 deer management report. Pages 33–47 in P. Harper, editor. Deer management report of survey and inventory activities 1 July 2010-30 June 2012. ADF&G. Juneau, AK.

Brinkman, T.J., D.K. Person, F.S. Chapin III, W. Smith, and K.J. Hundertmark. 2011. Estimating abundance of Sitka black-tailed deer using DNA from fecal pellets. J. Wildlife Manage. 75(1): 232–242.

Brinkman, T.J., D.K. Person, W. Smith, F.S. Chapin, III, K. McCoy, M. Leonawicz, K.J. Hundertmark. 2013. Using DNA to test the utility of pellet-group counts as an index of deer counts. Wildlife Society Bulletin; DOI: 10.1002/wsb.270.

FSB. 2006. Transcripts of Federal Subsistence Board proceedings, May 16, 2006. Office of Subsistence Management, USFWS. Anchorage, AK.

FSB. 2007. Transcripts of Federal Subsistence Board proceedings, April 30, 2007. Office of Subsistence Management, USFWS. Anchorage, AK.

FSB. 2010. Transcripts of Federal Subsistence Board proceedings, May 18, 2012. Office of Subsistence Management, USFWS. Anchorage, AK.

FSB. 2014. Transcripts of Federal Subsistence Board proceedings, April 18, 2014. Office of Subsistence Management, USFWS. Anchorage, AK.

FSB. 2016. Transcripts of Federal Subsistence Board proceedings, April 12, 2016. Office of Subsistence Management, USFWS. Anchorage, AK.

FSB. 2018a. Transcripts of Federal Subsistence Board proceedings, April 11, 2018. Office of Subsistence Management, USFWS. Anchorage, AK.

FSB. 2018b. Transcripts of Federal Subsistence Board proceedings, August 8, 2018. Office of Subsistence Management, USFWS. Anchorage, AK.

Hanley, T.A., and J.D. McKendrick. 1985. Potential nutritional limitations for black-tailed deer in a spruce-hemlock forest, Southeastern Alaska. Journal of Wildlife Management 49:103–114.

Kie, J.G., R.T. Bowyer, and K.M. Stewart. 2003. Ungulates in western forests: habitat relationships, population dynamics, and ecosystem processes. Pages 296–340 in: Zabel, C., and R. Anthony, editors. Mammal community dynamics in western coniferous forests: management and conservation. The Johns Hopkins University Press, Baltimore.

McCoy, K. 2011. Sitka black-tailed deer pellet-group surveys in southeast Alaska, 2011 report. ADF&G, Juneau, AK. 47 pages.

McCoy, K. 2013. Wildlife Biologist. Personal communication: email to J. Reeves (USFS) containing ADF&G deer pellet count data. ADF&G, Craig, AK.

McCoy, K. 2019a. Wildlife Biologist. Personal communication: email to J. Reeves (USFS) containing ADF&G deer pellet count data. ADF&G, Craig, AK.

McCoy, K. 2019b. Wildlife Biologist. Personal communication: email to G. Dunn (USFS) containing ADF&G deer harvest data. ADF&G, Sitka, AK.

Olson, S.T. 1979. The life and times of the black-tailed deer in southeast Alaska. Pages 160–168 in O.C. Wallmo and J.W. Schoen, editors. Sitka black-tailed deer: Proceedings of a conference in Juneau, Alaska. USFS, Alaska Region, in cooperation with the ADF&G. Series No. R10-48, May 1979.

Office of Subsistence Management (OSM). 2019. Subsistence permit database, updated June 2019.

Parker, K.L., M.P. Gillingham, T.A. Hanley, and C.T. Robbins. 1999. Energy and protein balance of free-ranging black-tailed deer in a natural forest environment. Wildlife Monographs 143:3–48.

SEASRAC. 2006. Unit 2 Deer Management Final Report from the Unit 2 Deer Planning Subcommittee of the Southeast Subsistence Regional Advisory Council.

SEASRAC. 2013. Transcripts of the Southeast Subsistence Regional Advisory Council, October 23, 2013 in Wrangell, Alaska. Office of Subsistence Management, USFWS. Anchorage, AK.

SEASRAC. 2015. Transcripts of the Southeast Subsistence Regional Advisory Council, October 27, 2015 in Yakutat, Alaska. Office of Subsistence Management, USFWS. Anchorage, AK.

SEASRAC. 2017. Transcripts of the Southeast Subsistence Regional Advisory Council, October 31, 2017 in Juneau, Alaska. Office of Subsistence Management, USFWS. Anchorage, AK.

Stewart, K.M., R.T. Bowyer, B.L. Dick, B.K. Johnson, and J.G. Kie. 2005. Density-dependent effects on physical condition and reproduction in North American elk: an experimental test. Oecologia 143:85–93.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS:

Southeast Alaska Subsistence Regional Advisory Council

Oppose WP20-05. The Council believes that using "Tag 5" is an adequate way to keep track of doe harvest and to regulate legal harvest. The hunter has a responsibility to know where it is legal to hunt, and most people know and understand that. There is currently adequate accounting for overall data on doe take through the deer harvest form, which provides managers with good information. Therefore, this proposal would place an unnecessary burden on hunters, and since a hunter can currently utilize "Tag 5" for harvest of a doe, this permit is not necessary.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-05: This proposal, submitted by the East Prince of Wales Fish and Game Advisory Committee, would require federally qualified hunters to possess a federal registration permit prior to harvesting a female deer on federally managed lands in Unit 2.

Introduction: Current regulations allow federally qualified hunters to harvest one female deer as part of their five deer bag limit, whereas non-federally qualified hunters are limited to two bucks on federal land and four bucks on state or private land. The goal of the proposal is to create a registration permit to provide managers with more accurate information on the number of does harvested each year. The authors believe that requiring a registration permit would provide an opportunity to educate hunters on federal harvest regulations and improve harvest data provided by hunters. From 2008-2017, annual reported doe harvest ranged from 77-119 does and was 3% of total average estimated deer harvest.

Impact on Subsistence Users: This proposal would increase the administrative burden for federally qualified hunters because they would need to acquire a permit and carry it with them while hunting.

Impact on Other Users: If adopted this proposal will have no direct impact on other users.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made positive customary and traditional use findings for Sitka black-tailed deer in Unit 2.

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably

necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for Sitka black-tailed deer in Unit 2 is 1,500 – 1,600 animals. The season and bag limit for deer is:

		Open Season (Permit/Hunt #)	
Unit/Area	Bag Limit	Resident	Nonresident
2	*4 bucks*	*Aug. 1 – Dec. 31* (*GD000*)	*Aug. 1 – Dec. 31* (*GD000*)

Special instructions: Evidence of sex must remain naturally attached to the meat or antlers must remain naturally attached to the entire carcass, with or without viscera. Hunters must submit a mandatory harvest report within 30 days of the close of the season.

Conservation Issues: None.

Enforcement Issues: None.

Recommendation: ADF&G is **NEUTRAL** on this proposal because we do not consider there to be a conservation concern. However, this proposal has the potential to provide more accurate information to managers by increasing reporting rates of harvested does. Should the Board adopt this proposal the State requests the opportunity to assist in the development of the permit; and to have consultation with federal managers in data collection and reporting to ensure accurate and timely hunt data reporting for use in Unit 2 deer management.

WRITTEN PUBLIC COMMENTS

Ketchikan Advisory Committee
June 6th, 2019
ADF&G Conference Room

I. **Call to Order**: 5:40pm by Matt Allen, Secretary

II. **Roll Call:** 8 voting members present, 1 via phone
Members Present: Allen, Crittenden, Dale, James, Westlund, Roth, Shaw, Bezneck, Fox, Scoblic (Phone)
Members Absent (Excused): Doherty, McQuarrie, Skan, Franulovich, Miller
Members Absent (Unexcused):
Number Needed for Quorum on AC: 8
List of User Groups and Public Present: Public, Sportfish Charter, ADFG (Sport Fish, Wildlife)
Motion: Bezneck, motion to make Allen meeting Chair, Roth, second. 9-0 in favor. Allen sits as meeting Chair

III. **Approval of Agenda:**
Allen, motion to amend agenda to include discussion of Federal Subsistence Proposals 10, 11, 13,14. Westlund seconded. Motion passed unanimously (9-0). Westlund, moved to approve agenda, Dale seconded. Motion passed unanimously (9-0)

IV. **Approval of Previous Meeting Minutes:**
Previous meeting minutes incomplete at this time

V. **Fish and Game Staff Present:**
Kelly Reppert, Ross Dorendorf, Tessa Hasbrouck

VI. **Guests Present: Jim Moody, Nick Hashagan, Martin Caplan, Tony Azure**

VII. **Chairman Report: Allen** read co-chair letter from Scoblic/Doherty

VIII. **ADF&G Sportfish Report: Reppert**, report regarding catch and release chinook fishing. Discussion and comment followed report.

IX. **Old Business:**
Federal Subsistence Proposals 2020-2022, WP20-01-08, WP20-10-15

X. **New Business:**
Catch and Release of chinook by Charter fishermen
Set next meeting date, September 12th, 2019, 5:30pm ADFG Conference Room

Federal Subsistence Management Program
2020-2022 Wildlife Proposal Comments

Proposal Number	Proposal Description		
Support, Support as Amended, Oppose, No Action	Number Support	Number Oppose /Abstain	Comments, Discussion (list Pros and Cons), Amendments to Proposal, Voting Notes
WP20-01	Southeast, Moose, Unit 1C, Eliminate Unit 1C – Berners Bay moose hunt		
Support	8	0/1 abstain	A biological concern does not currently exist necessitating a subsistence priority. Majority of traditional use comes from Juneau area. A fair system is currently in place to provide for opportunity
WP20-02	Southeast, Deer, Unit 2, Remove harvest limits to non-federally qualified users		
Support	9	0	We support State managers in their assessment of the deer population and the opportunity it can support.
WP20-03	Southeast, Deer, Unit 2, Eliminate doe harvest		
Oppose	1	8	Though the AC does not agree with doe harvest, we do not support this proposal because it would have minimal impact.
WP20-04	Southeast, Deer, Unit 2, Revise harvest limit		
Oppose	3	6	Some AC members support cessation of doe harvest if only for a short period of time.
WP20-05	Southeast, Deer, Unit 2, Establish a registration permit for does		
Support	7	1/1	AC supports the proposal as it may lead to better data for management.
WP20-06	Southeast, Deer, Unit 2, Revise season		
Support	9	0	AC supports removal of January hunt due to small amount of harvest, reduced quality of meat and difficulty in distinguishing bucks and does.
WP20-07	Southeast, Deer, Unit 2, Revise harvest limit		
Support	9	0	
WP20-08	Statewide, All Trapping Species, Require traps or snares to be marked with name or State Identification number		
Oppose	1	8	Though some type of compromise should be reached in regards to labelling of traps/snares a one size fits all regulation could be overly burdensome in some areas
WP20-09	Southeast, Beaver, Units 1-4, Revise trapping season		
No Action			
WP20-10	Statewide, Black Bear, Units 1-5, Revise Customary and Traditional Use Determination		

Oppose	2	6	Hunting of Black Bear is not customary and traditional in all units residing in Southeast
WP20-11	Statewide, Brown Bear, Units 1-5, Revise Customary and Traditional Use Determination		
	3	4	Hunting of Brown Bear is not customary and traditional in all units residing in Southeast.
WP20-12	Southeast, Deer, Unit 3, Revise hunt areas, season dates, and harvest limits		
WP20-13	Statewide, Elk, Unit 3, Establish Customary and Traditional Use Determination		
	0	9	This is a population introduced by the State in 1986, due to this fact we do not believe this population is traditional and customary for any Unit in Southeast Alaska. The authors of this proposal do not demonstrate how this particular species in this area has been used to meet the definition as customary and traditional.
WP20-14	Statewide, Goat, Unit 1-5, Revise Customary and Traditional Use Determination		
	4	4	Hunting of Mountain Goat is not Customary and Traditional in all Units residing in Southeast.
WP20-15	Statewide, Moose, Unit 1-5, Revise Customary and Traditional Use Determination		
	0	8	Hunting of Moose is not customary and traditional in all units residing in Southeast.
WP20-16	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			
WP20-17	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			

Adjournment:

Minutes Recorded By: _____
Minutes Approved By: _____
Date: _____

APPENDIX 1

Appendix 1: Regulatory framework of State and Federal deer seasons by year since 1925

Year	Type of Season	Season	Limit	Conditions & Limi-tations
1925	Open	Sept 15-Dec 16	3	Buck, 3" antlers or longer
1925-1929	Open	Sept 1-Nov 30	3	Buck, 3" antlers or longer
1930-1941	Open	Aug 20-Nov 15	2	Buck, 3" antlers or longer
1942-1943	Resident	Sept 16-Nov 15	2	Buck, 3" antlers or longer
1942-1943	Non-resident	Sept 16-Nov 15	1	Buck, 3" antlers or longer
1944-1948	Resident	Sept 1-Nov 7	2	Buck, 3" antlers or longer
1944-1948	Non-resident	Sept 1-Nov 7	1	Buck, 3" antlers or longer
1949	Resident	Sept 1-Nov 15	2	Buck, 3" antlers or longer
1949	Non-resident	Sept 1-Nov 15	1	Buck, 3" antlers or longer
1950-1951	Resident	Aug 20-Nov 15	2	Buck, 3" antlers or longer
1950-1951	Non-resident	Aug 20-Nov 15	1	Buck, 3" antlers or longer
1952	Open	Aug 20-Nov 22	2	Buck, 3" antlers or longer
1953-1954	Open	Aug 20-Nov 22	3	Buck, 3" antlers or longer
1955	Open	Aug 20-Nov 22	3	3 bucks or 2 bucks and one antlerless, bucks 3" antlers or longer, antlerless may be taken Nov 15-Nov 22
1956	Open	Aug 20-Nov 26	3	3 bucks or 2 bucks and one antlerless, bucks 3" antlers or longer, antlerless may be taken Nov 13-Nov 26
1957-1959	Open	Aug 20-Nov 30	4	4 deer, does may be taken Oct 15-Nov 30
1960	Open	Aug 20-Dec 15	4	4 deer, does may be taken Oct 15-Nov 30
1961	Open	Aug 20-Nov 30	4	4 deer, antlerless deer may be taken Sept 15-Nov 30

Year	Type of Season	Season	Limit	Conditions & Limitations
1962	Open	Aug 1-Dec 15	4	4 deer, antlerless deer may be taken Sept 15-Dec 15
1963-1967	Open	Aug 1-Dec 31	4	4 deer, antlerless deer may be taken Sept 15-Dec 31
1968	Open	Aug 1-Dec 15	4	4 deer, antlerless deer may be taken Sept 15-Dec 15
1969-1971	Open	Aug 1-Dec 31	4	4 deer, antlerless deer may be taken Sept 15-Dec 31
1972	Open	Aug 1-Dec 31	3	3 deer, antlerless deer may be taken Nov 1-Nov 30
1973-1977	Open	Aug 1-Nov 30	3	1 antlerless deer may be taken Nov 1-Nov 30
1978-1984	Open	Aug 1-Nov 30	3	Antlered deer
1985-1986	State General	Aug 1-Nov 30	3	Antlered deer
1987	State General	Aug 1-Nov 30	4	1 antlerless deer may be taken Oct 10-Oct 31
1988-2018	State General	Aug 1-Dec 31	4	Antlered deer/bucks
1991-1994	Federal Subsistence	Aug 1-Dec 31	4	Antlered deer
1995-1997	Federal Subsistence	Aug 1-Dec 31	4	No more than one may be an antlerless deer, antlerless deer may be taken only during Oct 15-Dec 31
1998-2002	Federal Subsistence	Aug 1-Dec 31	4	No more than one may be an antlerless deer, antlerless deer may be taken Oct 15-Dec 31 by Federal registration permit only
2003-2005	Federal Subsistence	July 24-Dec 31	4	No more than one may be an antlerless deer, antlerless deer may be taken Oct 15-Dec 31 by Federal registration permit only
2006-2009	Federal Subsistence	July 24-Dec 31	5	No more than one may be an antlerless deer; antlerless deer may be taken Oct 15-Dec 31

Year	Type of Season	Season	Limit	Conditions & Limitations
2010-2015	Federal Subsistence	July 24-Dec 31	5	No more than one may be a female deer; female deer may be taken Oct 15-Dec 31
2016-2018	Federal Subsistence	July 24-Jan 31	5	No more than one may be a female deer; female deer may be taken Oct 15-Jan 31.

Appendix 2

Appendix 2: History of Federal regulatory actions related to deer in Unit 2 taken by the Federal Subsistence Board

Proposal number	Reg Year	FSB action	Proposal request
P95-01	1995	Adopt w/ mod to require harvest report requirement	Create an antlerless season in Unit 2
R95-09	1995	Reject	Requested rescinding antlerless deer season created by adoption of P95-01
P97-07	1997	Reject	Reduce deer season from Aug. 1-Dec. 31 to Sept. 1-Dec. 31, and eliminate harvest of antlerless deer in Unit 2.
P98-09	1998	Reject	Eliminate antlerless season
P98-10	1998	Reject	Eliminate antlerless season and apply antler restriction of forked horn or larger
P98-11	1998	Reject	Shorten deer season from Sept 1 -Nov. 30
P98-12	1998	Reject	Eliminate antlerless season
P00-005	2000	Reject	Eliminate antlerless season
P00-05	2000	Reject	Eliminate antlerless deer season
P00-06	2000	Reject	Community harvest permit request of 500 deer per Unit 2 community
WP01-03	2001	Reject	Eliminate antlerless deer season
WP02-08	2002	Reject	Request increase of deer harvest limit for Unit 2 residents and reduction for Unit 1A and 3 residents
WP02-09	2002	Took no action	Restrict non-Federally qualified users from hunting on Federal lands between Aug. 1-31 and Oct. 16-Nov. 14
WRFR02-01	2002	Reject	Requested reconsideration of the Board rejecting WP02-09 to close Federal lands in Unit 2.
WP03-04	2003	Adopt with modification adding one week in July at front of season (July 24-31)	Requested earlier extension of deer season for Federally qualified users
WP03-05	2003	Adopt with modification restricting non-Federally qualified users from Aug 1-21 on Federal Public Lands on Prince of Wales Island (closure for 1 year)	Requested closure of Federal public lands from Aug 1-Sept. 1 and reduction of harvest limit to 2 deer for non-Federally qualified subsistence users.
WP04-03	2004	Took no action	Requested closure be changed from Aug 1-21 to Oct. 16-Nov. 14 and reduction of harvest limit for non-Federally qualified users

Proposal number	Reg Year	FSB action	Proposal request
WP04-04	2004	Took no action	Requested antlerless deer season be modified from Oct. 15-Dec. 31 to Aug. 1-Sept. 15
WP04-05	2004	Took no action	Requested closure to non-Federally qualified users be reduced by one week
WP04-06	2004	Took no action	Requested elimination of August closure to non-Federally qualified users.
WP04-07	2004	Took no action	Requested elimination of August closure to non-Federally qualified users.
WP04-08	2004	Took no action	Requested elimination of August closure to non-Federally qualified users.
WP04-09	2004	Took no action	Requested removal of the antlerless deer season and the July 24 start date for subsistence users and to replace closure with antler restrictions for non-Federally qualified users.
WP04-10	2004	Took no action	Requested removal of the antlerless deer season and the July 24 start date for subsistence users and to replace closure with a 3 buck harvest limit for non-Federally qualified users.
WP04-11	2004	Took no action	Requested removal of the July 24 start date for subsistence users and to modify closure from Aug. 1-21 to Oct. 16-Dec. 31 and implement a 2 buck harvest limit for non-Federally qualified users.
WP04-12	2004	Took no action	Requested modifying Federal season from July 24-Dec. 31 to Aug. 1-Jan. 31 for subsistence users and modified the August closure to the month of January to all but Unit 2 residents
WP04-13	2004	Took no action	Requested modifying Federal season from July 24-Dec. 31 to Aug. 1-10 and removing the antlerless deer season for subsistence users and reducing the August closure from Aug. 1-10 for non-Federally qualified users.
WP04-14	2004	Took no action	Reduce deer season from July24-Dec. 31 to Aug. 1-Dec. 31for Federally qualified users in Unit 2.

Proposal number	Reg Year	FSB action	Proposal request
WP04-15	2004	Adopt with modification restricting non-Federally qualified users from Aug 1-15 on Federal Public Lands on Prince of Wales Island	Requested continuation of the one year closure as passed by the FSB during the 2003 regulatory cycle.
WP05-04	2005	Adopt with modification removing registration requirement, but required use of a joint State/Federal harvest report as recommended by the Unit 2 Deer Subcommittee	Requested that all hunters obtain a Federal registration permit to hunt deer in Unit 2.
WP06-06	2006	Reject	Requested removing sequential use of harvest tickets and possession of all unused harvest ticket requirements.
WP06-07	2006	Took no action	Requested expansion of closure area to non-Federally qualified users.
WP06-08	2006	Adopt with modificaton. Modifications included: 1) removal of the August clousure on SE portion of Prince of Wales Island; 2) rejected closure to non-Federally qualified users on Suemez Island; and 3) rejected a closure to non-Federally qualified users on the islands located along the SW coast of Prince of Wales Island.	Requested expansion of closure area to non-Federally qualified users.
WP06-09	2006	Adopt with modification. The Board modified the Council recommendation by eliminating the need to have a Federal permit for harvesting a 5th deer. The Board also delegated the Forest Supervisor the ability to lower the harvest limit to 4 deer if needed.	Requested increasing the deer harvest limit to 6 deer.
WP06-10	2006	Reject	Requested use of harvest ticket #1 to record harvest of a female deer.
WP07-07	2007	Reject	Requested either elimination of antlerless deer hunt or to only allow for antlerless deer harvest every other year.
WP10-19	2010	Reject	Requested modification of female deer season from Oct. 15-Dec. 31 to Sept. 15-Oct. 15
WP10-20	2010	Reject	Requested modification of the non-Federally qualified closure from Aug. 1-15 to July 24-31.
WP10-22	2010	Adopt with modification. The modification provided delegations to the ten USFS District Rangers via letter and was to apply only to wildlife. Any fish delegation requests would have to be submitted to the Board.	The delegated in-season management for wildlife on a species by species basis, by letter, to the ten District Rangers located in Units 1-5
WSA11-01	2011	Adopted	To rescind requirement of joint State/Federal harvest report
WP12-08	2012	Adopted	To rescind requirement of joint State/Federal harvest report

Proposal number	Reg Year	FSB action	Proposal request
WP14-03	2014	Reject	Eliminate antlerless deer season
WP14-04	2014	Reject	Request early start date for Federally qualified users over 60 or disabled.
WP16-01	2016	Adopt with mod adding January season, but rejected non-qualified harvest reduction	Requested non-Federally qualified users be restricted to two deer and extension season closing date from Dec. 31 to Jan. 31
WP16-05	2016	Adopted	Requests the language stating the Unit 2 deer harvest limit may be reduced to four deer in times of conservation be removed
WP16-08	2016	Adopted	Requests deer harvest ticket #5 be validated out of sequence to record female deer taken in Unit 2.
WP18-01	2018	Adopt w/ mod to accept harvest limit restriction but oppose season reduction	Limit harvest to two deer from Federal public lands the reduce season by one week or more for non-Federally qualified subsistence users
WP18-02	2018	Adopted	Requested modification of deer C&T for Units 1-5 to all rural residents of Units 1-5.

WP20–08 Executive Summary	
General Description	Proposal WP20–08 requests implementing a statewide requirement that traps and snares be marked with either the trapper's name or State identification number. Submitted by: East Prince of Wales Fish and Game Advisory Committee.
Proposed Regulation	**Statewide— Trapping (General Provisions)** ***Traps or snares must be marked with trapper's name or state identification number (Alaska driver's license number or State identification card number).***
OSM Conclusion	**Oppose**
Southeast Alaska Subsistence Regional Advisory Council Recommendation	**Oppose**
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	**Oppose**
Kodiak/Aleutians Subsistence Regional Advisory Council Recommendation	**Take No Action**
Bristol Bay Subsistence Regional Advisory Council Recommendation	**Oppose**
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation	**Oppose**
Western Interior Alaska Subsistence Regional Advisory Council Recommendation	**Oppose**

WP20–08 Executive Summary	
Seward Peninsula Subsistence Regional Advisory Council Recommendation	**Oppose**
Northwest Arctic Subsistence Regional Advisory Council Recommendation	**Oppose**
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation	**Oppose**
North Slope Subsistence Regional Advisory Council Recommendation	**Oppose**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**1 Support, 1 Oppose**

STAFF ANALYSIS
WP20-08

ISSUES

Wildlife Proposal WP20-08, submitted by the East Prince of Wales Fish and Game Advisory Committee, requests implementing a statewide requirement that traps and snares be marked with either the trapper's name or State identification number.

DISCUSSION

The proponent believes that current regulations do not allow for accountability if a trapper leaves their traps out and set after the close of the season, or chooses to use illegal baits (i.e., whole chunks of deer meat or whole migratory birds). The proponent believes requiring trap identification (Alaska issued driver's license number or personal identification number) would make enforcement easier and may prevent these issues. Clarification with the proponent indicated that the proposed marking requirement is to apply Statewide.

Existing Federal Regulation

There are no statewide trap marking requirements under Federal regulations.

Proposed Federal Regulation

Statewide— Trapping (General Provisions)

Traps or snares must be marked with trapper's name or state identification number (Alaska driver's license number or State identification card number).

Existing State Regulation

There are no statewide trap marking requirements under State regulations.

Extent of Federal Public Lands/Waters

Alaska is comprised of 65% Federal public lands and consist of 23% Bureau of Land Management (BLM) managed lands, 21% U.S. Fish and Wildlife Service (USFWS) managed lands, 15% National Park Service (NPS) managed lands, and 6% U.S. Forest Service (USFS) managed lands.

Customary and Traditional Use Determinations

Customary and traditional use determinations for specific areas and species are found in subpart C of 50 CFR 100, §___.24(a)(1) and 36 CFR 242 §___.24(a)(1).

Regulatory History

The Alaska Board of Game (BOG) adopted a marking requirement for traps and snares in Units 1–5 in 2006. Federal regulations were aligned with the State requirements in Units 1–5 when the Federal Subsistence Board (Board) adopted Proposal WP12-14 in 2012. The rationale of the Board was that the BOG adopted trap marking requirements for Units 1-5 in 2006 in response to concerns by Alaska Wildlife Troopers, the Alaska Department of Fish and Game (ADF&G), and members of the public, that trapping as a whole would benefit from having some way of identifying ownership of traps and snares. This was prompted by incidences of traps being placed in areas where trapping was not allowed, pets being caught in traps, and unattended snares still capable of capturing a passing deer, bear, or wolf, being found following the close of season (FSB 2012).

The Southeast Alaska Subsistence Regional Advisory Council (Council) expressed concern that there was a lack of evidence why traps should be marked in either State or Federal regulations, and stated that regulations should be adopted for a good reason and not because of "*one bear caught in a snare, set by an unknown person for an unknown reason*". However, the Council supported the proposal, stating the benefit of aligning Federal and State regulations, and reducing the uncertainty about whether current regulations required traps to be marked (SEASRAC 2011).

In 2014, the Board considered Proposal WP14-01, requesting new statewide Federal provisions requiring trapper identification tags on all traps and snares, the establishment of a maximum allowable time limit for checking traps, and establishment of a harvest/trapping report form to collect data on non-target species captured in traps and snares. The proposal analysis indicated statewide application would be unmanageable, would require substantial law enforcement and public education efforts, and could cause subsistence users to avoid the regulation by trapping under State regulations. The proposal was unanimously opposed by all ten Federal Subsistence Regional Advisory Councils, ADF&G, and the public as reflected in written public comments. The Board rejected the proposal as part of its consensus agenda (FSB 2014).

In March 2016, the BOG removed trap marking requirements in response to Proposal 78. The BOG determined that trappers are generally responsible and that the 2006 regulation was not addressing the reasons why it was implemented, noting that marking traps does not prevent illegal trapping activity or prevent dogs from getting trapped.

In 2018, the Board considered Proposal WP18-13, requesting removal of the trap marking requirement in Units 1-5. The proposal was submitted to remove an unnecessary and burdensome requirement on Federally qualified subsistence users and to realign State and Federal regulations. While ADF&G was neutral on the proposal, it was unanimously supported by the Council (SEASRAC 2017). The proposal was adopted by the Board as part of its consensus agenda (FSB 2018).

Current Events Involving the Species

Wildlife proposal WP20-20 has been submitted requesting that trap sites be marked with brightly colored surveyor's tape in plain view on a nearby tree or overhanging branch in Unit 7.

Effects of the Proposal

The proposal will not result in any positive or negative effects to furbearer or other non-furbearer wildlife populations.

If the proposal is adopted, Federally qualified subsistence users trapping under Federal regulations throughout the State will be required to mark traps and snares with identification tags. The proposed requirement could potentially benefit law enforcement by allowing easier identification of traps and snares set in the field. However, differences in land ownership, population concentrations, terrain, and habitats would limit the effectiveness of the proposed statewide regulation. Individual traplines can span across Federal and State managed lands and, therefore, could have different regulatory requirements along the line. Alternatively, Federally qualified subsistence users could simply choose to trap under State regulations and avoid the proposed requirement, as both Federal and State trapping regulations are applicable on most Federal public lands, as long as the State regulations are not inconsistent with or superseded by Federal regulations, or unless Federal lands are closed to non-Federally qualified users.

Within portions of Unit 15, over 60 percent which lies within Kenai National Wildlife Refuge, and those portions of Unit 7 that are contained within Kenai NWR, a trapping permit is required and a stipulation of Kenai NWR's permit includes the marking of traps and snares. Also, under State regulations, all snares within a quarter mile of a public road in Units 12 and 20E are required to be marked. Federally qualified subsistence users trapping on Federal public lands outside of these specific areas would be required to mark traps and snares with identification tags that include the trapper's name and license number. However, Federally qualified subsistence users trapping on Federal public lands would not be required to mark traps and snares under State regulations.

The requirement to mark traps and snares would also result in additional burden and cost for Federally qualified subsistence users trapping under Federal subsistence regulations. Copper tags stamped with a trapper's identification information, including fasteners, cost approximately $26 per 100 tags (including shipping) or less (approximately $15–$20) for "write-your own" tags (FWS 2012). In addition, trappers often trade or borrow equipment from family members or friends, and changes of identification tags on large numbers of traps or snares would require significant effort (FWS 2014).

Re-implementation of a mandatory requirement to mark traps under Federal regulations creates unnecessary divergence of State and Federal regulations, which may create confusion for Federally qualified subsistence users. Although adoption of the proposal could allow law enforcement to more easily identify trappers that have traps deployed outside the open season or have otherwise violated regulations, mandatory trap marking does not necessarily prevent illegal trapping activity or prevent dogs from getting trapped. Also, adoption of this proposal will not affect State regulations, which

would allow Federally qualified subsistence users to operate traps under State regulations to avoid this requirement.

OSM CONCLUSION

Oppose Proposal WP20-08.

Justification

Requiring Federally qualified subsistence users to mark traps is an unnecessary burden, as mandatory marking does not prevent illegal trapping activity. With State regulations being less restrictive, Federally qualified subsistence users could avoid the requirement by trapping under those regulations, essentially rendering a Federal marking requirement unenforceable. There is no anticipated conservation concern to furbearers with opposing this proposal, as there is no established correlation between furbearer harvest levels and trap marking requirements. Adoption of this proposal also creates unnecessary divergence between State and Federal regulations.

LITERATURE CITED

FSB. 2012. Transcripts of Federal Subsistence Board proceedings, January 17-20, 2012. Office of Subsistence Management, USFWS. Anchorage, AK.

FSB. 2014. Transcripts of Federal Subsistence Board proceedings, April 15-17, 2014. Office of Subsistence Management, USFWS. Anchorage, AK.

FSB. 2018. Transcripts of Federal Subsistence Board proceedings, April 11-13, 2018. Office of Subsistence Management, USFWS. Anchorage, AK.

FWS. 2012. Staff Analysis WP12-14. Pages 969-976 in Federal Subsistence Board Meeting Materials January 17–2012. Office of Subsistence Management, USFWS. Anchorage, AK. 1,020 pages.

FWS. 2014. Staff Analysis WP14-01. Pages 352-367 in Federal Subsistence Board Meeting Materials April 15-17, 2014. Office of Subsistence Management, USFWS. Anchorage, AK. 628 pages.

SEASRAC. 2011. Transcripts of the Southeast Alaska Subsistence Regional Advisory Council, September 27-29, 2011 in Wrangell, Alaska. Office of Subsistence Management, USFWS. Anchorage, AK.

SEASRAC. 2017. Transcripts of the Southeast Alaska Subsistence Regional Advisory Council, October 31-November 2, 2017 in Juneau, Alaska. Office of Subsistence Management, USFWS. Anchorage, AK.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southeast Alaska Subsistence Regional Advisory Council

Oppose WP20-08. The Council believes this proposal intends to fix a problem that does not exist. The Alaska Board of Game rescinded a regulation requiring marked traps a few years ago and no clear issues concerning unmarked traps have been recently presented through staff reports nor have there been any similar recommendations from Federal or State biologists. The Council opposes this proposal as a statewide proposal as it covers too broad an area.

Southcentral Alaska Subsistence Regional Advisory Council

Oppose WP20-08. The Council believed that there should not be a standard for the whole State as it is an issue that should be addressed focusing on local conflicts/problems. Placing a standard for the State of Alaska would place an additional burden upon Federal users and would create too broad a solution.

Kodiak/Aleutians Subsistence Regional Advisory Council

Take No Action WP20-08.

Bristol Bay Subsistence Regional Advisory Council

Oppose WP20-08. Local users are opposed to the proposal and requiring local subsistence users to mark traps is unnecessary and burdensome. No conservation concerns exist to the furbearer population in the region.

Yukon-Kuskokwim Delta Subsistence Regional Advisory Council

Oppose WP20-08. The Council opposes the marking of all traps and snares because it would cause unnecessary burden to subsistence hunters and trappers. The Council relayed the challenges of finding a way to label hundreds of traps and snares and the cost it would entail to subsistence hunters. Overall, the Council expressed that marking traps and snares is unnecessary because traditionally hunters maintain their own trapping boundaries and jurisdictions, which are respected locally. People know who's trapping area it is or it may be marked by a hatchet mark on a tree to identify the trapline. Some Council members relayed that over a lifetime of active trapping they had purchased thousands of traps and given them away to younger family members or share them with others, and individual identification would only hamper this open sharing of subsistence equipment.

Western Interior Subsistence Regional Advisory Council

Oppose WP20-08. The Council unanimously opposed WP20-08. While the Council believes conflicts may exist in urban areas, this is a Federal subsistence proposal affecting those identified as Federally-qualified subsistence users in rural Alaska. The Council considers this proposal a hardship for rural communities, as well ineffective in resolving the proponent's issue. In rural Alaska, it is clear who is

trapping from the community, and most trappers have multiple sets, making marking each one burdensome. Further, the Alaska Board of Game has found no evidence that marking traps with an identification deters illegal trapping activities. Finally, users would simply trap under State regulations to avoid compliance with Federal regulations.

Seward Peninsula Subsistence Regional Advisory Council

Oppose WP20-08. The Council voted unanimously to oppose WP20-08. Council members did not believe this proposal would have any beneficial effect on trapping in the Seward Peninsula region. Some Council members thought tagging traps might deter animals and; therefore, be injurious to subsistence opportunity.

Northwest Arctic Subsistence Regional Advisory Council

Oppose WP20-08. The Council voted to oppose WP20-08. The Council stated WP20-08 would be burdensome to Federally qualified subsistence users as the justification for its recommendation. A Council member noted that they boil traps to remove any scents, but did not think the tags could be boiled, so the tag's scent could deter furbearers from their traps.

Eastern Interior Subsistence Regional Advisory Council

Oppose WP20-08. The Council noted the proposal would be burdensome, costly, and provide no benefit to Federally qualified subsistence users in remote areas. The Council believes that this proposal will not be effective at stopping illegal trapping because those hunting out of season, using the wrong bait, or wrong size trap will not mark their traps regardless. The Council supported OSM's justification on page 179 of the Council's October 2019 meeting book, stating that the Council agrees with all of the main points brought up in this justification and that this proposal is not good for Federally qualified subsistence users. The Council emphasized this proposal will not work in the bush.

North Slope Subsistence Regional Advisory Council

Oppose WP20-08. The Council acknowledged there might be local concerns regarding traps being placed too close to city limits where pets or people may inadvertently encounter them. However, the Council stressed that this statewide proposal would be unnecessarily burdensome to trappers everywhere, many of whom have maintained trap lines for generations. Requiring a label on all traps would incur burden and financial hardship to subsistence hunters who may maintain hundreds of traps and share them among family members. Council members relayed that across the North Slope region most trapping areas are established, and it is usually known who it belongs to with traditional family markings identifying their hunting equipment.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-08: This proposal, submitted by the East Prince of Wales Fish and Game Advisory Committee, seeks to require that traps or snares set under statewide federal regulations be marked with their name or a state identification number.

Introduction: This proposal would require that trappers operating under federal regulations anywhere in the state mark their traps and snares with their name or a state identification number. The proponent specifies that illegal or sloppy trappers cannot be held accountable for violations such as leaving gear out after the season closes or using illegal bait.

Beginning with the Regulatory Year (RY) 2007 season, the Alaska Board of Game (BOG) required all traps and snares in Units 1-5 be marked with a permanent tag with the trapper's name and address or Department issued identification number, or be set within 50 yards of a sign with the same information. Because much of the land in Region 1 is federally managed there were enforcement issues with the state regulation due to the lack of a corresponding federal requirement. The Department worked with the federal Regional Advisory Council to require trap marking through federal regulation (proposal WP12-14) beginning with the RY13 trapping season.

At the March 2016 statewide BOG meeting the Board rescinded all trap tag requirements for Units 1-5. The Department was neutral on that proposal, acknowledging that trap tags make enforcement easier but could potentially cause problems for otherwise legal trappers. The Federal Subsistence Board followed suit at their spring 2018 board meeting, removing the requirement to mark trap tags and snares on federally managed lands.

As recently as the January 2019 BOG meeting there were proposals (numbers 13 and 14) to re-instate trap marking requirements in Southeast Alaska. Neither proposal was adopted. Currently there are no State of Alaska trap identification requirements.

Impact on Subsistence Users: This proposal would require trappers trapping under federal regulations to mark traps and snares. In most cases federally qualified trappers are also eligible to trap under state regulations where there is no similar requirement.

Impact on Other Users: Trappers who trap under state regulations would not be required to mark traps or snares, so the regulations may be confusing to some who trap on federal public lands as well as state lands.

State customary and traditional use findings: The Alaska Board of Game has made a positive customary and traditional use finding for furbearers in all units (5AAC 99.025(13)).

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a furbearer population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Trapping regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: trapping regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for furbearers in Alaska is 90% of the harvestable portion of the population.

Conservation Issues: None.

Enforcement Issues: There are potential enforcement issues if there are different trap marking requirements under state and federal regulations. Trappers would need to know land boundaries.

Recommendation: ADF&G is **NEUTRAL** on this proposal because there is no biological concern.

WRITTEN PUBLIC COMMENTS

Ketchikan Advisory Committee
June 6th, 2019
ADF&G Conference Room

I. **Call to Order**: 5:40pm by Matt Allen, Secretary

II. **Roll Call:** 8 voting members present, 1 via phone
Members Present: Allen, Crittenden, Dale, James, Westlund, Roth, Shaw, Bezneck, Fox, Scoblic (Phone)
Members Absent (Excused): Doherty, McQuarrie, Skan, Franulovich, Miller
Members Absent (Unexcused):
Number Needed for Quorum on AC: 8
List of User Groups and Public Present: Public, Sportfish Charter, ADFG (Sport Fish, Wildlife)
Motion: Bezneck, motion to make Allen meeting Chair, Roth, second. 9-0 in favor. Allen sits as meeting Chair

III. **Approval of Agenda:**
Allen, motion to amend agenda to include discussion of Federal Subsistence Proposals 10, 11, 13,14. Westlund seconded. Motion passed unanimously (9-0). Westlund, moved to approve agenda, Dale seconded. Motion passed unanimously (9-0)

IV. **Approval of Previous Meeting Minutes:**
Previous meeting minutes incomplete at this time

V. **Fish and Game Staff Present:**
Kelly Reppert, Ross Dorendorf, Tessa Hasbrouck

VI. **Guests Present: Jim Moody, Nick Hashagan, Martin Caplan, Tony Azure**

VII. **Chairman Report: Allen** read co-chair letter from Scoblic/Doherty

VIII. **ADF&G Sportfish Report: Reppert**, report regarding catch and release chinook fishing. Discussion and comment followed report.

IX. **Old Business:**
Federal Subsistence Proposals 2020-2022, WP20-01-08, WP20-10-15

X. **New Business:**
Catch and Release of chinook by Charter fishermen
Set next meeting date, September 12th, 2019, 5:30pm ADFG Conference Room

Federal Subsistence Management Program
2020-2022 Wildlife Proposal Comments

Proposal Number	Proposal Description		
Support, Support as Amended, Oppose, No Action	Number Support	Number Oppose /Abstain	Comments, Discussion (list Pros and Cons), Amendments to Proposal, Voting Notes
WP20-01	Southeast, Moose, Unit 1C, Eliminate Unit 1C – Berners Bay moose hunt		
Support	8	0/1 abstain	A biological concern does not currently exist necessitating a subsistence priority. Majority of traditional use comes from Juneau area. A fair system is currently in place to provide for opportunity
WP20-02	Southeast, Deer, Unit 2, Remove harvest limits to non-federally qualified users		
Support	9	0	We support State managers in their assessment of the deer population and the opportunity it can support.
WP20-03	Southeast, Deer, Unit 2, Eliminate doe harvest		
Oppose	1	8	Though the AC does not agree with doe harvest, we do not support this proposal because it would have minimal impact.
WP20-04	Southeast, Deer, Unit 2, Revise harvest limit		
Oppose	3	6	Some AC members support cessation of doe harvest if only for a short period of time.
WP20-05	Southeast, Deer, Unit 2, Establish a registration permit for does		
Support	7	1/1	AC supports the proposal as it may lead to better data for management.
WP20-06	Southeast, Deer, Unit 2, Revise season		
Support	9	0	AC supports removal of January hunt due to small amount of harvest, reduced quality of meat and difficulty in distinguishing bucks and does.
WP20-07	Southeast, Deer, Unit 2, Revise harvest limit		
Support	9	0	
WP20-08	Statewide, All Trapping Species, Require traps or snares to be marked with name or State Identification number		
Oppose	1	8	Though some type of compromise should be reached in regards to labelling of traps/snares a one size fits all regulation could be overly burdensome in some areas
WP20-09	Southeast, Beaver, Units 1-4, Revise trapping season		
No Action			
WP20-10	Statewide, Black Bear, Units 1-5, Revise Customary and Traditional Use Determination		

Oppose	2	6	Hunting of Black Bear is not customary and traditional in all units residing in Southeast
WP20-11	Statewide, Brown Bear, Units 1-5, Revise Customary and Traditional Use Determination		
	3	4	Hunting of Brown Bear is not customary and traditional in all units residing in Southeast.
WP20-12	Southeast, Deer, Unit 3, Revise hunt areas, season dates, and harvest limits		
WP20-13	Statewide, Elk, Unit 3, Establish Customary and Traditional Use Determination		
	0	9	This is a population introduced by the State in 1986, due to this fact we do not believe this population is traditional and customary for any Unit in Southeast Alaska. The authors of this proposal do not demonstrate how this particular species in this area has been used to meet the definition as customary and traditional.
WP20-14	Statewide, Goat, Unit 1-5, Revise Customary and Traditional Use Determination		
	4	4	Hunting of Mountain Goat is not Customary and Traditional in all Units residing in Southeast.
WP20-15	Statewide, Moose, Unit 1-5, Revise Customary and Traditional Use Determination		
	0	8	Hunting of Moose is not customary and traditional in all units residing in Southeast.
WP20-16	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			
WP20-17	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			

Adjournment:

Minutes Recorded By: _____
Minutes Approved By: _____
Date: _____

June 25, 2019
TO: Federal Board of Subsisence Management, (Att: Theo Mutskowitz)
FROM: Alaskans FOR Wildlife and any Cooperating Entities
RE: Comments on Subsistence Proposals

Please consider these comments on numbered proposals. Comments are offered from a public perspective that reflects several major considerations which we earnestly wish you and the board to keep clearly in mind as you make decisions on these and all proposals offered, namely,

1) The lands in question are publically owned lands belonging to all US citizens who in theory and in law all have interest in how wildlife on these lands are managed, and
2) Article 8 of our Alaska Constitution clearly sets forth that ALL (emphasis) Alaskans are stakeholders, all essentially owners, with respect to its natural resources and how they are managed .

WP-20 Wolf Trapping lifting harvest restrictions and extending sealing time.
OPPOSE

This proposal leads to spreading unrestricted wolf take everywhere. Given especially the substantial science on the value of apex predators plus the high interest in sustaining wolf populations on American public lands including here in Alaska as essential to maintenance of ecosystem biodiversity, we maintain that enactment of this proposal would result in another chapter in the unscientific overall continued war on wolves. This proposal to lift harvest limits and to extend sealing limits also already excessive in length are not scientifically justified nor justified as a pubic matter given the overall value of wolves to maintenance of biodiversity. It must not pass.

WP20-17 – Removing harvest quotas and sealing requirements for hunting wolves, OPPOSE.
We oppose this proposal for the same reasons offered to oppose the previous proposal, WP20-16.
The values of wolves as apex predator and its place in American culture must have bearing upon this consideration. No science and no national or even Alaskan public cultural norms can possibly support this permissively reckless proposal to expand wolf take without bounds. It must not pass.

WP20-26 Permitting the use of snowmachines to "position" wildlife for harvest. OPPOSE

This proposal would expand this practice apparently from other land management units. In essence "positioning" is another term for what in reality will result in chasing, and harassing wildlife to exhaustion, prohibitions in the regulation notwithstanding, due to impossible enforcement limitations. As an example, when asked to explain existing regulations for snowmachine use in trapping and hunting, an Alaska wildlife trooper explained he does not even understand the regulation.

Expanded snowmachine use, "positioning," will amount to a continued enforcement challenge. Widespread abuse will surely result and will continue to give subsistence the reputation of abuse when it really needs public support: we feel that as we now face mass extinctions of wildlife species; there is new public and growing focus on the crisis. This is an extremely unwise plunge to the bottom and we caution a futuristic consideration.

WP20-08 Proposal to require traps and snares to be marked with name and state identification number.

SUPPORT This proposal is topical, even in urban municipalities of Alaska as conflicts in public use areas resulting in injuries to hikers, pets and other outdoor public land users rise .

Keeping in mind even the use of more remote public lands grows as outdoor users of their lands increase, the potential for conflicts including serious injuries resulting from hidden owner-unidentified traps will increase.

Organized trappers have strongly opposed such requirements as proposed here in past requests for change considered by the Alaska Board of Game. We witness the public land users (including of federal lands) would most certainly strongly favor this accountability. We strongly favor this proposal.

In closing, please carefully consider these comments as you go forward with the process over the next year or so. WE thank you for your consideration of these comments.

Sincerely,

Jim Kowalsky,
Chair, Alaskans FOR Wildlife
PO Box 81957
Fairbanks, Alaska 99708
907-488-2434

WP20–09 Executive Summary	
General Description	Proposal WP20-09 requests that the trapping season for beaver be extended in Units 1-5. *Submitted by: Southeast Alaska Subsistence Regional Advisory Council*
Proposed Regulation	**Units 1, 2, 3 except Mitkof Island and Unit 4 – Beaver (trapping)** *No limit* ~~*Dec. 1 – May 15*~~ ***Nov. 10 – May 15*** **Unit 3 Mitkof Island – Beaver (trapping)** *No limit* ~~*Dec. 1 – Apr. 15*~~ ***Nov. 10 – May 15***
OSM Conclusion	**Support**
Southeast Alaska Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Support**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-09

ISSUES

Wildlife Proposal WP20-09, submitted by the Southeast Alaska Subsistence Regional Advisory Council (Council), requests that the trapping season for beaver be extended in Units 1-5.

DISCUSSION

Because there would be no change to Unit 5 if this proposal is adopted, discussions relative to Unit 5 will be limited throughout the rest of the analysis.

The proponent states that adoption of this proposal will increase beaver harvest opportunity in Units 1-4 for Federally qualified subsistence users, and align the Federal season with the State season, which was recently extended by the Alaska Board of Game (BOG). Beaver populations throughout Southeast Alaska are healthy so no conservation concerns and anticipated with extending the season. There will be no change in Unit 5 as the current Federal trapping season is in alignment with the proposed dates. The proponent also states that adoption of this proposal is not expected to impact any other users.

Existing Federal Regulation

Units 1, 2, 3 except Mitkof Island and Unit 4 – Beaver (trapping)

No limit	*Dec. 1 – May 15*

Unit 3 Mitkof Island – Beaver (trapping)

No limit	*Dec. 1 – Apr. 15*

Proposed Federal Regulation

Units 1, 2, 3 except Mitkof Island and Unit 4 – Beaver (trapping)

No limit	~~*Dec. 1 – May 15*~~ ***Nov. 10 – May 15***

Unit 3 Mitkof Island – Beaver (trapping)

No limit	~~*Dec. 1 – Apr. 15*~~ ***Nov. 10 – May 15***

Existing State Regulation

Beaver must be sealed within 30 days of the close of the season.

Unit 1-4 – Beaver (trapping)

No limit	*Nov. 10 – May 15*

Extent of Federal Public Lands/Waters

Unit 1 is comprised of approximately 86% of Federal public lands and consist of 69% U.S. Forest Service (USFS), 17% National Park Service (NPS), and less than 1% Bureau of Land Management (BLM) managed lands **(see Unit Map)**.

Unit 2 is comprised of approximately 72% of Federal public lands and consist of 72% USFS and less than 1% U.S. Fish and Wildlife Service (USFWS) managed lands **(see Unit Map)**.

Unit 3 is comprised of approximately 90% of Federal public lands and consist of 90% USFS managed lands **(see Unit Map)**.

Unit 4 is comprised of approximately 92% of Federal public lands and consist of 92% USFS and less than 1% BLM managed lands **(see Unit Map)**.

Customary and Traditional Use Determinations

The Federal Subsistence Board has not made a customary and traditional use determination for beaver in Units 1-4. Therefore, all Federally qualified subsistence users may harvest beaver in these units.

Regulatory History

In 2007, the Council submitted Proposals WP07-09 and WP07-10 to establish and/or realign trapping seasons in Units 1D and 4 for beaver following BOG action in November 2006. The Council supported WP07-09 with modification to specify harvest dates of Dec. 1 – May 15 and supported WP07-10 as written (SEASRAC 2007). The Federal Subsistence Board (Board) adopted both proposals (WP07-10 to open the beaver trapping season in Unit 4 west of Chatham Strait as written and WP07-09 as modified by the Council) as consensus agenda items (FSB 2007).

The NPS prohibits the use of firearms to take free-ranging furbearers under a trapping license. This practice is prohibited in Alaskan National Parks, Monuments, and Preserves as a result of two sets of regulations: the definition of a trap as "*a snare, trap, mesh, or other implement designed to entrap animals others than fish*" (36 CFR § 13.1), NPS-wide regulations that define trapping as "*taking or attempting to take wildlife with a trap*" (36 CFR § 1.4).

Federal trapping regulations in Units 1-5 were adopted from the State trapping regulations at the time Federal management began. Although trapping regulations typically allow trappers to harvest furbearers with a firearm, harvesting beaver in southeast Alaska with this method had been prohibited. In 2016, the Council submitted Proposal WP16-07 requesting that firearms be allowed under trapping regulations to harvest beaver in Units 1-5. The Board adopted the proposal with modification to allow firearms to be used to take beaver under a trapping license under an open beaver season, except on NPS lands (FSB 2016).

Under State regulations, prior to regulatory year 2011/2012, the beaver trapping season was Dec. 1-May 15 in most of the Southeast Region (Mitkof Island Dec. 1-April 15 and Unit 5 Nov. 10-May 15). At the November 2010 BOG meeting, the Alaska Department of Fish and Game (ADF&G) brought Proposal 29 before the BOG to change the opening date for beaver trapping in Units 1-5 to Nov. 10. The rationale for this proposal was that beaver populations were believed to be healthy, and the increased season length would reduce nuisance permits and allow additional opportunity. Proposal 29 was adopted with modification and the season start date was changed to Nov. 10; the modification was to move the season ending date to April 30th due to concerns over pelt quality and for protection of kits.

Proposal 11 was submitted to the BOG for the 2018/2019 season, requesting that the trapping season for beaver be extended to Nov. 10 – May 15 for Units 1-5. The rationale from the proponent was to return the closure date to the previous closure date of May 15. The BOG adopted this proposal during their January 11-15, 2019 meeting in Petersburg (ADF&G 2019a), based on the rationale that beaver are generally abundant and underutilized, low additional harvest is expected, provides the opportunity for fresh meat in the spring, and no public concerns.

Biological Background

Beaver occur in the forested wetland areas of Alaska and are considered to be common and abundant throughout the state (ADF&G 2015). Little information is available for Unit 1A; however, due to low pelt prices, harvest is low in this unit (Porter 2013). Beaver are reported to be common to abundant in Unit 1B (Lowell 2013). In Unit 1C, beavers exist at moderate levels in most drainages with suitable habitat along the coastal mainland, as well as some of the larger islands. Furbearer populations in this unit, including beaver, appear stable (Scott 2013). Nuisance beaver harvest increased in Unit 1C during the 2012-2017 report period (Churchwell 2019). In Unit 1D, beavers were once considered scarce but now appear to be widely distributed and fairly abundant in the Unit (Sell 2013).

The beaver population in Unit 2 is thought to be high. Low levels of predators, low interest in trapping due to low pelt prices, and increasing amounts of second growth timber are all factors which may be influencing the population (Bethune 2013).

Most Unit 3 furbearer populations, including beaver, appear to be abundant or common and stable. Trapping is moderate throughout the unit, and higher near communities with established road systems. Large roadless portions of the unit likely remain untrapped. However, trapping access is improving due to increasing timber harvest and associated road densities, reducing furbearer's refugia and making them more vulnerable to overharvest (Lowell 2014). Beaver occur in limited areas of Unit 4 (Mooney 2013).

Harvest History

Average annual harvest of beaver for Units 1-4 was 252 for 2014-2018 (Schumacher 2019). Federally qualified subsistence users accounted for 68% of the harvest during this time period (**Figure 1**). Harvest level varies and is more a function of trapper interest, weather conditions, access, fuel prices, and fur prices rather than abundance (Bethune 2013, Lowell 2013, Porter 2013, Scott 2013). Low pelt prices may be contributing to low harvest in recent years (Bethune 2013, Porter 2013).

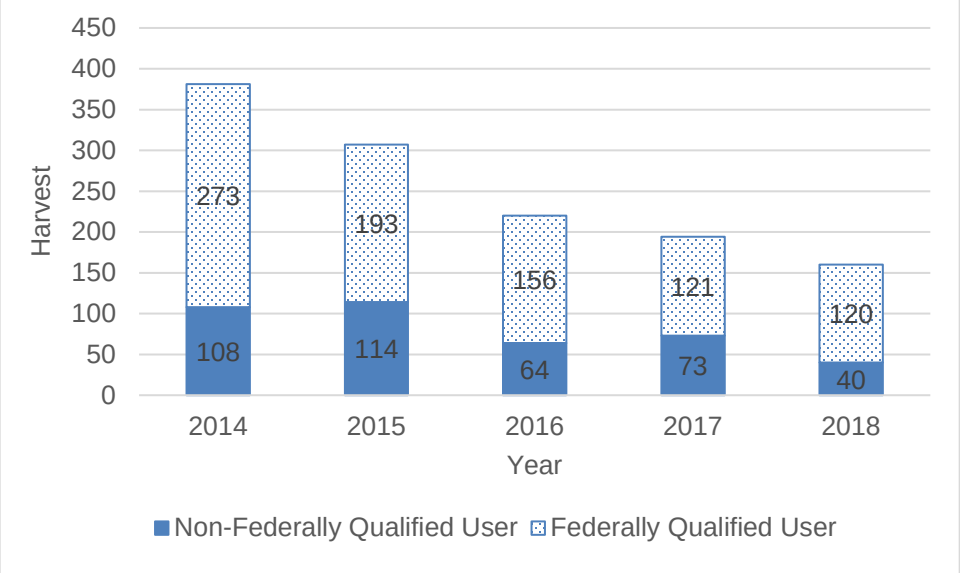

Figure 1. Beaver trapping harvest in Units 1-4, 2014-2018 (Schumacher 2019).

Effects of the Proposal

If this proposal is adopted, Federally qualified subsistence users would have additional opportunities to harvest (trap) beaver in Units 1-4, and the State and Federal seasons would be aligned, which reduces regulatory complexity and user confusion. ADF&G anticipates the annual beaver harvest to increase approximately 5% as a result of adoption of the State season extension (ADF&G 2019b); however, since Federally qualified subsistence users can currently trap under State regulations during the extended State season, adoption of this proposal is not expected to result in any additional harvest.

Furthermore, beaver populations are considered healthy through Units 1-4; therefore, adoption of this proposal is not expected to cause a conservation concern.

OSM CONCLUSION

Support Proposal WP20-09.

Justification

Adoption of this proposal would provide additional harvest opportunities for Federally qualified subsistence users in Units 1-4, and align State and Federal trapping regulations for beaver. Adoption of this proposal is not expected to cause a conservation concern.

LITERATURE CITED

ADF&G. 2015, Wildlife Notebook Series Internet: http://www.adfg.alaska.gov/index.cfm?adfg=beaver.main

ADF&G. 2019a. Alaska Board of Game Southeast Region Meeting, January 11-15, 2019, Petersburg, AK. Meeting summary. 7pp. http://www.adfg.alaska.gov/static/applications/web/nocache/regulations/regprocess/gameboard/pdfs/2018-2019/se/soa.pdf0401469B7D5CA05F65D4FB825F177BF5/soa.pdf.

ADF&G. 2019b. Alaska Department of Fish and Game, Staff Comments, Southeast Regional Proposals, Alaska Board of Game Meeting, Petersburg, AK, January 11-15, 2019 (pp. 29-30). http://www.adfg.alaska.gov/static/regulations/regprocess/gameboard/pdfs/2018-2019/se/rc4_tab2_comments.pdf

Bethune, S. 2013. Unit 2 furbearer management report. Pages 47-57 *in* P. Harper and Laura McCarthy, editors. Furbearer management report of survey and inventory activities 1 July 2009-30 June 2012. ADF&G, Species Management Report ADF&G/DWC/SM-2013-5, Juneau. ADF&G. Juneau, AK.

Churchwell, R. 2019. Furbearer Management Report and Plan, Game Management Unit 1C: Report Period 1 July 2012-30 June 2017, and Plan Period 1 July 2017-30 June 2022. ADF&G, Species Management Report and Plan ADF&G/DWC/SMR&P-2019-XX. Draft Report. ADF&G. Juneau, AK.

FSB. 2007. Transcripts of Federal Subsistence Board proceedings, December 11-13 2007. Office of Subsistence Management, FWS. Anchorage, AK.

FSB. 2016. Transcripts of Federal Subsistence Board proceedings, April 12, 2016. Office of Subsistence Management, FWS. Anchorage, AK.

Lowell, R. E. 2013. Unit 1B furbearer management report. Pages 13-29 *in* P. Harper and Laura McCarthy, editors. Furbearer management report of survey and inventory activities 1 July 2009-30 June 2012. ADF&G, Species Management Report ADF&G/DWC/SM-2013-5, Juneau. ADF&G. Juneau, AK.

Lowell, R. E. 2014. Unit 3 furbearer management report. Pages 58-74 *in* P. Harper and Laura McCarthy, editors. Furbearer management report of survey and inventory activities 1 July 2009-30 June 2012. ADF&G Species Management Report ADF&G/DWC/SM-2013-5, Juneau. ADF&G. Juneau, AK.

Mooney, P. 2013. Unit 4 furbearer management report. Pages 75-86 *in* P. Harper and Laura McCarthy, editors. Furbearer management report of survey and inventory activities 1 July 2009-30 June 2012. ADF&G, Species Management Report ADF&G/DWC/SM-2013-5, Juneau. ADF&G. Juneau, AK.

Porter, B. 2013. Unit 1A furbearer management report. Pages 1-12 *in* P. Harper and Laura McCarthy, editors. Furbearer management report of survey and inventory activities 1 July 2009-30 June 2012. ADF&G, Species Management Report ADF&G/DWC/SM-2013-5, Juneau. ADF&G. Juneau, AK.

Schumacher, Tom. 2019. Beaver sealing data for Units 1-5, 2014-2018. Personal Communication, email. ADF&G. Douglas, AK.

Scott, R. 2013. Unit 1C furbearer management report. Pages 30-38 *in* P. Harper and Laura McCarthy, editors. Furbearer management report of survey and inventory activities 1 July 2009-30 June 2012. ADF&G, Species Management Report ADF&G/DWC/SM-2013-5, Juneau. ADF&G. Juneau, AK.

Sell, S.K. 2013. Unit 1D furbearer management report. Pages 39-46 *in* P. Harper and Laura McCarthy, editors. Furbearer management report of survey and inventory activities 1 July 2009-30 June 2012. ADF&G, Species Management Report ADF&G/DWC/SM-2013-5, Juneau. ADF&G. Juneau, AK.

SEASRAC (Southeast Alaska Subsistence Regional Advisory Council). 2007. Transcripts of the Southeast Subsistence Regional Advisory Council, February 28, 2007 in Kake, Alaska. Office of Subsistence Management, FWS. Anchorage, AK.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southeast Alaska Subsistence Regional Advisory Council

Support WP20-09. The Council supports this alignment of Federal and State regulations as harvest levels of beaver have decreased significantly, and although observations and data in the analysis show that the population has decreased in recent years, there is no evidence to support any concerns for beaver populations. In fact, this proposal may assist in smolt survival in certain systems. The Council supports the proposal to avoid possible user confusion.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-09: This proposal, submitted by the Southeast Alaska Subsistence Regional Advisory Council, would extend the beaver trapping season in Units 1-4 for Federally qualified subsistence users and align the Federal season with the State season. Currently the Unit 5 season ends May 15.

Introduction: This proposal seeks to align the federal subsistence beaver trapping season with new state regulations adopted by the Alaska Board of Game in January 2019. At the January 2019 meeting, the Board passed Proposal 11 to extend the season by two weeks to end on May 15.

Prior to 2011, the end date for beaver trapping had been May 15. The rationale for this extended season was that beaver populations were believed to be healthy, and the increased season would reduce the need for ADF&G to issue nuisance permits, and it would allow additional opportunity. Regionwide trapper harvest of beavers during May averages approximately 14 beavers annually, or 5% of the total harvest. Currently, beaver populations across the region are thought to be healthy and stable or increasing, and trapping pressure is light to moderate.

Impact on Subsistence Users: This proposal will afford federally qualified trappers in Units 1-4 an additional two weeks of beaver trapping opportunity.

Impact on Other Users: If adopted this proposal will align the Federal and State trapping seasons and is not expected to have any impact on other users.

Opportunity Provided by State: The State beaver trapping season of November 10 to May 15 will go into effect for this upcoming Regulatory Year 2019 season.

State customary and traditional use findings: The Alaska Board of Game has made a positive customary and traditional use finding for furbearers in all units.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a furbearer population that is reasonably necessary for customary and traditional uses. This is an ANS. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Trapping regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: trapping regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for beavers in Units 1-5 is 90% of the harvestable portion of the population. The trapping season and bag limit for beaver in Units 1-5 is:

		Open Season	
Unit/Area	Bag Limit	Resident	Nonresident
1-5	*No limit*	*Nov 10 – May 15*	*Nov 10 – May 15*

Special instructions: Harvested beavers must be sealed within 30 days after the season closes.

Conservation Issues: None.

Enforcement Issues: The alignment of both state and federal regulations would decrease confusion among users and enforcement officers.

Recommendation: ADF&G **SUPPORTS** this proposal because the proposal aligns state and federal regulations and does not create biological concerns for the beaver populations in Units 1-5, which can be sustainably managed under the current or proposed regulations. The Department currently has a program developed for issuing nuisance beaver permits when they are needed (See page 11 of the Alaska Trapping Regulations NO. 59).

WP20–10 Executive Summary	
General Description	Proposal WP20-10 requests a customary and traditional use determination for black bears in Units 1, 2, 3, and 5 for rural residents of Units 1 through 5. *Submitted by: Southeast Alaska Regional Advisory Council.*
Proposed Regulation	**Customary and Traditional Use Determination—Black Bear** ***Units 1, 2, 3, and 5*** — ***Rural residents of Units 1–5*** ~~*Unit 1A, 1B, and 1D*~~ — ~~*All rural residents*~~ ~~*Unit 1C*~~ — ~~*Rural residents of Units 1C, 1D, 3, and Hoonah, Pelican, Point Baker, Sitka, and Tenakee Springs*~~ ~~*Units 2 and 3*~~ — ~~*All rural residents*~~ ~~*Unit 5*~~ — ~~*Rural residents of Unit 5A*~~
OSM Conclusion	**Support**
Southeast Alaska Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**1 Oppose**

STAFF ANALYSIS
WP20-10

ISSUES

Proposal WP20-10, submitted by the Southeast Alaska Subsistence Regional Advisory Council (Council), is a request for the Federal Subsistence Board (Board) to recognize customary and traditional uses of black bears in Units 1, 2, 3, and 5 for rural residents of Units 1 through 5.

DISCUSSION

The Council states that customary and traditional use determinations carried over from State management were inappropriately narrow. Residents of Southeast Alaska (including Yakutat) have a long history of obtaining large wildlife resources from throughout the region. Subsistence users frequently travel far from home within the region to obtain subsistence resources, and this is a pattern that has been practiced both traditionally and contemporarily. Subsistence users access these areas by planes, boats, highway vehicles, and all-terrain vehicles. Black bears provide not only nutrition for families, but for many, there is a deeply seated cultural connection. Subsistence users have passed hunting, processing, and preservation knowledge down for generations. This resource is also frequently shared within and among Southeast Alaska communities, and it sustains the regions mixed subsistence-cash economy. Harvest and sharing of this species in recent times has been frequently documented in subsistence harvest surveys, harvest ticket reporting, and in testimony at Council meetings and local State advisory committee meetings. There is additional data available in published literature from various authors. It is clear that a long-term pattern of use throughout the region exists for black bears and that rural residents of Southeast Alaska continue to rely on black bears to meet their subsistence needs. This species provides substantial cultural, economic, social, and nutritional elements to meet subsistence needs.

Existing Federal Regulation

Customary and Traditional Use Determination—Black Bear

Unit 1A, 1B, and 1D	*All rural residents*
Unit 1C	*Rural residents of Units 1C, 1D, 3, and Hoonah, Pelican, Point Baker, Sitka, and Tenakee Springs*
Units 2 and 3	*All rural residents*
Unit 5	*Rural residents of Unit 5A*

Note: Black bears are not found in Unit 4.

Proposed Federal Regulation

Customary and Traditional Use Determination—Black Bear

Units 1, 2, 3, and 5	***Rural residents of Units 1–5***
~~*Unit 1A, 1B, and 1D*~~	~~*All rural residents*~~
~~*Unit 1C*~~	~~*Rural residents of Units 1C, 1D, 3, and Hoonah, Pelican, Point Baker, Sitka, and Tenakee Springs*~~
~~*Units 2 and 3*~~	~~*All rural residents*~~
~~*Unit 5*~~	~~*Rural residents of Unit 5A*~~

Relevant Federal Regulation

36 CFR 242.5 Eligibility for subsistence use.

. . .

(c) Where customary and traditional use determinations for a fish stock or wildlife population within a specific area have not yet been made by the Board (e.g., "no determination"), all Alaskans who are residents of rural areas or communities may harvest for subsistence from that stock or population under the regulations in this part.

Extent of Federal Public Lands

Federal public lands comprise approximately 88% of Southeast Alaska Units 1, 2, 3, and 5. Details by unit are shown in **Table 1**, below. The Tongass National Forest comprises U.S. Forest Service lands. Glacier Bay National Park and Preserve and Wrangell-St. Elias National Park and Preserve comprise National Park Service lands (see **Unit 1 through 5 Maps**). Glacier Bay National Park is closed to subsistence uses, but Glacier Bay National Preserve is open to subsistence uses.

There are special requirements for National Park Service Lands. Under the guidelines of the Alaska National Interest Conservation Act (ANILCA), National Park Service regulations identify qualified local rural subsistence users in National Parks and Monuments: (1) by identifying resident zone communities, which include a significant concentration of people who have customarily and traditionally used subsistence resources on park lands; and (2) by identifying and issuing subsistence use permits to individuals residing outside of these resident zone communities who have a personal or family history of subsistence uses.

Table 1. Percentage of Federal public lands in the Southeast Alaska Region Units 1, 2, 3, and 4, by Federal management agency.

Wildlife Management Units	Percentage Federal Public Lands	Percentage Managed by Each Federal Agency
1A	91.3%	91.3% U.S. Forest Service
1B	98.1%	98.1% U.S. Forest Service
1C	95.5%	62.6% U.S. Forest Service 32.9% National Park Service
1D	43.8%	24.9% National Park Service 18.9% U.S. Forest Service
2	74.0%	74.0% U.S. Forest Service
3	90.6%	90.6% U.S. Forest Service
5A	94.5%	63.3% U.S. Forest Service 31.2% National Park Service
5B	96.0%	93.8% National Park Service 2.1% Bureau of Land Management 0.1% U.S. Forest Service

Regulatory History

At the beginning of the Federal Subsistence Management Program in Alaska in 1992, the Board adopted the State's customary and traditional use determinations for Units 1–5 into regulations. The State did not recognized customary and traditional uses of black bears in most of Southeast Alaska, except in Unit 1C that included rural residents of Unit 1C and Haines, Klukwan, and Hoonah. The Board determined that, lacking a State determination, then all rural residents would be eligible to hunt black bears under Federal regulations until the Board adopted customary and traditional use determinations for the rest of Southeast Alaska (see §242.5(c) above; 72 FR 22961, May 29, 1992).

In 1997, Wrangell-St. Elias National Park Subsistence Resource Commission and the Southeast Alaska Council submitted Proposal P97-13 seeking to include residents of Yakutat in a customary and traditional use determination for black bears in Unit 5. The Board adopted the Southeast Alaska Council recommendation and modified the request to include residents of Unit 5A, including Yakutat.

In 1998, Proposal P98-02 was submitted by the Petersburg Ranger District of the U.S. Department of Agriculture Forest Service seeking to add Kake to the customary and traditional use determination for black bears in Unit 1C south of Bishop Point, including drainages into Taku Inlet and Taku River.

Proposal P98-03 was also submitted by the Petersburg Ranger District seeking to add Petersburg to the determination for black bears in Unit 1C south of Point Coke, including drainages into Williams Cove and Tracy Arm.

The Board adopted the Council's recommendation to support the proposals, and additionally the Board added rural residents of Units 1D and 2, and the communities Pelican, Point Baker, Sitka, and Tenakee

Springs to the determination for black bears in Unit 1C (68 FR 38468; June 27, 2003). The Board justification was the following:

> The traditional use and ownership area of the Kake Tlingits, the primary residents of the community of Kake, extends north from Unit 1(B) into Unit 1(C) to include Tracy Ann and Endicott Ann. While there is no recent harvest data for black hear in Unit 1(C) by residents of Kake, the fact that the Kake Tlingits' traditional use area included part of Unit l(C) constitutes evidence for a positive C&T for black bear for Kake in that area. The other communities in the region listed should be included in the C&T use determination because they have an active record of harvest in the unit. The rationale for extending the positive C&T for these communities to Unit 1(C) as a whole rather than to a part of it is for regulatory simplicity. The intent of proposal 2 is accommodated in the recommended action pertaining to proposal 3. Exclusion of communities located outside the region, but which have recorded harvest of black hear from Unit 1(C) rests on the rationale that they do not meet the C&T factor which specifies that harvest of resources must take place near, or in a location reasonably accessible to, the community or area (OSM 1998: 25).

In 2010, the Secretary of the Interior asked the Board to review, with Regional Advisory Council input, the customary and traditional use determination process and present recommendations for regulatory changes (Salazar 2010). During the Southeast Alaska Council's review in 2016, it requested, among other things, that the Board adopt customary and traditional use determinations broadly (Bangs 2016). The Council requested the Board to in the future recognize customary and traditional uses of all fish and wildlife in Southeast Alaska that have been taken for food or other purposes, including handicrafts, ceremonies, and customary trade. The Council said its recommendations to the Board in the future would tend to include residents of all rural Southeast communities and areas, and the three criteria in Section 804 of ANILCA was the regulatory process the Board should use to allocate resources, when necessary, and not customary and traditional use determinations. The Council intended to submit regulatory proposals to the Board requesting to broaden the complex web of customary and traditional use determinations that currently existed in Southeast Alaska (Bangs 2016). The Board responded that the Southeast Alaska Council's recommendation regarding customary and traditional use determinations aligned well with the current process followed statewide in the Federal Subsistence Management Program (Towarak 2016: 5). Since then, the Council has requested, and the Board has adopted, customary and traditional use determinations for all fish (Proposal FP19-17) and for deer (Proposal WP18-02) that include all rural residents of Southeast Alaska. This has greatly simplified these determinations that were originally adopted from State regulations at the formation of the Federal Subsistence Management Program in 1992.

Background

During the Russian Period in Alaska, the Russian American Company exported black bear skins to St. Petersburg and Asia (Bockstoce 2009). The sale of black bear skins was generally allowed until 1971 when the State banned the practice of selling black bear skins and implemented mandatory sealing requirements (State of Alaska 1971). Currently, however, black bear hides and skulls may be sold after

sealing, but black bear trophies may not be sold (5 AAC 92.200). The State has allowed the sale of handicraft items made from black bear skins since 1998 (5 AAC 92.200), and the Federal Program adopted similar regulations in 2004 (CFR §242.25 (j)).

Since 2008, all Alaska resident hunters must obtain a State harvest ticket and report their hunting efforts. In 2010, the State re-classified back bears as furbearing animals as well as game animals (5 AAC 92.990 (a)(32)). Consequently, during State hunts, black bears could be taken with a trap, if trapping regulations were adopted. They have not been adopted. A September through June season and a two bear harvest limit have remained the same since statehood.

In Southeast Alaska, black bears occupy the mainland and islands with the exceptions of Admiralty, Baranof, Chichagof, and Kruzof islands (Unit 4). Habitat in Units 2 and 3 support more black bears than in Units 1 and 5. Within Unit 5, black bears are found almost exclusively in Unit 5A because Unit 5B is dominated by the Malaspina Glacier (Bethune 2014, Bethune and Porter 2014, Lowell 2014a and 2014b, and Sell 2014).

Nonresident hunting in Southeast Alaska has grown since the 1970s, peaking around 1990. Since then, a decline in nonresident hunting effort is likely due to several reasons. First, nonresident hunters are required to purchase and compete for a draw permit, or obtain a harvest ticket that requires the nonresident hunter to hire a registered guide to accompany him or her. Additionally the nonresident harvest limit has been reduced from two to one black bear, the meat of spring black bears must be salvaged, and the cost of a nonresident tag has risen. However, nonresident hunters continue to harvest the bulk of black bears that are taken in Southeast Alaska with most taken in Units 2 and 3 where black bear habitat is better than in other areas (Bethune 2014, Bethune and Porter 2014, Lowell 2014a and 2014b, and Sell 2014).

Community Characteristics

The rural area of Southeast Alaska is comprised of about 33 small to medium sized communities, ranging in population from 20 or less (Point Baker, Elfin Cove, and Game Creek) to over 8,000 (Sitka) (**Table 2,** ADCCED 2017, ADLWD 2017, and U.S. Bureau of the Census 1995). Many were established by Tlingit Indians and are situated at historical village sites or were established by Haida Indians (Hydaburg and Kasaan) or Tsimshian Indians (Metlakatla). Population growth in Southeast Alaska during the historical period (beginning about 1750) has been affected by several waves of in-migration, first by Russian fur traders who established Sitka as their headquarters in the late 1700s. After the sale of Alaska to the United States in 1867, new industries (such as commercial fishing, canneries, and mining) and commercial trade, were pursued with the associated influx of outsiders (Worl 1990). Beginning in the 1970s, timber logging camps sprang up and some have persisted as new communities, such as Game Creek and Thorne Bay (Ellanna and Sherrod 1986). Many rural communities in Southeast Alaska have at their core a *kwaan* or tribe of Alaska Natives. The kwaan territories mapped in 1947 by Goldschmidt and Haas covered all of Southeast Alaska (Goldschmidt and Haas 1998).

Since 1960, the rural population of Southeast Alaska has doubled from 13,102 people in 1960 to 26,343 people in 2010 (**Table 2**). Some of this growth has been from new communities established near logging activities, growth in the recreation industry, and natural growth (Cerveny 2005).

Eight Factors for Determining Customary and Traditional Use

Customary and traditional uses in a community or area is generally exemplified through the eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) a pattern of use recurring in specific seasons for many years; (3) a pattern of use consisting of

Table 2. The number of people living in rural Southeast Alaska communities, from 1960 to 2010, based on the U.S. Census. NA=not available, *Italic*=estimated (Source: ADLWD 2017, ADCCED 2017, and U.S. Bureau of the Census 1995).

Unit of residence	Community	1960	1970	1980	1990	2000	2010	Number of house-holds
1A	Hyder	32	49	77	99	97	87	47
	Metlakatla	1,135	1,245	1,333	1,464	1,375	1,405	469
	Saxman	153	135	273	369	431	411	120
1C	Gustavus	107	64	98	258	429	442	199
1D	Haines Borough	*1,000*	1,504	1,680	2,117	2,392	2,508	991
	Klukwan	112	103	135	129	139	95	44
	Skagway	659	675	814	692	862	920	410
2	Coffman Cove	0	0	193	186	199	176	89
	Craig	273	272	527	1,260	1,397	1,201	523
	Edna Bay	135	112	6	86	49	42	19
	Hollis	0	0	0	111	139	112	55
	Hydaburg	251	214	298	384	382	376	133
	Kasaan	36	30	25	54	39	49	17
	Klawock	251	213	318	722	854	755	313
	Naukati Bay	0	0	0	93	135	113	60
	Point Baker	0	80	90	39	35	15	8
	Port Protection	0	0	40	62	63	48	26
	Thorne Bay	0	443	377	569	557	471	214
	Whale Pass	0	0	90	75	58	31	20
3	Kake	455	448	555	700	710	557	246
	Kupreanof	26	36	47	23	23	27	15
	Petersburg Borough	1,502	2,042	2,821	3,207	3,224	2,948	1,252
	Wrangell Borough	2,165	2,358	2,658	2,479	2,448	2,369	1,053
4	Angoon	395	400	465	638	572	459	167
	Elfin Cove	0	49	28	57	32	20	15
	Game Creek	0	0	0	61	35	18	10
	Hoonah	686	748	680	795	860	760	300
	Pelican	135	133	180	222	163	88	70
	Port Alexander	18	36	86	119	81	52	22
	Sitka Borough	3,237	6,109	7,803	8,588	8,835	8,881	3,545
	Tenakee Springs	109	86	138	94	104	131	72
	Whitestone	0	0	NA	164	116	114	30
5A	Yakutat Borough	230	190	449	534	808	662	270
TOTAL		**13,102**	**17,774**	**22,284**	**26,450**	**27,643**	**26,343**	**10,824**

methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area; (5) 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; (6) a pattern of use which includes the handing down of knowledge of

fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use in which the harvest is shared or distributed within a definable community of persons; and (8) 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 the community or area.

The Board makes customary and traditional use determinations based on a holistic application of these 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.

Introduction

If a proposal is received requesting a customary and traditional use determination where none has been made previously for the resource, such as Units 1A, 1B, 1D, 2, and 3 in this proposal, the analyst evaluates use by all rural residents who may harvest the resource within the geographic boundaries defined by the proponent in the request.

Harvest Reporting System

One source of harvest data is State sealing records. **Appendix Table 1-1** shows that about half of reported black bears harvested in Southeast Alaska was harvested by nonresidents of Alaska (15,248 out of 27,816 black bears, 55%) hunting primarily in Units 2 and 3 since 1972 (OSM 2019; Scott 2019, pers. comm.). These records do not include the numbers of attempts to take bears as opposed to actually harvesting one, so neither the success rate nor the communities whose residents were unsuccessful in taking black bears are shown. Additionally, people from all over Alaska have taken black bears in Southeast Alaska. It is clear that residents of rural communities are responsible for much of the take (5,714 out of 27,816 black bears, about 21%). **Table 3** below shows the reported harvest of black bears by rural Southeast communities. They reported harvesting almost all (5,453 of 5,714 black bears, 95%) of the harvest reported by rural communities in Alaska since 1972.

Another source of harvest data is State harvest ticket returns since 2008. **Appendix Table 1-2** shows half of reported black bears harvested in Southeast Alaska was harvested by nonresidents of Alaska (1,652 out of 3,208 black bears, 51%) hunting in Units 2 and 3 (OSM 2019; Scott 2019, pers. comm.).

Table 3. State sealing records: The reported harvest of black bears by rural residents of Southeast Alaska, from 1972 to 2018 cumulative (blank cell=0) (Source: OSM 2019; Scott 2019, pers. comm.).

Unit of Residence	Community	Unit 1A	Unit 1B	Unit 1C	Unit 1D	Unit 2	Unit 3	Unit 5A	Unit 5B	Total
1A	ANNETTE	33				24				57
1A	BELL ISLAND	1								1
1A	CLEVELAND PEN	1								1
1A	HYDER	14				1				15
1A	MEYERS CHUCK	4					1			5
1A	NEETS BAY	3								3
1A	REVILLA ISLAND	4								4
1A	SAXMAN	1								1
1B	HOBART BAY			34			1			35
1C	EXCURSION INLET			9						9
1C	GUSTAVUS			101			4	2		107
1D	HAINES	1		51	1,132	3	5	1		1,193
1D	KLUKWAN			1	5			1		7
1D	SKAGWAY		1	5	124		1	1		132
2	CAPE POLE					7				7
2	COFFMAN COVE	2				65	3			70
2	CRAIG	1	1	1		498	4			505
2	EDNA BAY					6	1			7
2	HOLLIS					14				14
2	HYDABURG					33				33
2	KASAAN					4				4
2	KLAWOCK					207	1			208
2	NAUKATI BAY					22				22
2	NICHAN COVE					1				1
2	POINT BAKER			1		1	2			4
2	POLK INLET					2				2
2	PORT ALICE					1				1
2	PORT PROTECTION					5	1			6
2	PRINCE OF WALES					1				1
2	THORNE BAY	2	4		1	314	6	2		329
2	WATERFALL					6				6
2	WHALE PASS					31				31
3	BURNETT INLET						3			3
3	KAKE	1					103			104
3	KUPREANOF CITY						2			2
3	PETERSBURG	5	135	22		44	782			988
3	PORTAGE BAY						1			1
3	ROOSEVELT HBR		1							1
3	ROWAN BAY						8			8
3	WRANGELL	3	124	9		61	283			480
4	ANGOON						6			6
4	HIDDEN FALLS						12			12
4	HOONAH			80	2	1	5			88
4	PELICAN			1			2			3
4	PORT ALEXANDER					1	10			11
4	PORT ARMSTRONG						4			4
4	SITKA	20	2	19	15	49	639	2		746
4	TENAKEE SPRINGS			1			1			2
5A	YAKUTAT			1		1		171		173
	GRAND TOTAL	96	268	336	1,279	1,403	1,891	180	0	5,453

Table 4. State harvest ticket reports: The reported harvest of black bears by rural residents of Southeast Alaska, from 2009 to 2018 cumulative (blank cell=0, 0=hunting effort/no harvest (Source: OSM 2019; Scott 2019, pers. comm.).

Unit of Residence	Community	Unit 1A	Unit 1B	Unit 1C	Unit 1D	Unit 1Z	Unit 2	Unit 3	Unit 5A	Unit 5B	Total
1A	HYDER	2					0				2
1A	METLAKATLA	0		0			2				2
1A	NEETS BAY	0									0
1C	GUSTAVUS		1	14	1		2	0		0	18
1D	HAINES	2		2	128			0			132
1D	KLUKWAN				0						0
1D	SKAGWAY			0	27						27
2	COFFMAN COVE	1					11	1			13
2	CRAIG	1		1			38	1		0	41
2	EDNA BAY						1				1
2	HOLLIS						4				4
2	KASAAN						0				0
2	KLAWOCK						16	2			18
2	NAUKATI BAY						2				2
2	PRT PROTECTION						0				0
2	PORT ST NICK						0				0
2	THORNE BAY		0	1			55	1			57
2	WATERFALL						1				1
2	WHALE PASS						3				3
3	KAKE						1	12			13
3	KUPREANOF CITY							1			1
3	PETERSBURG	1	10	1			6	76			94
3	WRANGELL	0	5		0	0	6	54	1		66
4	ANGOON			0							0
4	BARANOF							1			1
4	HIDDEN FALLS							19			19
4	HOONAH			4							4
4	PRT ALEXANDER							0			0
4	PRT ARMSTRONG							3			3
4	PORT WALTER							1			1
4	PYBUS BAY							2			2
4	SITKA	5	0	7	0		11	60		0	83
5A	YAKUTAT			1						33	34
	GRAND TOTAL	12	16	31	156	0	159	234	1	33	642

Additionally, people from all over Alaska have taken black bears in Southeast Alaska. It is clear that residents of rural communities are responsible for much of the take (675 out of 3,208 black bears, about 21%). **Table 4** above shows the reported harvest of black bears by rural Southeast communities. They reported harvesting almost all (642 of 675 black bears, 95%) of the total harvest reported by rural communities in Alaska since 2008.

Rural communities in Alaska for which an attempt to harvest black bears been documented (see **Appendix Table 1-1** and **Appendix Table 1-2)** but which are outside of Southeast Alaska will be

excluded from further analysis. These communities are not in reasonable proximity to Units 1, 2, 3, or 5, the area under consideration in this analysis.

Black Bear Uses in Southeast Alaska

Hunting black bears, or *s'eek* in Tlingit, *táan* in Haida, and 'tu*'utsgm ol* in Tsimshian, is a well-documented Tlingit, Haida, and Tsimshian tradition (Edwards 2009, Lacher 2010, and Roberts 2009). Black bears were customarily and traditionally harvested during all months of the year, often opportunistically while hunters were engaged in other activities. In late summer or fall black bears were often hunted in conjunction with fishing, when their meat could be either dried and stored, or eaten fresh (Oberg 1973). Winter was also considered a prime black bear hunting time. In early spring bears just emerging from their dens were sought for their hides (Oberg 1973 and Emmons 1991).

In rural communities of the region, the harvest of fish, wildlife, and plants follows a yearly cycle that is primarily based on the seasonal appearance of these resources. This seasonal round is a regular pattern, although some fluctuation appears from year to year depending on the availability of certain species and weather conditions. In more recent times, wage employment and regulations have influenced the timing of harvests. The knowledge of these seasonal fish, wildlife, and plant harvesting opportunities is widely shared throughout the region (Firman and Bosworth 1990 and Smythe 1988). In recent times, hunting has occurred during seasons set by the Alaska Board of Game. Since 1959, essentially all open black bear seasons have been September through June (Bethune 2014). Traditionally, southeast Alaska Native hunters speared bears in dens, often with the aid of dogs, or ambushed them along trails and beaches. Besides spears, a pick-like club was used to kill bears. Bears were also shot with bows and arrows from tree stands above their trails (de Laguna 1960 and Berg 1973). Deadfalls and pits also were used by the Tlingit. The steel leg trap, used with a heavy log and chain drag, had replaced many of these earlier methods by the late 1800s (Emmons 1991).

Today, there is no trapping season for black bears. Contemporary hunters use rifles to take bears. Access to hunting areas is by boat, highway vehicle where roads exist, off-road vehicle, and sometimes by aircraft. After a bear is shot, it is generally skinned and quartered, then carried in portions to an access point (ADF&G 1992).

Communities in the region have a history of hunting and fishing near their communities as well as fairly distantly from those communities. Availability of faster, larger boats has increased the ease of access to some areas (Cohen 1988:47–52, Ellanna and Sherrod 1986, Firman and Bosworth 1990, Gmelch and Gmelch 1983, Sill and Koster 2017a and 2017b, Smythe 1988).

Black bear have traditionally been used in Southeast Alaska as an important source of food, clothing, grease, and fat. Black bear hide, fat, and claws were a common trade item among all Native groups of the region. Beyond their use for food and utility items, black bears continue to be important as mythical or symbolic beings; black bear are found on totems and clan crests. Many traditional clan houses are named after the black bear. The Sitka Tlingit calendar, for instance, refers to February as "the month when black and brown bears begin to have cubs and throw them out into the snow." The

Wrangell Tlingit calendar has the same time as “black bear month, the month when the black bear turns over on the other side in his den” (ADF&G 1992).

Traditionally, bear meat was harvested and eaten fresh, or dried and stored for later consumption. Today, bear meat is eaten fresh, or may be frozen, canned, corned, or made into sausage (Oberg 1973).

Knowledge relating to the taking and use of black bears extends well into the prehistory of indigenous people of the region. Non-Native people immigrating into the region in the last two centuries brought their own bear hunting experience and lore with them. The combination of these traditions continues in all of communities in the region.

The antiquity of the bear population in the region extends to between 23,000 and 42,000 years ago, as evidenced by recent paleontological work at On Your Knees Cave on Prince of Wales Island. A black bear tibia found in that cave has been radiocarbon dated at 41,600 +/- 1,500 years old. The presence of human remains in the same cave dating to nearly 10,000 years ago, suggests that human use of bear in the region is quite ancient (Heaton et al. 1996).

To Tlingits, hunting and fishing were, and continue to be important religious, moral, as well as subsistence occupations. In the past,

The hunter would pray to the dead animal and to his own “spirit above,” explaining his need and asking forgiveness. The dead creature was thanked in song ... [and] certain essential parts (head, bones, or vital organs, depending on the species) were interred to the water, or cremated, to insure reincarnation of the animal (de Laguna 1990:209).

There is good evidence that use of black bears in the region has been continuous through recorded history in all areas where bears have been found. Black bear is often featured at Alaska Native traditional ceremonies, continuing an ancient tradition. In all communities, black bear hunting areas are locally known, and a newcomer without kinship ties in a community may not be shown these areas until becoming established as a resident and as a hunter. At that time, knowledge is passed from friends and neighbors (ADF&G 1992).

Sharing

Black bears are widely shared in the region, within and between communities. This is an indication of their value, their discontinuous occurrence in the region, and the large quantity of meat provided by one animal. Alaska Department of Fish Game Division of Subsistence household surveys conducted between 1983 and 2015 demonstrate that in all communities where hunters harvest black bears, hunters share their harvests with other households. Similarly, several communities reported using black bears even though they reported no harvest. Based on household surveys, 29 of 34 communities report using black bears, and 29 of 34 communities report sharing their black bear harvests with others (see **Appendix Table 1-3**, ADF&G 2019). Trade in black bears often involves other valued resources such as herring eggs, hooligan oil, or moose meat (ADF&G 1992).

Reliance upon a Wide Diversity of Fish and Wildlife Resources

Most rural Southeast communities rely a wide variety of wild resources. These resources comprise a substantial portion of dietary intake. Alaska Department of Fish and Game Division of Subsistence household surveys conducted between 1983 and 2015 demonstrate this variety. Harvest level estimates are described in categories such as salmon, nonsalmon fish, land mammals, marine mammals, birds and eggs, marine invertebrates, and plants and berries in pounds edible weight annually. Overall harvest rates above 200 pounds per person are common. In general, rural Southeast communities harvest fish at the highest rates and land mammals, such as deer and moose, and marine invertebrates, such as clams and crab, are also harvested at high rates. Marine mammals, birds, and plants and seaweed comprise smaller portions of annual harvests but are important components of the diet (see **Appendix Table 1-4,** ADF&G 2019).

Effects of the Proposal

If Proposal WP20-10 is adopted, those eligible to hunt black bears under Federal regulations in Unit 1C will increase from rural residents of Units 1C, 1D, 3, and Hoonah, Pelican, Point Baker, Sitka, and Tenakee Springs; and in Unit 5 will increase from rural residents of Unit 5A; to rural residents of Southeast Alaska, Units 1 through 5.

In contrast, eligibility to hunt black bears under Federal regulations in the remainder of Southeast Alaska (in Units 1A, 1B, 1D, 2, and 3) will decrease from all rural residents of the state, to rural residents of Southeast Alaska, Units 1 through 5.

OSM CONCLUSION

Support Proposal WP20-10.

Justification

Rural residents of Southeast Alaska have demonstrated customary and traditional uses of black bears in Southeast Alaska according to ethnographic descriptions and harvest documentation. Rural communities in Alaska for whom an attempt to harvest black bears is documented but who are situated outside of Southeast Alaska were not considered. These communities are not in reasonable proximity to Units 1, 2, 3, or 5, the area under consideration in this analysis.

Black bears have traditionally been used in Southeast Alaska as an important source of food, clothing, grease, and fat. Black bear hide, fat, and claws were common trade items among all Native groups of the region. There has been a long history of harvesting black bears for their furs, especially for the Russian market where black bear hides were made into outer garments and held prestige (Bockstoce 2009).

Several factors have affected long-term patterns of black bear use by rural Southeast Alaska residents. Yakutat, situated in Unit 5A, is separated from other areas of Southeast Alaska by a long expanse of

coastline; however, residents have demonstrated hunting effort in Southeast Alaska in areas distant to them. Additionally, organized communities are not present in Units 1B and 5B, and hunting effort is occasionally reported by people living outside of an organized community. Low human populations in these areas are limiting demonstrated hunter effort by residents of these areas.

Another factor possibly affecting patterns of black bear use is competition with other hunters. The proportion of rural Southeast Alaska residents using Units 2 and 3 to harvest black bears is much smaller than for the group of other hunters who visit Units 2 and 3 in large numbers (**Appendix Tables 1-1 and 1-2**). Units 2 and 3 offer the better black bear habitat and abundance than other units, but rural Southeast Alaska hunters must compete with other hunters, a factor that may dissuade them from traveling to Units 2 and 3. Additionally, Unit 5B is dominated by the Malaspina Glacier and therefore few harvests have been reported there. Further, while black bears are not found in Unit 4, Unit 4 residents have demonstrated traveling to Units 1, 2, 3, and 5 in search of black bears.

Finally, the Southeast Alaska Council has requested that the Board consider customary and traditional use determinations broadly and inclusively (Bangs 2016). Therefore, all rural residents of Southeast Alaska should be included in a customary and traditional use determination for black bears in Units 1, 2, 3, and 5.

LITERATURE CITED

ADCCED (Alaska Department of Commerce, Community, and Economic Development). 2017. Community and Regional Affairs, Community Index. https://www.commerce.alaska.gov/dcra/DCRAExternal/community, retrieved June 19, 2017. Alaska Department of Commerce, Community, and Economic Development. Juneau, AK.

ADF&G (Alaska Department of Fish and Game). 1992. Customary and traditional uses of Southeast Alaska black bear, brown bear, and deer. Grouse and ptarmigan, moose, wolf, wolverine populations in Southeast Alaska. Report to the Board of Game, November 1992. Alaska Department of Fish and Game Division of Subsistence, Anchorage.

ADF&G. 2019a. Community Subsistence Information System. Alaska Department of Fish and Game Division of Subsistence online database. Anchorage.

ADLWD (Alaska Department of Labor and Workforce Development). 2017. Research and Analysis, Population and Census, Historical Data: Boroughs/Census Areas. Juneau, AK.
http://live.laborstats.alaska.gov/pop/index.cfm, retrieved June 19, 2017. Anchorage, AK.

Bangs, M. 2016. Letter to Tim Towarak, Chair, Federal Subsistence Board, dated January 22. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 3 pages.

Bethune, S. 2014. Unit 2 black bear management report. Chapter 5: pages 5-1 through 5-26 *in* P. Harper and Laura A. McCarthy, editors. Black bear management report of survey and inventory activities 1 July 2010–30 June 2012. Alaska Department of Fish and Game, Species Management Report, ADF&G/DWC/SMR-2014-5, Juneau.

Bethune, S. and B. Porter. 2014. Unit 1A black bear management report. Chapter 1, pages 1-1 through 1-20 *in* P. Harper and Laura A. McCarthy, editors. Black bear management report of survey and inventory activities 1 July 2010–30 June 2013. Alaska Department of Fish and Game, Species Management Report, ADF&G/DWC/SMR-2014-5, Juneau.

Bockstoce, J.R. 2009. Furs and frontiers in the far North: The contest among Native and foreign nations for the Bering Strait fur trade. Yale University Press. 475 pages.

Cerveny L.K. 2005. Tourism and its effects on Southeast Alaska communities and resources: case studies from Haines, Craig, and Hoonah, Alaska. U.S. Department of Agriculture Forest Service, Pacific Northwest Research Station Research Paper PNW-RP-566. Portland, OR. 163 pages.

Cohen, K. 1988. Wrangell harvest study: a comprehensive study of wild resource harvest and use by Wrangell residents. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 165. Juneau, AK.

de Laguna, R. 1960. Selected papers from the American Anthropologist, 1888–1920. American Anthropological Association, Washington, D.C.

de Laguna, R. 1990. Tlingit. Pages 203–228 *in* Handbook of North American Indians, vol. 7. W. Suttles, editor. Smithsonian Institute, Washington D.C.

Edwards, K. 2009. Dictionary of Tlingit. Sealaska Heritage Institute, Juneau, AK. 614 pages. <http://www.sealaskaheritage.org/institute/language/resources>

Ellanna, L.J., and G.K. Sherrod. 1986. Timber management and fish and wildlife use in selected Southeastern Alaska communities: Klawock, Prince of Wales Island, Alaska. ADF&G, Division of Subsistence Technical Paper No. 126. Juneau, AK.

Emmons, G.T. 1991. The Tlingit Indians. F. de Laguna, editor. University of Washington, Seattle.

Firman, A.S., and R.G. Bosworth. 1990. Harvest and use of fish and wildlife by residents of Kake, Alaska. Alaska Department of Fish and Game Division of Subsistence Technical Paper No 145. Juneau.

FSB (Federal Subsistence Board). 2016. Letter from T. Towarak, Chair, to M. Bangs, Chair of the Southeast Alaska Subsistence Regional Advisory Council, dated June 21, 2016. U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 5 pages.

Gmelch, G., and S.B. Gmelch. 1983. Resource use in a small Alaskan city–Sitka. ADF&G Division of Subsistence, Technical Paper No. 90. Juneau, AK.

Goldschmidt, W. R., and T. Haas. 1998. *Haa Aani*: Our Land. Tlingit and Haida land rights and use. University of Washington Press, Seattle and London; and Sealaska Heritage Foundation, Juneau. 219 pages.

Heaton, H. T., S. L. Talbot, and G. F. Shields. 1996. An ice age refugium for large mammals in the Alexander Archipelago, Southeast Alaska. Quaternary Research 46:186–192

Lacher, J. 2010. Dictionary of Alaskan Haida. Sealaska Heritage Institute, Juneau, AK. 735 pages. <http://www.sealaskaheritage.org/sites/default/files/Haida_dictionary_web.pdf>

Lowell, R. E. 2014a. Unit 3 black bear management report. Chapter 6, pages 6-1 through 6-26 *in* P. Harper and L. A. McCarthy, editors. Black bear management report of survey and inventory activities 1 July 2010–30 June 2013. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2014-5, Juneau.

Lowell, R.E. 2014b. Unit 1B black bear management report. Chapter 2, pages 2-1 through 2-14 *in* P. Harper and L. A. McCarthy, editors. Black bear management report of survey and inventory activities 1 July 2010–30 June 2013. Alaska Department of Fish and Game Species Management Report ADF&G/DWC/SMR-2014-5, Juneau.

Oberg, K., 1973. The social economy of the Tlingit Indians. University of Washington Press, Seattle.

OSM (Office of Subsistence Management). 1998. Staff analysis P98-02/03. Pages (Southeast Region) 24–41 in Federal Subsistence Board Meeting Materials. May 4–8. U.S. Fish and Wildlife Service Office of Subsistence Management. Anchorage. 1,449 pages.

OSM. 2015. Staff briefing on the customary and traditional use determination process—Southeast Alaska Council proposal. Pages 20–57 *in* Southeast Alaska Subsistence Regional Advisory Council meeting materials, March 17–19, 2015, Sitka, Alaska. U.S. Fish and Wildlife Service, Anchorage, AK.

OSM. 2019. ADF&G bear sealing database. Federal Subsistence Permit System. Online database, accessed May 31, 2019. Fish and Wildlife Service Office of Subsistence Management, Anchorage.

Roberts, D.M. 2009. Dictionary of *Shm'algyack*. Sealaska Heritage Institute, Juneau, AK. 140 pages.

Scott, S. 2019b. Assistant Director. Personal communication: email. Alaska Department of Fish and Game Division of Wildlife Conservation, Anchorage.

Salazar, K. 2010. Letter to Tim Towarak, Chair, Federal Subsistence Board, dated December 17. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 4 pages.

Sell, S. 2014. Unit 1D black bear management report. Chapter 4, pages 4-1 through 4-16 *in* P. Harper and L. A. McCarthy, editors. Black bear management report of survey and inventory activities 1 July 2010–30 June 2013. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2014-5, Juneau.

Sill, L.A., and D. Koster (editors). 2017a. The harvest and use of wild resources in Haines, Hoonah, Angoon, Whale Pass, and Hydaburg, Alaska, 2012. ADF&G, Division of Subsistence Technical Paper No. 399. Juneau, AK.

Sill, L.A., and D. Koster. 2017b. The harvest and use of wild resources in Sitka, Alaska, 2013. ADF&G, Division of Subsistence Technical Paper No. 423. Juneau, AK.

Smythe, C.W. 1988. Harvest and use of fish and wildlife resources by residents of Petersburg, Alaska. Alaska Department of Fish and Game Division of Subsistence Technical Paper No 164. Juneau, AK.

State of Alaska. 1971. Alaska Game and Guiding Regulations #12. Alaska Department of Fish and Game, Juneau. 82 pages.

Towarak, T. 2016. Letter to Mike Bangs, Chair, Southeast Alaska Subsistence Regional Advisory Council, dated June 21. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 5 pages.

U.S. Bureau of the Census. 1995. Alaska: population of counties by decennial Census: 1900 to 1990. Compiled and edited by Richard L. Forstall, Population Division, Washington D.C. https://www.census.gov/population/cencounts/ak190090.txt

Worl, R. 1990. History of Southeastern Alaska since 1867. Pages 149–158 *in* Handbook of North American Indians, vol. 7. W. Suttles, editor. Smithsonian Institute, Washington D.C.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATION

Southeast Alaska Subsistence Regional Advisory Council

Support WP20-10. The Council's intent on this proposal was to essentially continue to make good, rational, customary and traditional use determinations. This required a good analysis of the uses of black bear throughout the region, and now that this information has been received and is thorough, the Council relied on that information to make a good, informed decision in line with a lot of work this Council has done in past years on this issue. The analysis recognizes that customary and traditional use determinations were inherited from a regulation structure in place when the State administered the program. The Council did not agree with this structure and felt it did not fulfill the intent of ANILCA. This proposal would simplify regulations, clearly set out eligibility for participation, and be beneficial to subsistence users. The Council noted that this justification would roughly be the same for all customary and traditional use determination proposals discussed at the fall 2019 meeting.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-10: This proposal, submitted by the Southeast Alaska Subsistence Regional Advisory Council, will alter the pool of federally-qualified hunters eligible to harvest black bears, currently Units 1, 2, 3, and 5, to include all federally qualified residents of Units 1 – 5.

Introduction: This proposal is part of a broader effort to expand eligibility among federally qualified hunters residing in Southeast Alaska to harvest all big game species. The Council believes current eligibility is too narrowly defined and does not reflect traditional harvest practices of rural residents of Units 1 – 5. The Federal Subsistence Board has not made customary and traditional use determinations for black bears in much of Southeast Alaska. Black bears are not generally found in Unit 4.

Impact on Subsistence Users: This proposal will expand opportunity to harvest black bears under federal subsistence regulations in Units 1C and 5 to include all federally qualified residents of Units 1 - 5. In the remainder of Unit 1 as well as Units 2 and 3, the pool of hunters eligible to harvest black bear under federal regulation would contract from all rural residents to only rural residents of Units 1-5.

Impact on Other Users: Without further actions from the Federal Subsistence Board, if this proposal is adopted ADF&G anticipates it will have little or no effect on black bear harvest for non-federally qualified hunters. Current state resident and federal black bear harvest regulations are identical, so adopting this proposal will provide no additional opportunity or incentive for federally qualified hunters to harvest black bears.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made positive customary and traditional use findings for black bears in Units 1, 2, 3, and 5. There is no finding for black bears in Unit 4 since black bears are not generally found in that unit.

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

The ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANSs for black bears in Units 1 – 3 and 5 are as follows:
Unit 1A (outside the state nonsubsistence area): 5-10
Unit 1B: 2-5
Unit 1C (outside the state nonsubsistence area): 50-70
Unit 1D: 10-20
Unit 2: 15-20
Unit 3: 15-20
Unit 5: 5-10

For Alaska residents, hunting season dates (September 1 – June 30) and bag limits (2 bears) under state regulations for Units 1 – 3 and 5 are identical to current federal seasons and bag limits.

Special provisions under both state and federal regulations: Only one bear of the two-bear bag limit may be of the blue or glacier color phase. Hides and skulls of all black bears harvested in Units 1 – 3, and 5 must be presented for sealing. State regulations require meat salvage during the period Jan. 1-May 31. Either the hide or meat and the skull must be salvaged during the period June 1-Dec. 31. Evidence of sex must remain naturally attached to the hide.

Conservation Issues: None. Black bear populations in Units 1 - 3 and 5 are believed to be stable or increasing.

Enforcement Issues: None.

Recommendation: ADF&G's position on this proposal is **NEUTRAL**. Adoption of this proposal will have little or no effect on black bear hunting or harvest opportunity without further actions by the FSB.

WRITTEN PUBLIC COMMENTS

Ketchikan Advisory Committee
June 6th, 2019
ADF&G Conference Room

I. **Call to Order**: 5:40pm by Matt Allen, Secretary

II. **Roll Call:** 8 voting members present, 1 via phone
Members Present: Allen, Crittenden, Dale, James, Westlund, Roth, Shaw, Bezneck, Fox, Scoblic (Phone)
Members Absent (Excused): Doherty, McQuarrie, Skan, Franulovich, Miller
Members Absent (Unexcused):
Number Needed for Quorum on AC: 8
List of User Groups and Public Present: Public, Sportfish Charter, ADFG (Sport Fish, Wildlife)
Motion: Bezneck, motion to make **Allen** meeting Chair, **Roth**, second. 9-0 in favor. **Allen** sits as meeting Chair

III. **Approval of Agenda:**
Allen, motion to amend agenda to include discussion of Federal Subsistence Proposals 10, 11, 13,14. **Westlund** seconded. Motion passed unanimously (9-0). **Westlund,** moved to approve agenda, **Dale** seconded. Motion passed unanimously (9-0)

IV. **Approval of Previous Meeting Minutes:**
Previous meeting minutes incomplete at this time

V. **Fish and Game Staff Present:**
Kelly Reppert, Ross Dorendorf, Tessa Hasbrouck

VI. **Guests Present: Jim Moody, Nick Hashagan, Martin Caplan, Tony Azure**

VII. **Chairman Report: Allen** read co-chair letter from Scoblic/Doherty

VIII. **ADF&G Sportfish Report: Reppert,** report regarding catch and release chinook fishing. Discussion and comment followed report.

IX. **Old Business:**
Federal Subsistence Proposals 2020-2022, WP20-01-08, WP20-10-15

X. **New Business:**
Catch and Release of chinook by Charter fishermen
Set next meeting date, September 12th, 2019, 5:30pm ADFG Conference Room

Federal Subsistence Management Program 2020-2022 Wildlife Proposal Comments			
Proposal Number	**Proposal Description**		
Support, Support as Amended, Oppose, No Action	**Number Support**	**Number Oppose /Abstain**	**Comments, Discussion (list Pros and Cons), Amendments to Proposal, Voting Notes**
WP20-01	Southeast, Moose, Unit 1C, Eliminate Unit 1C – Berners Bay moose hunt		
Support	8	0/1 abstain	A biological concern does not currently exist necessitating a subsistence priority. Majority of traditional use comes from Juneau area. A fair system is currently in place to provide for opportunity
WP20-02	Southeast, Deer, Unit 2, Remove harvest limits to non-federally qualified users		
Support	9	0	We support State managers in their assessment of the deer population and the opportunity it can support.
WP20-03	Southeast, Deer, Unit 2, Eliminate doe harvest		
Oppose	1	8	Though the AC does not agree with doe harvest, we do not support this proposal because it would have minimal impact.
WP20-04	Southeast, Deer, Unit 2, Revise harvest limit		
Oppose	3	6	Some AC members support cessation of doe harvest if only for a short period of time.
WP20-05	Southeast, Deer, Unit 2, Establish a registration permit for does		
Support	7	1/1	AC supports the proposal as it may lead to better data for management.
WP20-06	Southeast, Deer, Unit 2, Revise season		
Support	9	0	AC supports removal of January hunt due to small amount of harvest, reduced quality of meat and difficulty in distinguishing bucks and does.
WP20-07	Southeast, Deer, Unit 2, Revise harvest limit		
Support	9	0	
WP20-08	Statewide, All Trapping Species, Require traps or snares to be marked with name or State Identification number		
Oppose	1	8	Though some type of compromise should be reached in regards to labelling of traps/snares a one size fits all regulation could be overly burdensome in some areas
WP20-09	Southeast, Beaver, Units 1-4, Revise trapping season		
No Action			
WP20-10	Statewide, Black Bear, Units 1-5, Revise Customary and Traditional Use Determination		

Oppose	2	6	Hunting of Black Bear is not customary and traditional in all units residing in Southeast
WP20-11	Statewide, Brown Bear, Units 1-5, Revise Customary and Traditional Use Determination		
	3	4	Hunting of Brown Bear is not customary and traditional in all units residing in Southeast.
WP20-12	Southeast, Deer, Unit 3, Revise hunt areas, season dates, and harvest limits		
WP20-13	Statewide, Elk, Unit 3, Establish Customary and Traditional Use Determination		
	0	9	This is a population introduced by the State in 1986, due to this fact we do not believe this population is traditional and customary for any Unit in Southeast Alaska. The authors of this proposal do not demonstrate how this particular species in this area has been used to meet the definition as customary and traditional.
WP20-14	Statewide, Goat, Unit 1-5, Revise Customary and Traditional Use Determination		
	4	4	Hunting of Mountain Goat is not Customary and Traditional in all Units residing in Southeast.
WP20-15	Statewide, Moose, Unit 1-5, Revise Customary and Traditional Use Determination		
	0	8	Hunting of Moose is not customary and traditional in all units residing in Southeast.
WP20-16	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			
WP20-17	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			

Adjournment:

Minutes Recorded By: _____
Minutes Approved By: _____
Date: _____

APPENDIX 1

Appendix Table 1-1. State sealing records: The reported harvest of black bears by wildlife management unit, from 1972 to 2018 cumulative (**bold**=rural community, blank cell=0) (Source: OSM 2019; Scott 2019, pers. comm.).

Unit of Residence	Community	Unit 1A	Unit 1B	Unit 1C	Unit 1D	Unit 2	Unit 3	Unit 5A	Unit 5B	Total
1A	**ANNETTE**	**33**				**24**				**57**
1A	**BELL ISLAND**	**1**								**1**
1A	**CLEVELAND PEN**	**1**								**1**
1A	**HYDER**	**14**				**1**				**15**
1A	KETCHIKAN	1,301	8	8	3	756	25			2,101
1A	**MEYERS CHUCK**	**4**					**1**			**5**
1A	**NEETS BAY**	**3**								**3**
1A	**REVILLA ISLAND**	**4**								**4**
1A	**SAXMAN**	**1**								**1**
1A	WARD COVE	190	1	1		104	1			297
1A	YES BAY	1								1
1B	**HOBART BAY**			**34**			**1**			35
1C	AUKE BAY	4		127	1	5	14			151
1C	DOUGLAS	2		85	3	4	5			99
1C	**EXCURSION INLET**			**9**						9
1C	**GUSTAVUS**			**101**			**4**	**2**		107
1C	JUNEAU	18	9	1,948	83	54	142	9		2,263
1D	**HAINES**	**1**		**51**	**1,132**	**3**	**5**	**1**		1,193
1D	**KLUKWAN**			**1**	**5**			**1**		7
1D	**SKAGWAY**		**1**	**5**	**124**		**1**	**1**		132
2	**CAPE POLE**					**7**				7
2	**COFFMAN COVE**	**2**				**65**	**3**			70
2	**CRAIG**	**1**	**1**	**1**		**498**	**4**			505
2	**EDNA BAY**					**6**	**1**			7
2	**HOLLIS**					**14**				14
2	**HYDABURG**					**33**				33
2	**KASAAN**					**4**				4
2	**KLAWOCK**					**207**	**1**			208
2	**NAUKATI BAY**					**22**				22
2	**NICHAN COVE**					**1**				1
2	**POINT BAKER**			**1**		**1**	**2**			4
2	**POLK INLET**					**2**				2
2	**PORT ALICE**					**1**				1
2	**PORT PROTECTION**					**5**	**1**			6
2	**PRINCE OF WALES**					**1**				1
2	**THORNE BAY**	**2**	**4**		**1**	**314**	**6**	**2**		329
2	**WATERFALL**					**6**				6
2	**WHALE PASS**					**31**				31
3	**BURNETT INLET**						**3**			3
3	**KAKE**	**1**					**103**			104
3	**KUPREANOF CITY**						**2**			2

Continued on next page

Appendix Table 1-1. State sealing records: The reported harvest of black bears by wildlife management unit, from 1972 to 2018 cumulative (**bold**=rural community, blank cell=0) *Continued from previous page*.

Unit of Residence	Community	Unit 1A	Unit 1B	Unit 1C	Unit 1D	Unit 2	Unit 3	Unit 5A	Unit 5B	Total
3	**PETERSBURG**	**5**	**135**	**22**		**44**	**782**			988
3	**PORTAGE BAY**						**1**			1
3	**ROOSEVELT HBR**		**1**							1
3	**ROWAN BAY**						**8**			8
3	**WRANGELL**	**3**	**124**	**9**		**61**	**283**			480
4	**ANGOON**						**6**			6
4	**HIDDEN FALLS**						**12**			12
4	**HOONAH**			**80**	**2**	**1**	**5**			88
4	**PELICAN**			**1**			**2**			3
4	**PORT ALEXANDER**					**1**	**10**			11
4	**PORT ARMSTRONG**						**4**			4
4	**SITKA**	**20**	**2**	**19**	**15**	**49**	**639**	**2**		746
4	**TENAKEE SPRINGS**			**1**			**1**			2
5A	**YAKUTAT**			**1**		**1**		**171**		173
6C	**CORDOVA**					**2**				2
6D	VALDEZ	5			1	4	10	3		23
7	MOOSE PASS					1				1
7	SEWARD	4	1	1		2	2			10
8	**CHINIAK**						**1**			1
8	**KODIAK**	**20**		**11**		**27**	**6**			64
9B	**KOKHANOK**							**3**		3
9B	**LEVELOCK**						**1**			1
9C	**KING SALMON**			**1**		**1**	**1**			3
9C	**NAKNEK**					**1**				1
9D	**SAND POINT**					**2**				2
9E	**PORT HEIDEN**					**1**				1
10	**ADAK**				**1**		**1**			2
10	**DUTCH HARBOR**				**1**		**1**			2
10	**UNALASKA**	**1**				**4**	**1**			6
12	**NORTHWAY**				**3**					3
13D	**CHITINA**					**1**				1
13D	**COPPER CENTER**		**1**	**1**	**2**					4
13D	**GLENNALLEN**			**1**		**2**	**1**			4
14A	BIG LAKE			2		1	1			4
14A	HOUSTON	2		1		3				6
14A	PALMER			9	1	45	8	4		67
14A	WASILLA	16	2	18	5	139	47	5		232
14A	WILLOW					2				2
14B	**CHICKALOON**					**1**				1
14C	ANCHORAGE	42	9	99	21	188	158	71	3	591
14C	CHUGIAK	6	1	6	1	10	12	2		38
14C	EAGLE RIVER	4	1	18	4	38	23	8		96
14C	ELMENDORF AFB	0	1	0	11	10	4	3		29
14C	FORT WAINWRIGHT	2			4	18	3	6		33

Continued on next page.

Appendix Table 1-1. State sealing records: The reported harvest of black bears by wildlife management unit, from 1972 to 2018 cumulative (**bold**=rural community, blank cell=0) *Continued from previous page*.

Unit of Residence	Community	Unit 1A	Unit 1B	Unit 1C	Unit 1D	Unit 2	Unit 3	Unit 5A	Unit 5B	Total
14C	FORT RICHARDSON		1			17	5	8		31
14C	FRITZ CREEK						1			1
14C	GIRDWOOD	1				3				4
15A	**COOPER LANDING**			**2**		**1**	**1**			4
15A	NIKISKI					2				2
15B	KASILOF					6	1			7
15B	KENAI	1	1	3		15	5	10		35
15B	SOLDOTNA	4		13	3	19	2	5		46
15B	STERLING				1	1				2
15C	ANCHOR POINT			1		3				4
15C	HOMER	3				6	1	2		12
15C	**NINILCHIK**						**2**			2
17C	**ALEKNAGIK**					**1**				1
17C	**DILLINGHAM**					**3**	**7**			10
18	**AKIAK**					**1**				1
18	**BETHEL**					**3**				3
20A	**HEALY**	**2**								2
20A	**NENANA**					**2**				2
20B	EIELSON AFB		1		9	2	2	2		16
20B	ESTER					1				1
20B	FAIRBANKS	13	1	27	25	76	39	19		200
20B	**MANLEY**					**2**				2
20B	NORTH POLE	6		4	8	10	6	1		35
20B	NORTH STAR BOR					1				1
20B	SALCHA					2	2			4
20C	**DENALI PARK**					**1**				1
20D	**DELTA JCT**		**1**	**5**	**6**	**4**	**3**	**8**		27
20D	**FORT GREELY**	**12**				**11**				23
20D	**TOK**	5	1	1	4	2	7			20
20D	**TOKEEN**					5				5
21B	**RUBY**	**1**								1
22A	**STEBBINS**						**2**			2
22A	**UNALAKLEET**		**2**			**1**	**7**			10
22C	**NOME**			**7**	**1**	**7**	**3**			18
23	**AMBLER**		**1**			**6**				7
23	**KOTZEBUE**			**1**	**1**	**5**	**1**			8
23	**NOORVIK**					**4**				4
26A	**BARROW**						**2**			2
26A	**PRUDHOE BAY**						**4**			4
26A	**WAINWRIGHT**				**1**					1
	UKNONWN	64	6	109	36	88	68	2		373
	NONRESIDENT	970	349	1,329	408	6,649	5,096	471	12	15,284
	GRAND TOTAL	2,796	666	4,175	1,927	9,789	7,626	822	15	27,816

Appendix Table 1-2. State harvest tickets: The reported harvest of black bears by wildlife management unit, from 2009 to 2018 cumulative (**bold**=rural community, blank cell=0, 0=hunting effort/no harvest) (Source: OSM 2019; Scott 2019, pers. comm.).

Unit of Residence	Community	Unit 1A	Unit 1B	Unit 1C	Unit 1D	Unit 1Z	Unit 2	Unit 3	Unit 5A	Unit 5B	Total
1A	**HYDER**	**2**					**0**				**2**
1A	KETCHIKAN	187	3	3	0	0	70	3		0	266
1A	**METLAKATLA**	**0**		**0**			**2**				**2**
1A	**NEETS BAY**	**0**									**0**
1A	WARD COVE	12					6				18
1B	**HOLLIS**						**4**				**4**
1C	AUKE BAY	0	0	4	0			0			4
1C	DOUGLAS			13	0		0	3	0		16
1C	**GUSTAVUS**		**1**	**14**	**1**		**2**	**0**		**0**	**18**
1C	JUNEAU	1	3	248	14	0	14	35	1	0	316
1D	**HAINES**	**2**		**2**	**128**			**0**			**132**
1D	**KLUKWAN**				**0**						**0**
1D	**SKAGWAY**			**0**	**27**						**27**
2	**COFFMAN COVE**	**1**					**11**	**1**			**13**
2	**CRAIG**	**1**		**1**			**38**	**1**		**0**	**41**
2	**EDNA BAY**						**1**				**1**
2	**KASAAN**						**0**				**0**
2	**KLAWOCK**						**16**	**2**			**18**
2	**NAUKATI BAY**						**2**				**2**
2	**PRT PROTECTION**						**0**				**0**
2	**PORT ST NICK**						**0**				**0**
2	**THORNE BAY**		**0**	**1**			**55**	**1**			**57**
2	**WATERFALL**						**1**				**1**
2	**WHALE PASS**						**3**				**3**
3	**KAKE**						**1**	**12**			**13**
3	**KUPREANOF CITY**							**1**			**1**
3	**PETERSBURG**	**1**	**10**	**1**			**6**	**76**			**94**
3	**WRANGELL**	**0**	**5**		**0**	**0**	**6**	**54**	**1**		**66**
4	**ANGOON**			**0**							**0**
4	**BARANOF**							**1**			**1**
4	**HIDDEN FALLS**							**19**			**19**
4	**HOONAH**			**4**							**4**
4	**PRT ALEXANDER**							**0**			**0**
4	**PRT ARMSTRONG**							**3**			**3**
4	**PORT WALTER**							**1**			**1**
4	**PYBUS BAY**							**2**			**2**
4	**SITKA**	**5**	**0**	**7**	**0**		**11**	**60**		**0**	**83**
5A	**YAKUTAT**			**1**						**33**	**34**
6C	**CORDOVA**		**0**								**0**
6D	VALDEZ	0		0			1				1
7	MOOSE PASS							0			0
7	SEWARD	0						2			2
8	**CHINIAK**							**1**			**1**
8	**KODIAK**	**2**		**1**	**0**		**7**	**2**		**0**	**12**

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Appendix Table 1-2. State harvest tickets: The reported harvest of black bears by wildlife management unit, from 2009 to 2018 cumulative (**bold**=rural community, blank cell=0, 0=hunting effort/no harvest) *Continued from previous page*

Unit of Residence	Community	Unit 1A	Unit 1B	Unit 1C	Unit 1D	Unit 1Z	Unit 2	Unit 3	Unit 5A	Unit 5B	Total
9C	**KING SALMON**						**1**				**1**
9D	**COLD BAY**			**0**							**0**
9D	**SAND POINT**							**1**			**1**
9E	**IVANOF BAY**			**0**							**0**
10	**AKUTAN**						**0**				**0**
10	**SHEMYA**						**1**	**1**			**2**
12	**CHISANA**				**0**						**0**
13D	**COPPER CENTER**						**0**				**0**
14A	BIG LAKE			0						0	0
14A	HOUSTON						1	1			2
14A	MEADOW LAKES							0			0
14A	PALMER	0		0	0		12	0		1	13
14A	SUTTON						0				0
14A	WASILLA	4	0	1	1		30	13	0	1	50
14A	WILLOW	0					0			0	0
14C	ANCHORAGE	3	3	6	2	0	43	18	0	5	80
14C	CHUGIAK	2		0			4	4	0	1	11
14C	EAGLE RIVER	0			1	1	6	2	0	0	10
14C	ELMENDORF AFB						3				3
14C	GIRDWOOD			0			3				3
14C	PETERS CREEK										0
15A	NIKISKI				0		1			0	1
15A	STERLING						0				0
15B	KALIFORNSKY			0							0
15B	KASILOF			0			3				3
15B	KENAI			0			0			0	0
15B	SOLDOTNA						2	1		0	3
15C	ANCHOR POINT				0						0
15C	CLAM GULCH							0			0
15C	HOMER	0					0				0
15C	**NINILCHIK**						**1**	**2**			**3**
18	**BETHEL**						**2**			**0**	**2**
20A	**NENANA**						**0**				**0**
20B	EIELSON AFB						1				1
20B	ESTER							0			0
20B	FAIRBANKS	1	0	1	2		15	8		2	29
20B	NORTH POLE			0	0	0	3	2	0	0	5
20B	SALCHA						0				0
20B	FT WAINWRIGHT	0	0					0			0
20D	**DELTA JUNCTION**				**1**		**1**			**0**	**2**
20D	**FORT GREELY**						**1**				**1**
21D	**GALENA**							**0**			**0**
22C	**NOME**	**0**		**0**	**1**		**1**	**1**			**3**
23	**AMBLER**		**1**				**0**		**0**		**1**
23	**KOTZEBUE**				**1**		**2**				**3**

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Appendix Table 1-2. State harvest tickets: The reported harvest of black bears by wildlife management unit, from 2009 to 2018 cumulative (**bold**=rural community, blank cell=0, 0=hunting effort/no harvest) *Continued from previous page*

Unit of Residence	Community	Unit 1A	Unit 1B	Unit 1C	Unit 1D	Unit 1Z	Unit 2	Unit 3	Unit 5A	Unit 5B	Total
26A	**UTQIAGVIK**			**1**	**0**						**1**
	UNKNOWN	8	1	7			9	19			44
	NONRESIDENT	96	45	126	18	4	665	678	20		1,652
	GRAND TOTAL	328	72	442	197	5	1,068	1,031	22	43	3,208

Appendix Table 1-3. The estimated harvest and use of black bears by rural residents of Southeast Alaska during one year study periods between 1983 and 2015, based on household surveys, blank cell=0, NA=question not asked (Source: ADF&G 2019).

Unit of residence	Community	Study Year	% of households using black bears	% of households attempting to harvest black bears	% of households harvesting black bears	% of household giving black bears	% of household receiving black bears
1A	Hyder	1987	18%	NA	18%	3%	
1A	Metlakatla	1987	6%	NA			6%
1A	Meyers Chuck	1987	10%	NA			10%
1A	Saxman	1987	8%	NA			8%
1A	Saxman	1999	8%	3%	1%	5%	7%
1C	Gustavus	1987		NA			
1D	Haines	1983	16%	16%	10%	5%	8%
1D	Haines	1987	17%	NA	8%	5%	11%
1D	Haines	1996	18%	7%	7%	7%	14%
1D	Haines	2012	13%	9%	4%	4%	9%
1D	Klukwan	1983	3%	12%	3%	3%	
1D	Klukwan	1987	12%	NA	7%	7%	5%
1D	Klukwan	1996	10%	3%			10%
1D	Skagway	1987	4%	NA	1%	1%	3%
2	Coffman Cove	1987	3%	NA			3%
2	Coffman Cove	1998	32%	22%	18%	10%	16%
2	Craig	1987	5%	NA	2%	1%	3%
2	Craig	1997	8%	6%	5%	4%	5%
2	Edna Bay	1987	45%	NA	45%	20%	20%
2	Edna Bay	1998	33%	17%	17%	17%	17%
2	Hollis	1987	33%	NA	11%	7%	26%
2	Hollis	1998	7%	2%	2%	2%	7%
2	Hydaburg	1987	6%	NA	2%	2%	5%
2	Hydaburg	1997					
2	Hydaburg	2012					
2	Kasaan	1987		NA			
2	Kasaan	1998	7%	14%	7%	7%	
2	Klawock	1984	3%	8%	3%	3%	
2	Klawock	1987	6%	NA	2%	1%	4%
2	Klawock	1997	6%	7%	3%	2%	3%
2	Naukati Bay	1998	32%	18%	16%	6%	18%
2	Point Baker	1987	32%	NA	21%	21%	11%
2	Point Baker	1996	25%	6%	6%	6%	19%
2	Prt Protection	1987	44%	NA	4%		44%
2	Prt Protection	1996	24%	12%	12%	8%	12%
2	Thorne Bay	1987	22%	NA	7%	4%	18%
2	Thorne Bay	1998	6%	6%	5%	1%	2%
2	Whale Pass	1987	22%	NA	11%		11%

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Appendix Table 1-3. The estimated harvest and use of black bears by rural residents of Southeast Alaska during one year study periods between 1984 and 2015, based on household surveys, blank cell=0, NA=question not asked. *Continued from previous page*

Unit of residence	Community	Study Year	% of households using black bears	% of households attempting to harvest black bears	% of households harvesting black bears	% of households giving black bears	% of households receiving black bears
2	Whale Pass	1998	33%			13%	33%
2	Whale Pass	2012	5%			5%	5%
3	Beecher Pass	1987	40%	NA	20%		20%
3	Kake	1985	3%	1%	1%		
3	Kake	1987		NA			0%
3	Kake	1996	4%	3%	3%	1%	1%
3	Petersburg	1987	5%	NA	3%	3%	2%
3	Petersburg	2000	3%	2%	1%		2%
3	Wrangell	1987	8%	NA	5%	3%	7%
3	Wrangell	2000	3%	3%	1%	2%	2%
4	Angoon	1984					
4	Angoon	1987		NA			
4	Angoon	1996					
4	Angoon	2012					
4	Elfin Cove	1987		NA			
4	Game Creek	1996					
4	Hoonah	1985	1%				1%
4	Hoonah	1987	3%	NA	3%		1%
4	Hoonah	1996	3%	3%	1%	1%	1%
4	Hoonah	2012					
4	Pelican	1987	3%	NA			3%
4	Port Alexander	1987	6%	NA	3%	3%	6%
4	Sitka	1987	1%	NA	1%		
4	Sitka	1996	3%	2%	2%	1%	2%
4	Sitka	2013		1%			
4	Tenakee Spr	1984					
4	Tenakee Spr	1987	3%	NA			3%
4	Whitestone	1996					
5A	Yakutat	1984	8%	8%	4%	4%	8%
5A	Yakutat	1987	10%	NA	1%	4%	9%
5A	Yakutat	2000	10%	6%	4%	3%	7%
5A	Yakutat	2015	14%	10%	7%	5%	8%

Appendix Table 1-4. The estimated harvest of wild resources for subsistence, in pounds edible weight per person, by rural residents of Southeast Alaska, during one year study periods between 1983 and 2015, based on household surveys (Source: ADF&G 2019).

Community	Study year	Salmon	Non-salmon fishes	Land mammals	Marine mammals	Birds and eggs	Marine inverte-brates	Plants and berries	Total pounds per person
Angoon	1984	74	46	58	17	1	13	8	216
Angoon	1987	71	35	73	32	1	26	7	244
Angoon	1996	82	48	51	9	0	30	4	224
Angoon	2012	37	53	51	5	0	22	13	183
Beecher Pass	1987	131	108	109	0	23	93	13	477
Coffman Cove	1987	52	56	60	1	1	9	5	183
Coffman Cove	1998	63	83	66	1	3	49	11	276
Craig	1987	40	62	42	5	1	29	6	185
Craig	1997	65	63	47	10	1	29	19	232
Edna Bay	1987	99	135	147	0	4	67	26	479
Edna Bay	1998	55	186	90	0	0	16	36	383
Elfin Cove	1987	81	59	72	0	0	24	27	263
Game Creek	1996	27	54	47	0	3	36	20	187
Gustavus	1987	55	82	64	0	2	28	10	241
Haines	1983	46	33	34	1	3	3	5	126
Haines	1987	28	37	23	0	1	4	5	97
Haines	1996	58	81	29	1	1	11	15	196
Haines	2012	47	38	28	0	1	12	10	135
Hollis	1987	44	35	42	0	1	49	11	183
Hollis	1998	40	31	40	0	0	53	6	169
Hoonah	1985	47	40	58	21	1	22	21	210
Hoonah	1987	100	78	90	53	1	49	13	385
Hoonah	1996	113	67	81	23	1	58	30	372
Hoonah	2012	72	120	52	13	2	41	44	343
Hydaburg	1987	137	83	43	7	1	51	14	336
Hydaburg	1997	117	109	35	3	1	101	19	384
Hydaburg	2012	214	133	68	5	0	83	27	531
Hyder	1987	121	86	32	8	6	85	7	345
Kake	1985	69	46	27	26	1	19	29	218
Kake	1987	35	33	39	23	1	18	15	163
Kake	1996	44	42	52	10	1	22	9	179
Kasaan	1987	32	32	40	2	0	69	6	182
Kasaan	1998	93	184	70	25	0	61	19	452
Klawock	1984	69	58	36	14	1	28	18	223
Klawock	1987	75	72	47	5	1	40	7	247
Klawock	1997	105	78	54	21	1	37	24	320
Klukwan	1983	114	33	14	2	1	0	6	170
Klukwan	1987	124	81	14	8	1	1	10	238
Klukwan	1996	267	252	28	3	1	14	45	608

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Appendix Table 1-4. The estimated harvest of wild resources for subsistence, in pounds edible weight per person, by rural residents of Southeast Alaska during one year study periods between 1983 and 2015, based on household surveys. *Continued from previous page*

Community	Study year	Salmon	Non-salmon fishes	Land mammals	Marine mammals	Birds and eggs	Marine inverte-brates	Plants and berries	Total pounds per person
Metlakatla	1987	20	17	11	1	1	15	5	70
Meyers Chuck	1987	105	174	48	0	9	64	14	414
Naukati Bay	1998	49	73	51	1	2	54	12	242
Pelican	1987	60	119	111	8	1	47	9	355
Petersburg	1987	45	44	57	0	4	39	9	198
Petersburg	2000	60	42	17	0	1	37	4	161
Point Baker	1987	89	66	101	0	3	66	20	346
Point Baker	1996	82	89	47	0	0	58	12	289
Prt Alexander	1987	70	70	108	3	1	31	28	312
Prt Protection	1987	111	88	41	0	2	43	19	304
Prt Protection	1996	59	111	101	9	2	139	30	451
Saxman	1987	33	19	20	2	0	14	4	94
Saxman	1999	84	47	29	12	0	23	23	217
Sitka	1987	39	43	38	1	1	18	5	145
Sitka	1996	58	54	51	7	1	27	7	205
Sitka	2013	46	68	26	3	0	19	12	175
Skagway	1987	18	16	4	0	0	9	2	48
Tenakee Spr	1984	71	42	65	4	0	61	7	250
Tenakee Spr	1987	49	82	135	8	2	43	11	330
Thorne Bay	1987	48	73	40	0	1	24	4	189
Thorne Bay	1998	62	37	36	11	1	26	6	179
Whale Pass	1987	41	37	60	2	1	33	5	179
Whale Pass	1998	28	36	51	0	0	57	13	185
Whale Pass	2012	52	76	80	0	13	24	3	247
Whitestone	1996	21	71	57	0	1	23	5	178
Wrangell	1987	30	43	32	7	1	38	4	155
Wrangell	2000	26	34	39	0	1	60	8	168
Yakutat	1984	129	82	52	24	10	46	26	369
Yakutat	1987	216	77	15	31	2	40	17	398
Yakutat	2000	145	87	34	35	3	54	27	386
Yakutat	2015	93	47	49	33	4	12	25	262

WP20–11 Executive Summary	
General Description	Proposal WP20-11 requests a customary and traditional use determination for brown bears in in Units 1, 3, 4, and 5 for rural residents of Units 1 through 5. *Submitted by: Southeast Alaska Regional Advisory Council.*
Proposed Regulation	**Customary and Traditional Use Determination—Brown Bear** ***Units 1, 3, 4, and 5*** — ***Rural residents of Units 1–5*** ~~*Unit 1A*~~ — ~~*Rural residents of Unit 1A, excluding residents of Hyder*~~ ~~*Unit 1B*~~ — ~~*Rural residents of Unit 1A, Petersburg, and Wrangell, excluding residents of Hyder*~~ ~~*Unit 1C*~~ — ~~*Rural residents of Unit 1C, Haines, Hoonah, Kake, Klukwan, Skagway, and Wrangell, excluding residents of Gustavus*~~ ~~*Unit 1D*~~ — ~~*Rural residents of Unit 1D*~~ ~~*Unit 3*~~ — ~~*All rural residents*~~ ~~*Unit 4*~~ — ~~*Rural residents of Unit 4 and Kake*~~ ~~*Unit 5*~~ — ~~*Rural residents of Yakutat*~~
OSM Conclusion	**Support**
Southeast Alaska Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**1 Oppose**

STAFF ANALYSIS
WP20-11

ISSUES

Proposal WP20-11, submitted by the Southeast Alaska Subsistence Regional Advisory Council (Council), is a request for the Federal Subsistence Board (Board) to recognize customary and traditional uses of brown bears in Units 1, 3, 4, and 5 for rural residents of Units 1 through 5.

DISCUSSION

The Council states that customary and traditional use determinations carried over from State management were inappropriately narrow. Residents of Southeast Alaska (including the Yakutat area) have a long history of obtaining large wildlife resources from throughout the region. Subsistence users frequently travel far from home within the region to obtain subsistence resources, and this is a pattern that has been practiced both traditionally and contemporarily. Subsistence users access these areas by plane, boat, vehicle, and all- terrain vehicles. Brown bears provide not only nutrition for families, but for many, there is a deeply seated cultural connection. Subsistence users have passed hunting, processing, and preservation knowledge down for generations. This resource is also frequently shared within and among Southeast Alaska communities, and it sustains the regions mixed subsistence-cash economy. Harvest and sharing of this species in recent times has been frequently documented in subsistence harvest surveys, harvest ticket reporting, and in testimony at Council meetings and local State advisory committee meetings. There is additional data available in published literature from various authors. It is clear that a long-term pattern of use throughout the region exists for brown bears and that rural residents of Southeast Alaska continue to rely on brown bears to meet their subsistence needs. This species provides substantial cultural, economic, social, and nutritional elements to meet subsistence needs.

Existing Federal Regulation

Customary and Traditional Use Determination—Brown bear

Unit 1A	*Rural residents of Unit 1A, excluding residents of Hyder*
Unit 1B	*Rural residents of Unit 1A, Petersburg, and Wrangell, excluding residents of Hyder*
Unit 1C	*Rural residents of Unit 1C, Haines, Hoonah, Kake, Klukwan, Skagway, and Wrangell, excluding residents of Gustavus*
Unit 1D	*Rural residents of Unit 1D*
Unit 3	*All rural residents*

Unit 4	*Rural residents of Unit 4 and Kake*
Unit 5	*Rural residents of Yakutat*

Proposed Federal Regulation

Customary and Traditional Use Determination—Brown bear

Units 1, 3, 4, and 5	***Rural residents of Units 1– 5***
~~*Unit 1A*~~	~~*Rural residents of Unit 1A, excluding residents of Hyder*~~
~~*Unit 1B*~~	~~*Rural residents of Unit 1A, Petersburg, and Wrangell, excluding residents of Hyder*~~
~~*Unit 1C*~~	~~*Rural residents of Unit 1C, Haines, Hoonah, Kake, Klukwan, Skagway, and Wrangell, excluding residents of Gustavus*~~
~~*Unit 1D*~~	~~*Rural residents of Unit 1D*~~
~~*Unit 3*~~	~~*All rural residents*~~
~~*Unit 4*~~	~~*Rural residents of Unit 4 and Kake*~~
~~*Unit 5*~~	~~*Rural residents of Yakutat*~~

Note: Brown bears are not found in Unit 2.

Relevant Federal Regulation

36 CFR 242.5 Eligibility for subsistence use.

. . .

(c) Where customary and traditional use determinations for a fish stock or wildlife population within a specific area have not yet been made by the Board (e.g., "no determination"), all Alaskans who are residents of rural areas or communities may harvest for subsistence from that stock or population under the regulations in this part.

Extent of Federal Public Lands

Federal public lands comprise approximately 88% of Southeast Alaska Units 1, 3, 4, and 5. Details by unit are shown in **Table 1**, below. In Southeast Alaska, the Tongass National Forest comprises U.S. Forest Service lands. Glacier Bay National Park and Preserve and Wrangell-St. Elias National Park and Preserve comprise National Park Service lands (see **Unit 1 through 5 Maps**). Glacier Bay National Park is closed to subsistence uses, but Glacier Bay National Preserve is open to subsistence uses.

There are special requirements for National Park Service Lands. Under the guidelines of the Alaska National Interest Conservation Act (ANILCA), National Park Service regulations identify qualified local rural subsistence users in National Parks and Monuments: (1) by identifying resident zone communities, which include a significant concentration of people who have customarily and traditionally used subsistence resources on park lands; and (2) by identifying and issuing subsistence use permits to individuals residing outside of these resident zone communities who have a personal or family history of subsistence uses.

Regulatory History

At the beginning of the Federal Subsistence Management Program in Alaska in 1992, the Board adopted the State's customary and traditional use determinations into permanent regulations. The Unit 1 determination for brown bears was "no subsistence" for residents of Wrangell, Klukwan, Haines, and Skagway. The customary and traditional use determinations for brown bears in Units 4, and 5 remain the same as when the Board adopted them from State regulations in 1992. The State did not recognized customary and traditional uses of brown bears in most of Unit 3. The Board determined that, lacking a State determination, then all rural residents would be eligible to hunt brown bears under Federal regulations until the Board adopted customary and traditional use determinations for Unit 3 (see §242.5(c) above; 57 FR 22958, May 29, 1992).

Table 1. Percentage of Federal public lands in the Southeast Alaska Region Units 1, 3, 4, and by Federal management agency.

Wildlife Management Unit	Percentage Federal Public Lands	Percentage Managed by Each Agency
1A	91.3%	91.3% U.S. Forest Service
1B	98.1%	98.1% U.S. Forest Service
1C	95.5%	62.6% U.S. Forest Service 32.9% National Park Service
1D	43.8%	24.9% National Park Service 18.9% U.S. Forest Service
3	90.6%	90.6% U.S. Forest Service
4	92.2%	92.2% U.S. Forest Service
5A	94.5%	63.3% U.S. Forest Service 31.2% National Park Service
5B	96.0%	93.8% National Park Service 2.1% Bureau of Land Management 0.1% U.S. Forest Service

In 1996, Proposals WP96-02 and WP96-08 requested a customary and traditional use determination for brown bears in Unit 1 to include rural residents of Wrangell, Klukwan, Haines, and Skagway. The Board adopted the following Southeast Council's modification: Unit A, rural residents of Unit 1A except no subsistence for residents of Hyder; Unit 1B, rural residents of Unit 1A, Petersburg, and

Wrangell, except no subsistence for residents of Hyder; Unit 1C, rural residents of Unit 1C, Haines, Hoonah, Klukwan, Skagway, and Wrangell, except no subsistence for residents of Gustavus; and Unit 1D, rural residents of Unit 1D (61 FR 39702, July 30, 1996).

In 1998, Proposal WP98-04, submitted by the Petersburg Ranger District U.S. Department of Agriculture Forest Service, requested to add rural residents of Kake to the customary and traditional use determination for brown bears in Unit 1C south of Bishop Point. The Board adopted the Southeast Council's modification and additionally added Kake to the determination in all of Unit 1C (63 FR 35336, June 29, 1998).

In 2010, the Secretary of the Interior asked the Board to review, with Regional Advisory Council input, the customary and traditional use determination process and present recommendations for regulatory changes (Salazar 2010). During the Southeast Alaska Council's review in 2016, it requested, among other things, that the Board adopt customary and traditional use determinations broadly (Bangs 2016). The Council requested the Board to in the future recognize customary and traditional uses of all fish and wildlife in Southeast Alaska that have been taken for food or other purposes, including handicrafts, ceremonies, and customary trade. The Council said its recommendations to the Board in the future would tend to include residents of all rural Southeast communities and areas, and the three criteria in Section 804 of ANILCA was the regulatory process the Board should use to allocate resources, when necessary, and not customary and traditional use determinations. The Council intended to submit regulatory proposals to the Board requesting to broaden the complex web of customary and traditional use determinations that currently existed in Southeast Alaska (Bangs 2016). The Board responded that the Southeast Alaska Council's recommendation regarding customary and traditional use determinations aligned well with the current process followed statewide in the Federal Subsistence Management Program (Towarak 2016: 5). Since then, the Council has requested, and the Board has adopted, customary and traditional use determinations for all fish (Proposal FP19-17) and for deer (Proposal WP18-02) that include all rural residents of Southeast Alaska. This has greatly simplified these determinations that were originally adopted from State regulations at the formation of the Federal Subsistence Management Program in 1992.

Background

"Southeast Alaska brown bears primarily inhabit the islands north of Frederick Sound, including Admiralty, Baranof, and Chichagof islands, and the coastal mainland, although they exist in low densities on other islands separated from the mainland by relatively short water crossings. Examples include Wrangell, Etolin, Deer, and Mitkof islands in Unit 3" (Bethune 2015:1). The majority of brown bear harvests each year in Southeast Alaska occur on Admiralty, Baranof, and Chichagof islands in Unit 4. Using motorized land vehicles to assist with brown bear hunting is prohibited in Northeast Chichagof Island Controlled Use Area in Unit 4. The following three areas in Unit 4 are closed to harvest in order to enhance brown bear viewing: the Seymour Canal Closed Area on eastern Admiralty Island; the Salt Lake Closed Area near Angoon; and the Port Althorp Closed Area near Elfin Cove (Bethune 2015, Lowell 2015, Mooney 2015, and Sell 2015).

During the Russian Period in Alaska, the Russian American Company exported brown bear skins to St. Petersburg and Asia (Bockstoce 2009). Market hunting, primarily through trapping, occurred until banned in 1925 (Thornton 1992). Currently, Federal regulations allow the sale of handicrafts made from brown bears legally harvested in Units 1 through 5 (CFR §242.25(j)).

Brown bears were legally defined as game animals in 1908. Since then seasons have generally been from fall (September or October) through early summer (May or June). Beginning in 1989, there have been two separate seasons each year, one in the fall (September through November or December) and one in the spring (March or April through May or June). Harvest limits throughout the region are one brown bear every four regulatory years. Since 1960, hunters have been required to seal their harvests, and the hide (with claws attached) and skull must be salvaged. Since 1990 hunters have also been required to obtain registration permits before hunting in Units 1 and 4 (or a drawing permit in Unit 4), and since 2005 in Units 3 and 5. The State implemented a Unit 3 brown bear hunt for the first time in 2005. Additionally, a Federal registration permit has been available for hunting brown bears in Unit 5 since 2005. The edible meat of brown bears harvested with Federal permits must be salvaged (CFR §242.25(j)). Hunters do not need to seal brown bears taken with Federal permits in Unit 5, unless they are removed from the unit (CFR §242.25(j)(3)). Only six Federal permits have been used in Unit 5, and two harvests have been reported (OSM 2019).

Alaska is a prime location for trophy bear hunting because brown bear populations in the Lower 48 states do not allow for extensive hunting. Since the 1930s, Alaska's non-Native population has increased steadily and the state has become more accessible to both resident and nonresident sport hunters seeking big game trophies (Thornton 1992). Today sport and trophy hunters are responsible for the majority of known brown bear harvests.

Community Characteristics

The rural area of Southeast Alaska is comprised of about 33 small to medium sized communities, ranging in population from 20 or less (Point Baker, Elfin Cove, and Game Creek) to over 8,000 (Sitka) (**Table 2,** ADCCED 2017, ADLWD 2017, and U.S. Bureau of the Census 1995). Many were established by Tlingit Indians and are situated at historical village sites or were established by Haida Indians (Hydaburg and Kasaan) or Tsimshian Indians (Metlakatla). Population growth in Southeast Alaska during the historical period (beginning about 1750) has been affected by several waves of in-migration, first by Russian fur traders who established Sitka as their headquarters in the late 1700s. After the sale of Alaska to the United States in 1867, new industries (such as commercial fishing, canneries, and mining) and commercial trade, were pursued with the associated influx of outsiders (Worl 1990). Beginning in the 1970s, timber logging camps sprang up and some have persisted as new communities, such as Game Creek and Thorne Bay (Ellanna and Sherrod 1986). Many rural communities in Southeast Alaska have at their core a *kwaan* or tribe of Alaska Natives. The kwaan territories mapped in 1947 by Goldschmidt and Haas covered all of Southeast Alaska (Goldschmidt and Haas 1998).

Since 1960, the rural population of Southeast Alaska has doubled from 13,102 people in 1960 to 26,343 people in 2010 (**Table 2**). Some of this growth has been from new communities established near logging activities, growth in the recreation industry, and natural growth (Cerveny 2005).

Table 2. The number of people living in rural Southeast Alaska communities, from 1960 to 2010, based on the U.S. Census, NA=not available, *Italic*=estimated (Source: ADLWD 2017, ADCCED 2017, and U.S. Bureau of the Census 1995).

Unit of residence	Community	1960	1970	1980	1990	2000	2010	Number of house-holds
1A	Hyder	32	49	77	99	97	87	47
	Metlakatla	1,135	1,245	1,333	1,464	1,375	1,405	469
	Saxman	153	135	273	369	431	411	120
1C	Gustavus	107	64	98	258	429	442	199
1D	Haines Borough	*1,000*	1,504	1,680	2,117	2,392	2,508	991
	Klukwan	112	103	135	129	139	95	44
	Skagway	659	675	814	692	862	920	410
2	Coffman Cove	0	0	193	186	199	176	89
	Craig	273	272	527	1,260	1,397	1,201	523
	Edna Bay	135	112	6	86	49	42	19
	Hollis	0	0	0	111	139	112	55
	Hydaburg	251	214	298	384	382	376	133
	Kasaan	36	30	25	54	39	49	17
	Klawock	251	213	318	722	854	755	313
	Naukati Bay	0	0	0	93	135	113	60
	Point Baker	0	80	90	39	35	15	8
	Port Protection	0	0	40	62	63	48	26
	Thorne Bay	0	443	377	569	557	471	214
	Whale Pass	0	0	90	75	58	31	20
3	Kake	455	448	555	700	710	557	246
	Kupreanof	26	36	47	23	23	27	15
	Petersburg Borough	1,502	2,042	2,821	3,207	3,224	2,948	1,252
	Wrangell Borough	2,165	2,358	2,658	2,479	2,448	2,369	1,053
4	Angoon	395	400	465	638	572	459	167
	Elfin Cove	0	49	28	57	32	20	15
	Game Creek	0	0	0	61	35	18	10
	Hoonah	686	748	680	795	860	760	300
	Pelican	135	133	180	222	163	88	70
	Port Alexander	18	36	86	119	81	52	22
	Sitka Borough	3,237	6,109	7,803	8,588	8,835	8,881	3,545
	Tenakee Springs	109	86	138	94	104	131	72
	Whitestone	0	0	NA	164	116	114	30
5A	Yakutat Borough	230	190	449	534	808	662	270
TOTAL		**13,102**	**17,774**	**22,284**	**26,450**	**27,643**	**26,343**	**10,824**

Eight Factors for Determining Customary and Traditional Use

Customary and traditional uses in a community or area is generally exemplified through the eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) a pattern of use recurring in specific seasons for many years; (3) a pattern of use consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area; (5) 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; (6) a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use in which the harvest is shared or distributed within a definable community of persons; and (8) 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 the community or area.

The Board makes customary and traditional use determinations based on a holistic application of these 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.

Introduction

If a proposal is received requesting a customary and traditional use determination where none has been made previously for the resource, such as in Unit 3 of this proposal, the analyst evaluates use by all rural residents who may harvest the resource within the geographic boundaries defined by the proponent in the request.

Harvest Reporting System

One source of harvest data are State sealing records. **Appendix Table 1-1** shows that over half of reported brown bears harvested in Southeast Alaska was harvested by nonresidents of Alaska (5,333 out of 9,463 brown bears, 56%) hunting primarily in Unit 4 (72% of the nonresident harvest) since 1960 (OSM 2019; Scott 2019, pers. comm.). These records do not include the numbers of attempts to take bears as opposed to actually harvesting one, so neither the success rate nor the communities whose residents were unsuccessful in taking brown bears are shown. Additionally, people from all over Alaska have taken brown bears in Southeast Alaska. It is clear that residents of rural Southeast Alaska communities are responsible for much of this take (1,894 out of 9,463 brown bears, about 20%).

Another source of harvest data is State permit returns. **Appendix Tables 1-2 through 1-9** show the number of hunters and the number of brown bears harvested based on hunter reports on returned State permits. The data extend back to 1991 except in Units 3 and 5 where data extend back to 2005. The overall pattern of harvest from permit reports and from sealing records are similar, and most harvests are reported in Unit 4. More specific details of the harvest pattern such as the portion of harvest taken by rural Southeast communities in each subunit differs from State sealing records, described above, likely a result of different historical depth of data from one reporting method to the other.

Looking at returned permits has an added benefit over sealing records by reporting hunter effort as well as hunter success. Competition with other hunters occurs in every unit but more so in Units 1A, 1D, 4, and 5A. In these units, over half of all hunters are not from rural Southeast communities, based on permit reports shown in **Appendix 1** tables. Competition may be depressing hunting effort by some rural Southeast communities in these areas.

Rural residents from throughout Southeast Alaska are represented in hunter effort in each unit. For example, rural communities situated in each of Units 1–4 have demonstrated hunting efforts in each of Units 1A, 1B 1C, 4, and 5A, based on sealing records and permit reports presented in **Appendix 1**. Yakutat, situated in Unit 5A, is separated from the rest of Southeast Alaska by a long expanse of coastline, and still demonstrates hunting effort in Units 1C, 1D, 3, 4, as well as nearby Units 5A and 5B.

Hunter efforts and harvests are much less in two areas, Units 3 and 5B. Brown bears are not common in Unit 3; however, the State initiated a legal hunting season in 2005 and some harvests have been reported. It is likely that if the brown bear population expands in this area, then more rural Southeast residents will demonstrate efforts to harvest brown bears there. Brown bear populations are limited in Unit 5B by the Malaspina Glacier covering most of the area (see **Appendix 1** tables).

Organized communities are not present in Units 1B and 5B, and instead, hunting effort is occasionally reported by people living outside of an organized community. Lower human population is limiting demonstrated hunter effort in these areas (see **Appendix 1** tables).

Brown Bear Uses in Southeast Alaska

Brown bears predate human occupancy and use of Southeast Alaska, as indicated by paleontological work in caves on Prince of Wales Island, where brown bear remains dating to about 35,000 years ago have been recovered. The oldest human remains found in Southeast Alaska so far, also from these caves, date to almost 10,000 years ago (Heaton et al. 1996). It is likely that indigenous people of Southeast Alaska have used brown bears wherever available for at least several thousand years. Ethnographic data show that Tlingit, Haida and Tsimshian people harvested brown bear for food and other purposes since before historic contact and have continued to use it through to the present day (de Laguna 1972, Niblack 1970, Oberg 1973, and Thornton 1992).

In rural communities of the region, the harvest of fish, wildlife, and plants follows a yearly cycle that is primarily based on the seasonal appearance of fish, wildlife, and plant resources. This seasonal round is

a regular pattern, although some fluctuation appears from year to year depending on the availability of certain species and weather conditions. In more recent times, wage employment and regulations have influenced timing of harvests. The knowledge of these seasonal fish, wildlife, and plant harvesting opportunities is widely shared throughout the region (Firman and Bosworth 1990 and Smythe 1988). In recent times, hunting has occurred during seasons set by the Alaska Board of Game. Alaska Native hunters in Southeast Alaska traditionally pursued brown bears throughout the year, with peak hunting periods in late winter, spring, late summer, and early fall (Thornton 1992). Brown bears were taken primarily in the spring for their meat and hides with hunters concentrating in the alpine and lowland areas where bears came to feed on grasses and roots. Fall bears were prized for their fat and were pursued often along streams where they concentrated to feast on salmon. Occasionally brown bears were hunted in their dens during the winter months, or taken incidentally during the summer fishing season (ADF&G 1992).

Brown bear, or *xóots* in Tlingit, *xúuj* in Haida, and mashgm*'ol* in Tsimshian, hunting is a well-documented Tlingit, Haida, and Tsimshian tradition (Edwards 2009, Lacher 2010, and Roberts 2009). In the past, Tlingits preferred to hunt brown bears in groups of hunters, often with dogs. Implements used included spears, snares, deadfalls, traps, and bow and arrows (ADF&G 1992 and de Laguna 1990). After firearms were introduced, most bears were taken with guns. Brown bear hunting was and is considered dangerous, as hunters are sometimes attacked or otherwise injured by bears (Thornton 1992). Market hunting, primarily through trapping, occurred prior to a 1925 ban. Prices went up to 50 dollars per pelt in the early 20th century (Thornton 1992). Today, 30-30 and similar caliber rifles, common before World War II, have given way to higher powered guns. Scopes and binoculars are widely available, providing greater effectiveness. Some other traditional, and quite effective, methods have long been outlawed by Federal and State regulations. These include the use of dogs, pits, snares, deadfalls, and traps (Thornton 1992).

Rural communities in the region have a history of hunting and fishing near communities as well as fairly distantly from communities (Firman and Bosworth 1990). Modern technologies have increased the ease of access to some hunting areas (Thornton 1992), though the relationship between that and the extension or shift in traditional hunting areas is not clear. Technological developments related to access have influenced modern bear hunting practices.

Traditional hunting areas and beliefs associated with brown bears are still important in many communities. In Tlingit tradition, a brown bear's spirit was considered to be especially powerful. After a brown bear was killed, certain observances were mandated in order to avoid angering the bear's spirit. Honor was paid to the bear through words and songs. Failure to show proper respect to the bear might prove harmful to the hunter and his family, as the bear's spirit or other bears might seek revenge for any abuse. After appeasing the bear's spirit and its kindred bears with words of thanks and praise, the hunter conducted a short ceremony before skinning it in order to insure good weather for drying the hide. It was especially important to handle the bear's head properly. For the majority of Tlingits, the custom was to bring the head back to camp where it was decorated with eagle feathers, painted red, and warmed by the fire. At Sitka in 1894, Emmons (1991) observed that "two brown bears were killed, and when the skins were stretched to dry, eagle down was put on the heads so that their spirits would feel honored." One

might also speak to the bear's head as if to a human being, saying, for example, "I am your friend. I am poor and come to you." Songs were sung to honor the bear and appease its spirit. In recent years such handling rituals have declined, although the songs still may be performed on ceremonial occasions (Thornton 1992).

Traditionally, the only way to preserve bear meat was to smoke and dry it. More recently it has been canned, frozen, or salted in barrels. Occasionally other foods, such as berries and shellfish, were preserved in bear fat (Thornton 1992). While it is clear that brown bears were hunted consistently in the past, its traditional role as a food source in the subsistence economy is less clear. Some sources suggest that consumption of meat was taboo; others state that it was eaten regularly. There is also some evidence to suggest that bears may have been a buffer resource during times when other resources were scarce because of their seasonal availability and the large quantities of meat and fat that they could provide (Thornton 1992).

Brown bears have played an important role in the subsistence economies and social life of Southeast Alaska communities for centuries. Brown bears were hunted for meat and hides, and other parts of the bear were fashioned into such things as tools, amulets, and ceremonial regalia. While the subsistence harvest and consumption of brown bears appears to have declined in recent years in Southeast Alaska, some Natives still consume its meat and fat, and other parts of the bear continue to be utilized for ceremonial purposes. Moreover, the cultural significance of brown bear in Southeast Alaska Natives' social and ceremonial life remains strong (Thornton 1992).

Brown bear symbols are an important component of traditional regalia, stories told from generation to generation, and in representational art. Clans are at the center of Tlingit social organization, and the *Teikweidee*, specifically named "Brown Bear Clan," acquired that name at a peace ceremony given by the brown bears. Angoon Tlingits often refer to themselves as *Xootsnuwuwedi*, People of the Brown Bear Fort. Part of Admiralty Island is now recognized as Kootznoowoo (Fortress of the Bears) Wilderness because of the large population of brown bears there (Thornton 1992).

Sharing

Brown bear meat, fat, and other parts were and continue to be distributed through kin and community networks. Brown bear is an especially important part of "parties" associated with Tlingit mortuary and funerary ceremonies. People sharing their harvests of wild resources is a predominant feature of subsistence economies in Alaska. **Table 3** indicates high levels of sharing occurs in rural Southeast Alaska communities. A large majority of households share, either through giving or receiving, based on household surveys conducted since the 1980s (ADF&G 2019).

Reliance upon a Wide Diversity of Fish and Wildlife

Most communities in Southeast Alaska rely a wide variety of wild resources. These resources comprise a substantial portion of dietary intake. The Alaska Department of Fish and Game Division of Subsistence household surveys conducted between 1983 and 2015 demonstrate this variety of use. Harvest level estimates are described in categories such as salmon, nonsalmon fish, land mammals,

marine mammals, birds and eggs, marine invertebrates, and plants and berries in pounds edible weight annually. Overall harvest rates above 200 pounds per person are common. In general, Southeast communities harvest fish at the highest rates and land mammals, such as deer and moose, and marine invertebrates, such as clams and crab, are also harvested at high rates. Marine mammals, birds, and plants and seaweed compose smaller portions of annual harvests but are important components of the diet (**Table 4,** ADF&G 2019).

Table 3. The estimated harvest and use of wild resources in rural Southeast Alaska communities during one year study periods between 1983 and 2015, based on household surveys (Source: ADF&G 2019).

Unit of residence	Community	Study year	% of households using wild resources	% of households harvesting wild resources	% of households giving wild resources	% of households receiving wild resources
1	Gustavus	1987	100%	100%	90%	90%
1	Haines	1983	97%	88%	42%	78%
1	Haines	1987	93%	83%	67%	85%
1	Haines	1996	98%	91%	72%	97%
1	Haines	2012	99%	90%	71%	90%
1	Hyder	1987	97%	91%	33%	76%
1	Klukwan	1983	100%	97%	64%	70%
1	Klukwan	1987	100%	95%	74%	100%
1	Klukwan	1996	100%	94%	90%	100%
1	Metlakatla	1987	100%	77%	53%	99%
1	Meyers Chuck	1987	100%	100%	60%	80%
1	Saxman	1987	97%	83%	45%	95%
1	Saxman	1999	97%	79%	70%	92%
1	Skagway	1987	96%	68%	38%	93%
2	Coffman Cove	1987	97%	88%	53%	90%
2	Coffman Cove	1998	100%	98%	78%	86%
2	Craig	1987	97%	91%	70%	88%
2	Craig	1997	99%	90%	16%	91%
2	Edna Bay	1987	100%	100%	100%	100%
2	Edna Bay	1998	100%	100%	58%	58%
2	Hollis	1987	100%	88%	59%	93%
2	Hollis	1998	96%	91%	67%	74%
2	Hydaburg	1987	100%	91%	75%	93%
2	Hydaburg	1997	100%	90%	80%	100%
2	Hydaburg	2012	100%	98%	90%	98%
2	Kasaan	1987	100%	100%	86%	100%
2	Kasaan	1998	100%	100%	93%	100%
2	Klawock	1984	100%	97%	83%	81%
2	Klawock	1987	100%	96%	62%	83%
2	Klawock	1997	100%	91%	77%	94%
2	Naukati Bay	1998	98%	94%	66%	90%
2	Point Baker	1987	100%	100%	90%	95%
2	Point Baker	1996	100%	100%	75%	100%
2	Port Protection	1987	100%	100%	80%	96%
2	Port Protection	1996	100%	92%	76%	96%

Unit of residence	Community	Study year	% of households using wild resources	% of households harvesting wild resources	% of households giving wild resources	% of households receiving wild resources
2	Thorne Bay	1987	100%	97%	66%	87%
2	Thorne Bay	1998	93%	91%	61%	57%
2	Whale Pass	1987	100%	100%	72%	67%
2	Whale Pass	1998	100%	100%	80%	100%
2	Whale Pass	2012	100%	100%	67%	76%
3	Beecher Pass	1987	100%	100%	100%	100%
3	Kake	1987	97%	91%	66%	91%
3	Kake	1996	99%	85%	75%	96%
3	Petersburg	1987	97%	94%	87%	93%
3	Petersburg	2000	94%	78%	55%	87%
3	Wrangell	1987	95%	80%	63%	90%
3	Wrangell	2000	94%	81%	65%	89%
4	Angoon	1984	97%	97%	74%	87%
4	Angoon	1987	100%	99%	84%	93%
4	Angoon	1996	97%	93%	68%	95%
4	Elfin Cove	1987	100%	100%	92%	100%
4	Game Creek	1996	100%	100%	83%	100%
4	Hoonah	1987	100%	95%	84%	100%
4	Hoonah	1996	97%	95%	78%	90%
4	Hoonah	2012	98%	90%	85%	96%
4	Hoonah	2016	100%	94%	88%	98%
4	Pelican	1987	100%	92%	78%	99%
4	Port Alexander	1987	100%	100%	86%	94%
4	Sitka	2013	99%	91%	76%	92%
4	Tenakee Spr	1984	96%	88%	79%	92%
4	Tenakee Spr	1987	100%	90%	68%	97%
4	Whitestone	1996	100%	96%	50%	67%
5	Yakutat	1984	100%	98%	86%	98%
5	Yakutat	1987	96%	96%	99%	93%
5	Yakutat	2000	100%	95%	89%	99%
5	Yakutat	2015	99%	93%	87%	97%

Brown bears have traditionally been used in Southeast Alaska as an important source of food, clothing, grease, and fat. There is a long history of harvesting brown bears for their furs (Bockstoce 2009, ADF&G 1992, Thornton 1992, Firman and Bosworth 1990). The commercial use of brown bears is generally no longer legal.

Effects of Proposal

If Proposal WP20-11 is adopted, those eligible to hunt brown bears under Federal regulations in Southeast Alaska will increase to all rural residents of Southeast Alaska, Units 1 through 5, except in Unit 3 where it will decrease from all rural residents of Alaska to rural residents of Southeast Alaska, Units 1 through 5.

Table 4. The estimated harvest of wild resources for subsistence, in pounds edible weight per person, by rural Southeast Alaska communities, during one year study periods between 1983 and 2015, based on household surveys (Source: ADF&G 2018).

Community	Study year	Salmon	Non-salmon fishes	Land mam-mals	Marine mam-mals	Birds and eggs	Marine inverte-brates	Plants and berries	Total pounds per person
Angoon	1984	74	46	58	17	1	13	8	216
Angoon	1987	71	35	73	32	1	26	7	244
Angoon	1996	82	48	51	9	0	30	4	224
Angoon	2012	37	53	51	5	0	22	13	183
Beecher Pass	1987	131	108	109	0	23	93	13	477
Coffman Cove	1987	52	56	60	1	1	9	5	183
Coffman Cove	1998	63	83	66	1	3	49	11	276
Craig	1987	40	62	42	5	1	29	6	185
Craig	1997	65	63	47	10	1	29	19	232
Edna Bay	1987	99	135	147	0	4	67	26	479
Edna Bay	1998	55	186	90	0	0	16	36	383
Elfin Cove	1987	81	59	72	0	0	24	27	263
Game Creek	1996	27	54	47	0	3	36	20	187
Gustavus	1987	55	82	64	0	2	28	10	241
Haines	1983	46	33	34	1	3	3	5	126
Haines	1987	28	37	23	0	1	4	5	97
Haines	1996	58	81	29	1	1	11	15	196
Haines	2012	47	38	28	0	1	12	10	135
Hollis	1987	44	35	42	0	1	49	11	183
Hollis	1998	40	31	40	0	0	53	6	169
Hoonah	1985	47	40	58	21	1	22	21	210
Hoonah	1987	100	78	90	53	1	49	13	385
Hoonah	1996	113	67	81	23	1	58	30	372
Hoonah	2012	72	120	52	13	2	41	44	343
Hydaburg	1987	137	83	43	7	1	51	14	336
Hydaburg	1997	117	109	35	3	1	101	19	384
Hydaburg	2012	214	133	68	5	0	83	27	531
Hyder	1987	121	86	32	8	6	85	7	345
Kake	1985	69	46	27	26	1	19	29	218
Kake	1987	35	33	39	23	1	18	15	163
Kake	1996	44	42	52	10	1	22	9	179
Kasaan	1987	32	32	40	2	0	69	6	182
Kasaan	1998	93	184	70	25	0	61	19	452
Klawock	1984	69	58	36	14	1	28	18	223
Klawock	1987	75	72	47	5	1	40	7	247
Klawock	1997	105	78	54	21	1	37	24	320
Klukwan	1983	114	33	14	2	1	0	6	170
Metlakatla	1987	20	17	11	1	1	15	5	70
Meyers Chuck	1987	105	174	48	0	9	64	14	414
Naukati Bay	1998	49	73	51	1	2	54	12	242
Pelican	1987	60	119	111	8	1	47	9	355

Community	Study year	Salmon	Non-salmon fishes	Land mam-mals	Marine mam-mals	Birds and eggs	Marine inverte-brates	Plants and berries	Total pounds per person
Petersburg	1987	45	44	57	0	4	39	9	198
Petersburg	2000	60	42	17	0	1	37	4	161
Point Baker	1987	89	66	101	0	3	66	20	346
Point Baker	1996	82	89	47	0	0	58	12	289
Port Alexander	1987	70	70	108	3	1	31	28	312
Port Protection	1987	111	88	41	0	2	43	19	304
Port Protection	1996	59	111	101	9	2	139	30	451
Saxman	1987	33	19	20	2	0	14	4	94
Saxman	1999	84	47	29	12	0	23	23	217
Sitka	1987	39	43	38	1	1	18	5	145
Sitka	1996	58	54	51	7	1	27	7	205
Sitka	2013	46	68	26	3	0	19	12	175
Skagway	1987	18	16	4	0	0	9	2	48
Tenakee Springs	1984	71	42	65	4	0	61	7	250
Tenakee Springs	1987	49	82	135	8	2	43	11	330
Thorne Bay	1987	48	73	40	0	1	24	4	189
Thorne Bay	1998	62	37	36	11	1	26	6	179
Whale Pass	1987	41	37	60	2	1	33	5	179
Whale Pass	1998	28	36	51	0	0	57	13	185
Whale Pass	2012	52	76	80	0	13	24	3	247
Whitestone	1996	21	71	57	0	1	23	5	178
Wrangell	1987	30	43	32	7	1	38	4	155
Wrangell	2000	26	34	39	0	1	60	8	168
Yakutat	1984	129	82	52	24	10	46	26	369
Yakutat	1987	216	77	15	31	2	40	17	398
Yakutat	2000	145	87	34	35	3	54	27	386
Yakutat	2015	93	47	49	33	4	12	25	262

OSM CONCLUSION

Support Proposal WP20-11.

Justification

Rural residents of Southeast Alaska have demonstrated customary and traditional uses of brown bears in Southeast Alaska, according to hunting documentation and ethnographic descriptions.

Several factors have affected long-term patterns of brown bear use by rural Southeast residents. Yakutat, situated in Unit 5A, is separated from other areas of Southeast Alaska by a long expanse of coastline; however, residents have demonstrated hunting effort in Southeast Alaska in areas distant to them. Additionally, Organized communities are not present in Units 1B and 5B, and hunting effort is occasionally reported by people living outside of an organized community. Low human populations in these areas are limiting demonstrated hunter effort by residents of these areas. Further, a harvestable

surplus of brown bears has existed in Unit 3 since 2004 when the State implemented a hunt there should be included in the regulation, as was requested by the proponent. Additionally, brown bears are rare in Unit 5B because it is dominated by the Malaspina Glacier and therefore few harvests have been reported there.

Another factor possibly affecting patterns of brown bear use is competition with other hunters. The proportion of rural Southeast Alaska residents using Units 1A, 1D, 4, and 5A to hunt is much smaller than for the group of other hunters who visit these areas in larger numbers, a factor that may dissuade area residents from traveling to these areas to hunt (see **Appendix 1** tables). Further, while black bears are not found in Unit 2, Unit 2 residents have demonstrated traveling to Units 1, 2, 3, and 5 in search of brown bears.

Finally, the Southeast Alaska Council has requested that the Board consider customary and traditional use determinations broadly and inclusively (Bangs 2016). Therefore, all rural residents of Southeast Alaska should be included in a customary and traditional use determination for brown bears in Units 1, 3, 4, and 5.

LITERATURE CITED

ADCCED. 2017. Community and Regional Affairs, Community Index. https://www.commerce.alaska.gov/dcra/DCRAExternal/community, retrieved June 19, 2017. Alaska Department of Commerce, Community, and Economic Development. Juneau, AK.

ADF&G. 2019. Community Subsistence Information System. Alaska Department of Fish and Game Division of Subsistence online database. Anchorage.

ADF&G. 1992. Customary and traditional uses of Southeast Alaska black bear, brown bear, and deer. Grouse and ptarmigan, moose, wolf, wolverine populations in Southeast Alaska. Report to the Board of Game, November 1992. Alaska Department of Fish and Game Division of Subsistence, Anchorage.

ADLWD. 2017. Research and Analysis, Population and Census, Historical Data: Boroughs/Census Areas. Juneau, AK. http://live.laborstats.alaska.gov/pop/index.cfm, retrieved June 19, 2017. Alaska Department of Labor and Workforce Development, Anchorage, AK.

Bangs, M. 2016. Letter to Tim Towarak, Chair, Federal Subsistence Board, dated January 22. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 3 pages.

Bethune, S. 2015. Unit 1 brown bear Chapter 1, pages 1–1 through 1–20 *in* P. Harper, editor. Brown bear management report of survey and inventory activities 1 July 2012–30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-1, Juneau.

Bockstoce, J.R. 2009. Furs and frontiers in the far North: The contest among Native and foreign nations for the Bering Strait fur trade. Yale University Press. 475 pages.

de Laguna. 1972. Under Mount Saint Elias: The history and culture of the Yakutat Tlingit. Simthsonian Contributions to Anthropology, Volume 7 (1–3). Smithsonian, Washington DC.

de Laguna, R. 1990. Tlingit. Pages 203–239 *in* Handbook of North American Indians, vol. 7. W. Suttles, editor. Smithsonian Institute, Washington D.C.

Edwards, K. 2009. Dictionary of Tlingit. Sealaska Heritage Institute, Juneau, AK. 614 pages. <http://www.sealaskaheritage.org/institute/language/resources>

Emmons, G.T. 1991. The Tlingit Indians. F. de Laguna, editor. University of Washington Press, Seattle.

Firman, A.S., and R.G. Bosworth. 1990. Harvest and use of fish and wildlife by residents of Kake, Alaska. Alaska Department of Fish and Game Division of Subsistence Technical Paper No 145. Juneau.

Goldschmidt, W. R., and T. Haas. 1998. *Haa Aani*: Our Land. Tlingit and Haida land rights and use. University of Washington Press, Seattle and London; and Sealaska Heritage Foundation, Juneau. 219 pages.

Heaton, H. T., S. L. Talbot, and G. F. Shields. 1996. An ice age refugium for large mammals in the Alexander Archipelago, Southeast Alaska. Quaternary Research 46:186–192.

Lacher, J. 2010. Dictionary of Alaskan Haida. Sealaska Heritage Institute, Juneau, AK. 735 pages. <http://www.sealaskaheritage.org/sites/default/files/Haida_dictionary_web.pdf>

Lowell, R. 2015. Unit 3 brown bear. Chapter 2, pages 2–1 through 2–8 *in* P. Harper, editor. Brown bear management report of survey and inventory activities 1 July 2012–30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-1, Juneau.

Mooney, P. W. 2015. Unit 4 brown bear management report. Chapter 3, pages 3-1 through 3-22 *in* P. Harper and L. A. McCarthy, editors. Brown bear management report of survey and inventory activities 1 July 2012–30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-1, Juneau.

Niblack 1970 [1890]. The coast Indians of Southern Alaska and Northern British Columbia. Pages 225–386 in U.S. National Museum Annual Report 1888. (Reprinted in 1970 by Johnson Reprint Corporation, New York.

Oberg, K., 1973. The social economy of the Tlingit Indians. University of Washington Press, Seattle.

OSM (Office of Subsistence Management). 2019. ADF&G bear sealing database. Federal Subsistence Permit System. Online database, accessed May 31, 2019. Fish and Wildlife Service Office of Subsistence Management, Anchorage.

Roberts, D.M. 2009. Dictionary of *Shm'algyack*. Sealaska Heritage Institute, Juneau, AK. 140 pages.

Salazar, K. 2010. Letter to Tim Towarak, Chair, Federal Subsistence Board, dated December 17. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 4 pages.

Sell, S. 2015. Unit 5 brown bear management report. Chapter 4, pages 4–1 through 4–9 [In] P. Harper, editor. Brown bear management report of survey and inventory activities 1 July 2012–30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-1. Juneau.

Thornton, T.F. 1992. Subsistence use of brown bear in Southeast Alaska. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 214. Juneau.

Towarak, T. 2016. Letter to Mike Bangs, Chair, Southeast Alaska Subsistence Regional Advisory Council, dated June 21. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 5 pages.

U.S. Bureau of the Census. 1995. Alaska: population of counties by decennial Census: 1900 to 1990. Compiled and edited by Richard L. Forstall, Population Division, Washington D.C. https://www.census.gov/population/cencounts/ak190090.txt

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATION

Southeast Alaska Subsistence Regional Advisory Council

Support WP20-11. The Council's intent on this proposal was to essentially continue to make good, rational, customary and traditional use determinations. This required a good analysis of the uses of brown bears throughout the region, and now that this information has been received and is thorough, the Council relied on that information to make a good, informed decision in line with a lot of work this Council has done in past years on this issue. The analysis recognizes that customary and traditional use determinations were inherited from a regulations structure in place when the State administered the program. The Council did not agree with this structure and felt it did not fulfill the intent of ANILCA. This proposal would simplify regulations, clearly set out eligibility for participation, and be beneficial to subsistence users. The proposal would increase opportunities for subsistence users throughout the Southeast and the analysis justifies this action. The Council noted that this justification would roughly be the same for all customary and traditional use determination proposals discussed at the fall 2019 meeting.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-11: This proposal, submitted by the Southeast Alaska Subsistence Regional Advisory Council (RAC), will expand the current pool of hunters eligible to harvest brown bears in units 1 and 3, 4, and 5 under federal subsistence regulations to include all federally qualified residents of units 1 – 5.

Introduction: This proposal is a part of a broader effort by the Southeast RAC to expand eligibility among federally qualified hunters residing in Southeast Alaska to harvest all big game species. The Council believes current eligibility is too narrowly defined and does not reflect traditional harvest practices of rural residents of units 1 – 5.

Impact on Subsistence Users: This proposal will expand opportunity to harvest brown bears under federal subsistence regulations in units 1 and 3, 4, and 5 to include all federally qualified residents of units 1 - 5. Residents of Hyder and Gustavus, as well as residents of communities in units 2 and 3 would become eligible. In Unit 5, current state resident regulations are more restrictive than federal regulations, so adoption of this proposal would provide additional opportunity and incentive to federally qualified users in that unit. State regulations provide for a brown bear hunt in Unit 3, which is not offered under federal regulations.

Impact on Other Users: Without further actions from the Federal Subsistence Board, if this proposal is adopted ADF&G anticipates it will have little or no effect on brown bear harvest for non-federally qualified hunters in most units. Current state resident regulations and federal brown bear harvest regulations are identical in Units 1 and 4, so adopting this proposal will provide no additional opportunity to federally qualified hunters to harvest brown bears in those units.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made positive customary and traditional use findings for brown bears in Unit 1 and units 3, 4, and 5. The Board of Game has not made a finding for Unit 2 due to no established population of brown bears in that unit.

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

The ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for brown bears in Units 1 and 3 – 5 are as follows:
Unit 1A (outside the state nonsubsistence area): 2-3
Units 1B and 3 combined: 1
Unit 1C (outside the state nonsubsistence area): 1
Unit 1D: 3-5;
Unit 4: 5-10
Unit 5: 3-6

For Alaska residents, bag limits in Units 1 and 3 – 5 are 1 bear every 4 regulatory years under state regulations. Hunting season dates in Units 1 and 4 are September 15 – December 31 and March 15 – May 31; in Unit 3, March 15 – May 31; and in Unit 5, September 15 – December 31 and March 15 – May 20. While brown bears may occasionally occur in Unit 2 there is no established population and no open State season for brown bears in the unit.

Special instructions: Hides and skulls of all brown bears harvested in units 1 and 3– 5 must be presented for sealing. Evidence of sex must remain naturally attached to the hide.

Conservation Issues: There are no conservation concerns. Brown bear populations in units 1 and 3 – 5 are believed to be stable.

Enforcement Issues: None.

Recommendation: ADF&G is **NEUTRAL** on this proposal. Adoption of this proposal will have little or no effect on brown bear hunting or harvest opportunity without further actions by the FSB.

WRITTEN PUBLIC COMMENTS

Ketchikan Advisory Committee
June 6th, 2019
ADF&G Conference Room

I. **Call to Order**: 5:40pm by Matt Allen, Secretary

II. **Roll Call:** 8 voting members present, 1 via phone
Members Present: Allen, Crittenden, Dale, James, Westlund, Roth, Shaw, Bezneck, Fox, Scoblic (Phone)
Members Absent (Excused): Doherty, McQuarrie, Skan, Franulovich, Miller
Members Absent (Unexcused):
Number Needed for Quorum on AC: 8
List of User Groups and Public Present: Public, Sportfish Charter, ADFG (Sport Fish, Wildlife)
Motion: Bezneck, motion to make **Allen** meeting Chair, **Roth**, second. 9-0 in favor. **Allen** sits as meeting Chair

III. **Approval of Agenda:**
Allen, motion to amend agenda to include discussion of Federal Subsistence Proposals 10, 11, 13,14. **Westlund** seconded. Motion passed unanimously (9-0). **Westlund,** moved to approve agenda, **Dale** seconded. Motion passed unanimously (9-0)

IV. **Approval of Previous Meeting Minutes:**
Previous meeting minutes incomplete at this time

V. **Fish and Game Staff Present:**
Kelly Reppert, Ross Dorendorf, Tessa Hasbrouck

VI. **Guests Present: Jim Moody, Nick Hashagan, Martin Caplan, Tony Azure**

VII. **Chairman Report: Allen** read co-chair letter from Scoblic/Doherty

VIII. **ADF&G Sportfish Report: Reppert**, report regarding catch and release chinook fishing. Discussion and comment followed report.

IX. **Old Business:**
Federal Subsistence Proposals 2020-2022, WP20-01-08, WP20-10-15

X. **New Business:**
Catch and Release of chinook by Charter fishermen
Set next meeting date, September 12th, 2019, 5:30pm ADFG Conference Room

Federal Subsistence Management Program
2020-2022 Wildlife Proposal Comments

Proposal Number	Proposal Description		
Support, Support as Amended, Oppose, No Action	Number Support	Number Oppose /Abstain	Comments, Discussion (list Pros and Cons), Amendments to Proposal, Voting Notes
WP20-01	Southeast, Moose, Unit 1C, Eliminate Unit 1C – Berners Bay moose hunt		
Support	8	0/1 abstain	A biological concern does not currently exist necessitating a subsistence priority. Majority of traditional use comes from Juneau area. A fair system is currently in place to provide for opportunity
WP20-02	Southeast, Deer, Unit 2, Remove harvest limits to non-federally qualified users		
Support	9	0	We support State managers in their assessment of the deer population and the opportunity it can support.
WP20-03	Southeast, Deer, Unit 2, Eliminate doe harvest		
Oppose	1	8	Though the AC does not agree with doe harvest, we do not support this proposal because it would have minimal impact.
WP20-04	Southeast, Deer, Unit 2, Revise harvest limit		
Oppose	3	6	Some AC members support cessation of doe harvest if only for a short period of time.
WP20-05	Southeast, Deer, Unit 2, Establish a registration permit for does		
Support	7	1/1	AC supports the proposal as it may lead to better data for management.
WP20-06	Southeast, Deer, Unit 2, Revise season		
Support	9	0	AC supports removal of January hunt due to small amount of harvest, reduced quality of meat and difficulty in distinguishing bucks and does.
WP20-07	Southeast, Deer, Unit 2, Revise harvest limit		
Support	9	0	
WP20-08	Statewide, All Trapping Species, Require traps or snares to be marked with name or State Identification number		
Oppose	1	8	Though some type of compromise should be reached in regards to labelling of traps/snares a one size fits all regulation could be overly burdensome in some areas
WP20-09	Southeast, Beaver, Units 1-4, Revise trapping season		
No Action			
WP20-10	Statewide, Black Bear, Units 1-5, Revise Customary and Traditional Use Determination		

Oppose	2	6	Hunting of Black Bear is not customary and traditional in all units residing in Southeast
WP20-11	Statewide, Brown Bear, Units 1-5, Revise Customary and Traditional Use Determination		
	3	4	Hunting of Brown Bear is not customary and traditional in all units residing in Southeast.
WP20-12	Southeast, Deer, Unit 3, Revise hunt areas, season dates, and harvest limits		
WP20-13	Statewide, Elk, Unit 3, Establish Customary and Traditional Use Determination		
	0	9	This is a population introduced by the State in 1986, due to this fact we do not believe this population is traditional and customary for any Unit in Southeast Alaska. The authors of this proposal do not demonstrate how this particular species in this area has been used to meet the definition as customary and traditional.
WP20-14	Statewide, Goat, Unit 1-5, Revise Customary and Traditional Use Determination		
	4	4	Hunting of Mountain Goat is not Customary and Traditional in all Units residing in Southeast.
WP20-15	Statewide, Moose, Unit 1-5, Revise Customary and Traditional Use Determination		
	0	8	Hunting of Moose is not customary and traditional in all units residing in Southeast.
WP20-16	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			
WP20-17	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			

Adjournment:

Minutes Recorded By: _____
Minutes Approved By: _____
Date: _____

APPENDIX 1

Appendix Table 1-1. State sealing records: The reported harvest of brown bears from 1960 to 2018 cumulative, by wildlife management unit, (**bold**=rural Southeast community, blank cell=0) (Source: OSM 2019; Scott 2019, pers. comm.).

Unit of Residence	Community	Unit 1A	Unit 1B	Unit 1C	Unit 1D	Unit 3	Unit 4	Unit 5A	Unit 5B	Total
1A	**ANNETTE**	**11**						**4**		**15**
1A	**HYDER**	**1**								**1**
1A	KETCHIKAN	125	13	3	2		45	4	2	194
1A	**METLAKATLA**	**4**					**3**			**7**
1A	**MEYERS CHUCK**	**3**	**1**							**4**
1A	WARD COVE	9	1				8			18
1A	YES BAY	1								1
1B	**BRADFIELD**		**1**							**1**
1B	**HOBART BAY**						**8**			**8**
1C	AUKE BAY			10			58	2		70
1C	DOUGLAS		1	12			61	3		77
1C	**GUSTAVUS**			**3**			**9**	**1**		**13**
1C	JUNEAU	1	2	178	23		736	58	9	1,007
1D	**HAINES**			**7**	**233**		**17**	**1**		**258**
1D	**KLUKWAN**				**3**					**3**
1D	**SKAGWAY**			**1**	**24**		**3**			**28**
2	**COFFMAN COVE**	**2**								**2**
2	**CRAIG**	**3**	**1**				**10**	**1**		**15**
2	**EDNA BAY**						**1**			**1**
2	**KASAAN**						**1**			**1**
2	**KLAWOCK**	**7**	**1**				**8**			**16**
2	**PORT ALICE**		**1**							**1**
2	**THORNE BAY**	**1**	**12**		**1**		**5**	**1**		**20**
3	**ANITA BAY**					**1**				**1**
3	**KAKE**						**9**			**9**
3	**PETERSBURG**	**1**	**10**			**2**	**112**	**1**		**126**
3	**WRANGELL**	**1**	**81**			**8**	**15**	**1**		**106**
4	**ANGOON**						**28**			**28**
4	**CANNERY COVE**						**1**			**1**
4	**CHATHAM CAN.**						**1**			**1**
4	**CUBE COVE**						**27**			**27**
4	**ELFIN COVE**						**6**			**6**
4	**FALSE ISLAND**						**4**			**4**
4	**GAME CREEK**						**1**			**1**
4	**HIDDEN FALLS**						**8**			**8**
4	**HOONAH**			**2**			**181**	**1**		**184**
4	**PELICAN**				**1**		**24**	**1**		**26**
4	**PRT ALEXANDER**						**17**			**17**
4	**PRT ARMSTRONG**						**6**			**6**
4	**PORT WALTER**						**1**			**1**
4	**PYBUS BAY**						**1**			**1**
4	**SITKA**	**1**	**1**	**1**	**3**		**705**	**16**	**4**	**731**

Continued on next page

Appendix Table 1-1. State sealing records: The reported harvest of brown bears from 1960 to 2018 cumulative, by wildlife management unit (**bold**=rural community, blank cell=0). *Continued from previous page*

Unit of Residence										
4	**TENAKEE SPR**						**23**			**23**
5A	**YAKUTAT**							**170**	**22**	**192**
5A	**ICY BAY**								**1**	**1**
6C	CORDOVA							1	1	2
6D	VALDEZ				1		2	1		4
6D	WHITTIER							1		1
7	COPPER CENTER				1		1			2
7	MOOSE PASS						2			2
7	SEWARD			1			1			2
8	KODIAK						2	1	2	5
9B	KOKHANOK							1		1
10	ADAK				1			1		2
10	DUTCH HARBOR				1				1	2
10	UNALASKA						2			2
12	NORTHWAY				3		1			4
13D	GLENNALLEN						3			3
14A	BIG LAKE							1		1
14A	PALMER						4	3		7
14A	SUTTON								1	1
14A	WASILLA	2					24	10		36
14A	WILLOW							1		1
14B	TALKEETNA						1	2		3
14C	ANCHORAGE	7	2	3	8	1	180	60	16	277
14C	CHUGIAK				1		4	3		8
14C	EAGLE RIVER			1	1		34	12	2	50
14C	EKLUTNA						1			1
14C	ELMENDORF AFB				1		18	4		23
14C	FT RICHARDSON			1			18	10	1	30
14C	GIRDWOOD							1		1
15A	COOPER LANDING						2			2
15B	KASILOF						1			1
15B	KENAI						2	4		6
15B	SOLDOTNA				1		8	5		14
15B	STERLING				1			1		2
15C	NINILCHIK						1			1
18	BETHEL						1			1
20A	CLEAR						1			1
20A	HEALY						3			3
20A	NENANA							1		1
20A	USIBELLI						1			1
20B	EIELSON AFB				8		6	5	1	20
20B	FAIRBANKS		1	2	12		82	18	2	117
20B	FT WAINWRIGHT	1			3		15	2		21
20B	NORTH POLE		1		6		16	15		38
20B	SALCHA						1	1		2

Continued on next page

Appendix Table 1-1. State sealing records: The reported harvest of brown bears from 1960 to 2018 cumulative, by wildlife management unit (**bold**=rural Southeast community, blank cell=0). *Continued from previous page*

Unit of Residence	Community	Unit 1A	Unit 1B	Unit 1C	Unit 1D	Unit 3	Unit 4	Unit 5A	Unit 5B	Total
20B	TWO RIVERS							1		1
20D	DELTA JCT			1	4		5	4		14
20D	FORT GREELY							1		1
20D	TOK			1	2		4			7
20E	CHICKEN						1			1
21D	GALENA						1			1
22C	NOME						3			3
23	AMBLER		1							1
26A	BARROW								1	1
26A	WAINWRIGHT				1					1
	UNKNOWN	4	0	10	29	1	55	36	1	136
	NONRESIDENTS	83	103	67	300	1	3,857	742	180	5,333
	GRAND TOTAL	268	234	304	675	14	6,507	1,214	247	9,463
RURAL SOUTHEAST COMMUNITY ONLY		**13%**	**47%**	**5%**	**39%**	**79%**	**19%**	**10%**	**11%**	**20%**

Appendix Table 1-2. Unit 1A: Number of hunters and number of brown bears harvested based on the ADF&G harvest reporting system, from 1991 to 2018 cumulative (**bold**=rural Southeast community) (Source: OSM 2019; Scott 2019 pers. comm.).

Unit of residence	Community	Unit 1A Number of hunters 1991-2018	Unit 1A Number of brown bears harvested 1991-2018
1A	**HYDER**	**5**	**0**
1A	KETCHIKAN	502	69
1A	**METLAKATLA**	**14**	**2**
1A	**NEETS BAY**	**3**	**1**
1A	WARD COVE	46	5
1C	**GUSTAVUS**	**1**	**0**
1C	JUNEAU	9	0
2	**COFFMAN COVE**	**1**	**0**
2	**CRAIG**	**11**	**1**
2	**HOLLIS**	**1**	**0**
2	**KLAWOCK**	**1**	**0**
2	**THORNE BAY**	**21**	**1**
3	**PETERSBURG**	**3**	**0**
3	**WRANGELL**	**1**	**1**
4	**SITKA**	**6**	**2**
8	KODIAK	1	0
10	UNALASKA	1	0
13E	CANTWELL	1	0
14A	SUTTON	1	0
14A	WASILLA	4	2
14A	WILLOW	2	0
14C	ANCHORAGE	12	3
14C	CHUGIAK	1	0
14C	EAGLE RIVER	1	0
20B	FAIRBANKS	6	0
20B	FORT WAINWRIGHT	1	1
20B	NORTH POLE	1	1
20D	FORT GREELY	2	0
20D	TOK	2	0
23	AMBLER	2	0
	RESIDENT, NON-AK CITY	2	0
	NONRESIDENT	179	76
	GRAND TOTAL	844	165
RURAL SOUTHEAST COMMUNITIES ONLY		**8%**	**5%**

Appendix Table 1-3. Unit 1B: Number of hunters and number of brown bears harvested based on the ADF&G harvest reporting system, from 1991 to 2018 cumulative (**bold**=rural Southeast community) (Source: OSM 2019; Scott 2019 pers. comm.).

Unit of residence	Community	Unit 1B Number of hunters 1991-2018	Unit 1B Number of brown bears harvested 1991-2018
1A	KETCHIKAN	20	4
1A	**METLAKATLA**	**1**	**0**
1A	**MEYERS CHUCK**	**2**	**1**
1A	WARD COVE	3	0
1C	AUKE BAY	1	0
1C	JUNEAU	7	1
2	**COFFMAN COVE**	**4**	**0**
2	**CRAIG**	**12**	**0**
2	**KLAWOCK**	**1**	**0**
2	**THORNE BAY**	**39**	**5**
3	**PETERSBURG**	**40**	**3**
3	**WRANGELL**	**190**	**27**
4	**SITKA**	**5**	**0**
14A	WASILLA	2	0
14C	ANCHORAGE	8	0
14C	CHUGIAK	1	0
14C	EAGLE RIVER	3	0
15A	KENAI	2	0
15C	NINILCHIK	1	0
20B	FAIRBANKS	8	1
20B	FORT WAINWRIGHT	2	0
20B	NORTH POLE	3	1
23	AMBLER	9	1
	RESIDENT NON-AK CITY	1	0
	NON-RESIDENT	184	91
	GRAND TOTAL	549	135
RURAL SOUTHEAST COMMUNITIES ONLY		**53%**	**26%**

Appendix Table 1-4. Unit 1C: Number of hunters and number of brown bears harvested based on the ADF&G harvest reporting system, from 1991 to 2018 cumulative (**bold**=rural Southeast community) (Source: OSM 2019; Scott 2019 pers. comm.).

Unit of residence	Community	Unit 1C Number of hunters 1991-2018	Unit 1C Number of brown bears harvested 1991-2018
1A	KETCHIKAN	142	2
1A	WARD COVE	20	1
1B	**HOBART BAY**	**3**	**1**
1C	AUKE BAY	83	2
1C	DOUGLAS	32	2
1C	**GUSTAVUS**	**25**	**2**
1C	JUNEAU	1,320	2
1D	**HAINES**	**92**	**2**
1D	**KLUKWAN**	**1**	
1D	**SKAGWAY**	**12**	**2**
2	**COFFMAN COVE**	**7**	**1**
2	**CRAIG**	**15**	**2**
2	**KLAWOCK**	**8**	**1**
2	**THORNE BAY**	**38**	**1**
2	**WHALE PASS**	**1**	**1**
3	**KAKE**	**1**	
3	**PETERSBURG**	**80**	**2**
3	**WRANGELL**	**92**	**2**
4	**ANGOON**	**1**	**1**
4	**CUBE COVE**	**1**	**1**
4	**ELFIN COVE**	**1**	**1**
4	**HIDDEN FALLS**	**14**	**1**
4	**HOONAH**	**55**	**2**
4	**PELICAN**	**2**	**1**
4	**PORT ALEXANDER**	**3**	**1**
4	**PORT ARMSTRONG**	**11**	**1**
4	**PORT WALTER**	**1**	**1**
4	**PYBUS BAY**	**3**	
4	**SITKA**	**374**	**2**
4	**TENAKEE SPRINGS**	**1**	
5A	**YAKUTAT**	**41**	**1**
6C	CORDOVA	1	1
6D	VALDEZ	2	
7	MOOSE PASS	2	1
8	KODIAK	8	1
10	ADAK	3	
10	SHEMYA	1	
10	UNALASKA	2	1
13D	GLENNALLEN	1	
14A	BIG LAKE	3	1
14A	HOUSTON	3	1
14A	MEADOW LAKES	1	1

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Appendix Table 1-4. Unit 1C: Number of hunters and number of brown bears harvested based on the ADF&G harvest reporting system, from 1991 to 2018 cumulative (**bold**=rural Southeast community).
Continued from previous page

Unit of residence	Community	Unit 1C Number of hunters 1991-2018	Unit 1C Number of brown bears harvested 1991-2018
14A	PALMER	13	
14A	WASILLA	37	2
14A	WILLOW	3	
14C	ANCHORAGE	103	2
14C	CHUGIAK	13	2
14C	EAGLE RIVER	24	2
14C	FORT RICHARDSON	2	1
14C	GIRDWOOD	2	
15A	STERLING	1	1
15B	KASILOF	4	1
15B	KENAI	9	1
15B	SOLDOTNA	15	2
15C	ANCHOR POINT	2	1
15C	HOMER	4	1
18	BETHEL	4	
18	QUINHAGAK	1	
20B	EIELSON AFB	3	2
20B	ESTER	1	1
20B	FAIRBANKS	59	2
20B	FORT WAINWRIGHT	1	1
20B	NORTH POLE	27	2
20B	SALCHA	1	1
20B	TWO RIVERS	2	
20D	DELTA JCT	11	1
20D	TOK	4	
23	AMBLER	9	1
25D	FORT YUKON	2	
26A	UTQIAGVIK	2	
	RESIDENT, NON-AK CITY	20	2
	NONRESIDENT	139	18
	GRAND TOTAL	1,295	77
RURAL SOUTHEAST COMMUNITIES ONLY		**68%**	**39%**

Appendix Table 1-5. Unit 1D: Number of hunters and number of brown bears harvested based on the ADF&G harvest reporting system, from 1991 to 2018 cumulative (**bold**=rural Southeast community) (Source: OSM 2019; Scott 2019 pers. comm.).

Unit of residence	Community	Unit 1D Number of hunters 1991-2018	Unit 1D Number of brown bears harvested 1991-2018
1A	KETCHIKAN	3	0
1C	AUKE BAY	1	0
1C	DOUGLAS	2	1
1C	JUNEAU	73	8
1D	**HAINES**	**556**	**75**
1D	**KLUKWAN**	**1**	
1D	**SKAGWAY**	**24**	**4**
3	**WRANGELL**	**2**	**0**
4	**ANGOON**	**1**	**0**
4	**PELICAN**	**1**	**1**
4	**SITKA**	**10**	**1**
6D	VALDEZ	1	1
9E	CHIGNIK	1	1
10	ADAK	1	1
10	DUTCH HARBOR	1	0
12	NORTHWAY	14	3
12	TOK	12	2
13D	COPPER CENTER	6	1
13D	GLENNALLEN	3	0
14A	PALMER	7	0
14A	WASILLA	9	0
14C	ANCHORAGE	29	2
14C	CHUGIAK	2	1
14C	EAGLE RIVER	11	1
14C	ELMENDORF AFB	6	1
15A	KENAI	2	0
15A	SOLDOTNA	3	1
15A	STERLING	1	0
15C	HOMER	3	0
15C	NINILCHIK	1	0
20A	NENANA	2	0
20B	EIELSON AFB	65	7
20B	ESTER	1	0
20B	FAIRBANKS	40	3
20B	FORT WAINWRIGHT	4	2
20B	NORTH POLE	28	4
20B	TWO RIVERS	4	0
20D	DELTA JCT	1	
20D	DELTA JUNCTION	8	4
21D	GALENA	1	0
26A	UTQIAGVIK	2	
	RESIDENT NON-AK CITY	1	0
	RESIDENCY UNKNOWN	1	0
	NONRESIDENT	420	162
	GRAND TOTAL	1,365	287
RURAL SOUTHEAST COMMUNITIES ONLY		**44%**	**28%**

Appendix Table 1-6. Unit 3: Number of hunters and number of brown bears harvested based on the ADF&G harvest reporting system, from 2005 to 2018 cumulative (**bold**=rural Southeast community) (Source: OSM 2019; Scott 2019 pers. comm.).

Unit of residence	Community	Unit 3 Number of hunters 2005-2018	Unit 3 Number of brown bears harvested 2005-2018
1A	KETCHIKAN	3	1
2	**KLAWOCK**	**1**	**1**
2	**THORNE BAY**	**2**	**0**
3	**PETERSBURG**	**12**	**1**
3	**WRANGELL**	**45**	**2**
18	BETHEL	1	1
14A	BIG LAKE	1	0
14C	ANCHORAGE	2	1
15A	SOLDOTNA	1	1
15B	KENAI	1	0
20B	EIELSON AFB	1	1
20B	FAIRBANKS	1	0
20D	TOK	2	1
22	NOME	2	1
	NONRESIDENTS	1	1
	GRAND TOTAL	76	12
RURAL SOUTHEAST COMMUNITIES ONLY		79%	33%

Appendix Table 1-7. Unit 4: Number of hunters and number of brown bears harvested based on the ADF&G harvest reporting system, from 1991 to 2018 cumulative (**bold**=rural Southeast community) (Source: OSM 2019; Scott 2019 pers. comm.).

Unit of residence	Community	Unit 4 Number of hunters 1991-2018	Unit 4 Number of brown bears harvested 1991-2018
1A	KETCHIKAN	94	23
1A	**METLAKATLA**	**1**	**0**
1A	WARD COVE	18	4
1B	**HOBART BAY**	**25**	**4**
1C	AUKE BAY	159	34
1C	DOUGLAS	94	12
1C	**GUSTAVUS**	**36**	**6**
1C	JUNEAU	1,815	341
1D	**HAINES**	**52**	**8**
1D	**KLUKWAN**	**0**	**0**
1D	**SKAGWAY**	**15**	**3**
2	**COFFMAN COVE**	**4**	**1**
2	**CRAIG**	**27**	**7**
2	**EDNA BAY**	**3**	**1**
2	**HYDABURG**	**4**	**0**
2	**KASAAN**	**3**	**1**
2	**KLAWOCK**	**13**	**7**
2	**SMITH COVE**	**3**	**2**
2	**THORNE BAY**	**21**	**5**
2	**WHALE PASS**	**1**	**1**
3	**KAKE**	**19**	**5**
3	**PETERSBURG**	**260**	**73**
3	**ROWAN BAY**	**1**	**0**
3	**WRANGELL**	**26**	**6**
4	**ANGOON**	**23**	**6**
4	**CORNER BAY**	**1**	**1**
4	**CUBE COVE**	**53**	**23**
4	**ELFIN COVE**	**9**	**3**
4	**FALSE ISLAND**	**2**	**2**
4	**GAME CREEK**	**6**	**2**
4	**HIDDEN FALLS HATCHERY**	**24**	**4**
4	**HOONAH**	**251**	**60**
4	**PELICAN**	**11**	**2**
4	**PORT ALEXANDER**	**14**	**10**
4	**PORT ARMSTRONG**	**12**	**5**
4	**PORT WALTER**	**2**	**1**
4	**PYBUS BAY**	**7**	**1**
4	**SITKA**	**1,781**	**346**
4	**TENAKEE SPRINGS**	**24**	**4**
4	**WHITESTONE CAMP**	**5**	**1**
5A	**YAKUTAT**	**2**	**0**
6C	CORDOVA	1	0

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Appendix Table 1-7. Unit 4: Number of hunters and number of brown bears harvested based on the ADF&G harvest reporting system, from 1991 to 2018 cumulative (**bold**=rural Southeast community).
Continued from previous page

Unit of residence	Community	Unit 4 Number of hunters 1991-2018	Unit 4 Number of brown bears harvested 1991-2018
6D	VALDEZ	10	1
6D	WHITTIER	1	0
7	COOPER LANDING	3	2
7	MOOSE PASS	3	2
7	SEWARD	1	0
8	KODIAK	7	3
9C	NAKNEK	1	0
10	ADAK	5	0
10	AKUTAN	2	0
10	SHEMYA	1	0
10	UNALASKA	5	2
12	NORTHWAY	1	0
12	TOK	5	2
13D	COPPER CENTER	3	1
13D	GLENNALLEN	5	0
14A	BIG LAKE	4	0
14A	HOUSTON	3	0
14A	KNIK	1	0
14A	MEADOW LAKES	2	1
14A	PALMER	48	3
14A	SUTTON	1	0
14A	WASILLA	92	23
14A	WILLOW	2	0
14B	TALKEETNA	4	1
14C	ANCHORAGE	347	76
14C	CHUGIAK	24	4
14C	EAGLE RIVER	78	19
14C	EKLUTNA	1	1
14C	ELMENDORF AFB	2	0
14C	FORT RICHARDSON	27	10
14C	GIRDWOOD	2	
14C	PETERS CREEK	2	1
15A	NIKISKI	1	0
15B	KASILOF	5	1
15B	KENAI	15	2
15B	SOLDOTNA	34	6
15B	STERLING	4	0
15C	ANCHOR POINT	1	0
15C	HOMER	4	1
15C	NINILCHIK	3	1
16B	SKWENTNA	1	0
18	BETHEL	14	0

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Appendix Table 1-7. Unit 4: Number of hunters and number of brown bears harvested based on the ADF&G harvest reporting system, from 1991 to 2018 cumulative (**bold**=rural Southeast community).
Continued from previous page

Unit of residence			
18	QUINHAGAK	1	
20A	ANDERSON	2	0
20A	CLEAR	2	1
20A	HEALY	5	1
20A	NENANA	2	0
20B	CHATANIKA	2	0
20B	EIELSON AFB	17	5
20B	FAIRBANKS	175	39
20B	FORT WAINWRIGHT	18	6
20B	NORTH POLE	73	14
20B	SALCHA	3	1
20B	TWO RIVERS	2	0
20D	DELTA JCT	3	1
20D	DELTA JUNCTION	5	1
20E	EAGLE	1	0
21D	GALENA	1	1
22C	NOME	2	1
23	AMBLER	6	0
23	KOTZEBUE	4	0
25D	FORT YUKON	2	0
26A	BARROW	1	0
	RESIDENT, NON-AK CITY	14	6
	RESIDENCY UNKNOWN	3	0
	NONRESIDENTS	5,357	2,701
	GRAND TOTAL	11,398	3,956
RURAL SOUTHEAST COMMUNITIES ONLY		**24%**	**15%**

Appendix Table 1-8. Unit 5A: Number of hunters and number of brown bears harvested based on the ADF&G harvest reporting system, from 2005 to 2018 cumulative (**bold**=rural Southeast community) (Source: OSM 2019; Scott 2019 pers. comm.).

Unit of residence	Community	Unit 5A Number of hunters 2005-2018	Unit 5A Number of brown bears harvested 2005-2018
1A	KETCHIKAN	139	27
1A	WARD COVE	22	2
1C	JUNEAU	713	120
1D	**HAINES**	**2**	**0**
1D	**KLUKWAN**	**1**	**0**
1D	**SKAGWAY**	**5**	**1**
2	**CRAIG**	**3**	**1**
2	**KLAWOCK**	**8**	**3**
2	**THORNE BAY**	**38**	**4**
2	**WHALE PASS**	**1**	**1**
3	**KAKE**	**1**	**0**
3	**PETERSBURG**	**79**	**18**
3	**WRANGELL**	**89**	**12**
4	**HOONAH**	**53**	**16**
4	**PELICAN**	**2**	**2**
4	**PORT ALEXANDER**	**3**	**3**
4	**PORT ARMSTRONG**	**11**	**5**
4	**PORT WALTER**	**1**	**1**
4	**PYBUS BAY**	**3**	**0**
4	**SITKA**	**373**	**93**
4	**TENAKEE SPRINGS**	**1**	**0**
5A	**YAKUTAT**	**110**	**39**
6D	VALDEZ	3	0
7	MOOSE PASS	2	1
8	KODIAK	13	4
9B	KOKHANOK	2	1
10	UNALASKA	2	1
10B	SHEMYA	1	0
14A	BIG LAKE	1	1
14A	HOUSTON	3	1
14A	MEADOW LAKES	1	1
14A	PALMER	15	1
14A	WASILLA	40	13
14A	WILLOW	4	0
14B	TALKEETNA	2	1
14C	ANCHORAGE	38	8
14C	CHUGIAK	1	0
14C	EAGLE RIVER	5	2
14C	FORT RICHARDSON	4	3
15B	KASILOF	4	1
15B	KENAI	19	4
15B	SOLDOTNA	12	2

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Appendix Table 1-8. Unit 5A: Number of hunters and number of brown bears harvested based on the ADF&G harvest reporting system, from 2005 to 2018 cumulative (**bold**=rural Southeast community).
Continued from previous page

Unit of residence	Community	Unit 5A Number of hunters 2005-2018	Unit 5A Number of brown bears harvested 2005-2018
15B	STERLING	3	2
15C	HOMER	4	1
18	BETHEL	3	0
18	QUINHAGAK	1	0
20A	CLEAR	1	1
20B	EIELSON AFB	1	1
20B	ESTER	1	0
20B	FAIRBANKS	11	2
20B	FORT WAINWRIGHT	1	1
20B	NORTH POLE	42	16
20B	SALCHA	2	1
20B	TWO RIVERS	7	1
20D	DELTA JUNCTION	16	0
20D	TOK	4	0
26A	UTQIAGVIK	2	0
	RESIDENT, NON-AK CITY	2	1
	NONRESIDENTS	289	153
	GRAND TOTAL	2,220	573
RURAL SOUTHEAST COMMUNITIES ONLY		**35%**	**35%**

Appendix Table 1-9. Unit 5B: Number of hunters and number of brown bears harvested based on the ADF&G harvest reporting system, from 2005 to 2018 cumulative (**bold**=rural Southeast community) (Source: OSM 2019; Scott 2019 pers. comm.).

Unit of residence	Community	Unit 5B Number of hunters 2005-2018	Unit 5B Number of brown bears harvested 2005-2018
1A	KETCHIKAN	1	0
1C	JUNEAU	2	0
4	**HOONAH**	**1**	**0**
4	**SITKA**	**3**	**3**
5A	**YAKUTAT**	**10**	**4**
10	DUTCH HARBOR	1	1
14A	PALMER	1	0
14A	WASILLA	1	0
14C	ANCHORAGE	2	0
14C	EAGLE RIVER	4	2
14C	FORT RICHARDSON	1	0
14C	PETERS CREEK	1	0
	RESIDENT, NON-AK CITY	1	0
	NONRESIDENT	75	38
	GRAND TOTAL	104	48
RURAL SOUTHEAST COMMUNITIES ONLY		**16%**	**15%**

WP20–12 Executive Summary	
General Description	Proposal WP20-12 requests that the deer season in Unit 3, Mitkof, Woewodski, and Butterworth Islands be extended from Oct. 15 – Oct. 31 to Oct. 1 – Nov. 7, and that the hunt area be revised to include that portion of Kupreanof Island on the Lindenberg Peninsula east of Portage Bay - Duncan Canal Portage. The proposal also request that harvest limit be revised from antlered deer to buck in all of Unit 3. *Submitted by: Southeast Alaska Subsistence Regional Advisory Council*.
Proposed Regulation	**Unit 3— Deer** *Unit 3— Mitkof, Woewodski, ~~and~~ Butterworth Islands* ***and that portion of Kupreanof Island on the Lindenberg Peninsula east of the Portage Bay-Duncan Canal Portage*** *— 1 ~~antlered deer~~* ***buck*** — ~~*Oct. 15 – Oct. 31*~~ **Oct. 1 – Nov. 7** ~~*Unit 3 — Kupreanof Island, that portion east of the Portage Bay – Duncan Canal Portage — 1 antlered deer*~~ — ~~*Oct. 15 – Oct. 31*~~ *Unit 3— remainder — 2 ~~antlered deer~~* ***bucks*** — *Aug. 1 – Nov. 30* *Dec. 1 – Dec. 31 season to be announced*
OSM Conclusion	**Support**
Southeast Alaska Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Support**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-12

ISSUES

Wildlife Proposal WP20-12, submitted by the Southeast Alaska Subsistence Regional Advisory Council (Council), requests that the deer season in Unit 3, Mitkof, Woewodski, and Butterworth Islands be extended from Oct. 15 – Oct. 31 to Oct. 1 – Nov. 7, and that the hunt area be revised to include that portion of Kupreanof Island on the Lindenberg Peninsula east of Portage Bay - Duncan Canal Portage. The proposal also requests that the harvest limit be revised from antlered deer to buck in all of Unit 3.

DISCUSSION

The proponent states that deer populations in the proposed hunt area could withstand additional harvest opportunity based on the actions of the Alaska Board of Game (BOG) in State Proposal 45 and local observations of the deer population. The proponent states that extending the season later in the fall would correspond to cooler temperatures, allowing harvesters a greater amount of time to travel and process deer before meat spoils. The proponent also states that the season should not be extended beyond the proposed dates due to increased stressors such as weather and wolf predation during this time. The proponent also requests that the harvest limit be changed from antlered deer to buck, aligning regulations with the State. Currently, the Federal regulations are more restrictive than the State, requiring that a legal buck have antlers. Aligning Federal and State harvest limit regulations would allow for greater opportunity for subsistence users.

Existing Federal Regulation

Unit 3— Deer

Unit 3— Mitkof, Woewodski, and Butterworth Islands — 1 antlered deer	*Oct. 15 – Oct. 31*
Unit 3— Kupreanof Island, that portion east of the Portage Bay – Duncan Canal Portage — 1 antlered deer	*Oct. 15 – Oct. 31*
Unit 3— remainder — 2 antlered deer	*Aug. 1 – Nov. 30* *Dec. 1 – Dec. 31, season to be announced*

Proposed Federal Regulation

Unit 3— Deer

Unit 3— Mitkof, Woewodski, ~~and~~ Butterworth Islands ***and that portion of Kupreanof Island on the Lindenberg Peninsula east of the Portage Bay-Duncan Canal Portage*** *— 1 ~~antlered deer~~* ***buck***	*~~Oct. 15 – Oct. 31~~* ***Oct. 1 – Nov. 7***
~~Unit 3 – Kupreanof Island, that portion east of the Portage Bay – Duncan Canal Portage – 1 antlered deer~~	*~~Oct. 15 – Oct. 31~~*
Unit 3— remainder — 2 ~~antlered deer~~ ***bucks***	*Aug. 1 – Nov. 30*
	Dec. 1 – Dec. 31 season to be announced

Existing State Regulation

Unit 3—Deer

Unit 3— Petersburg Management Area — 2 bucks, by bow and arrow Only	*Oct. 1 – Dec. 15*
Unit 3— remainder of Mitkof, Woewodski, Butterworth Islands — 1 buck	*Residents: Oct. 1 – Nov. 7*
	Non-residents: Oct. 15 – Oct 31
Unit 3—That portion of Kupreanof Island on the Lindenberg Peninsula east of the Portage Bay-Duncan Canal Portage – 1 buck	*Residents: Oct. 1 – Nov. 7*
	Non-residents: no open season
Unit 3— *remainder — 2 bucks*	*Aug. 1 – Nov. 30*
Same-day airborne hunting of deer allowed. Harvest ticket must be validated in sequential order, and unused tickets must be carried when you hunt. In all hunts limited to one sex, evidence of sex must remain naturally attached to the meat or antlers must remain naturally attached to the entire carcass, with or without viscera.	

Extent of Federal Public Lands/Waters

Unit 3 is comprised of 90% Federal public lands and consist of 90% U.S. Forest Service (USFS) managed lands (**see Unit Map**).

Customary and Traditional Use Determinations

Rural residents of Units 1-5 have a customary and traditional use determination for deer in Unit 3.

Regulatory History

Complete State and Federal regulatory history since 1925 can be found in **Appendix 1**. Unit 3 deer regulations became more restrictive following severe winters in the late 1960s and early 1970s. In 1969, Mitkof Island was first separated from the remainder of Unit 3 to reduce harvest on the island. Harvest restrictions increased until 1975 when Unit 3 was closed to deer harvest. In 1980, a season opening allowed for the harvest of one buck in the southern portion of Unit 3 from Aug. 1 – Dec. 31. The Lindenberg Peninsula remained closed until 1993 when a season was established to allow the harvest of one buck by registration permit from Oct. 15 – Oct. 31. In 2003, Mitkof, Woewodski, and Butterworth Islands were open to the harvest of one buck from Oct. 15 – Oct. 31 while the remainder of Unit 3, now including the Lindenberg Peninsula, had a harvest limit of two antlered deer from Aug. 1 – Nov. 30. Beginning in 2013, the Lindenberg Peninsula was separated from the majority of Unit 3, reducing the season to Oct. 15 – Oct. 31 and limiting harvest to one buck. Since 2008, the Petersburg Ranger District of the USFS has been authorized to extend the season in the remainder of Unit 3 up to December 31 in consultation with the Alaska Department of Fish and Game (ADF&G) and the Council Chair. However, the season has never been extended due to lower than average deer numbers.

Current Events Involving the Species

In January 2019, the BOG adopted Proposal 45 to extend the resident deer season on Mitkof, Woewodski, and Butterworth Islands to Oct. 1 – Nov. 7. Although the Petersburg Management Area season was extended for both residents and non-residents, seasons on Mitkof, Woewodski, and Butterwoth Islands were only extended for residents. The BOG also adopted Proposal 46 to extend the resident deer season for the portion of Kupreanof Island on the Lindenberg Peninsula east of the Portage Bay-Duncan Canal Portage, referred to as Lindenberg Peninsula by the BOG. The Lindenberg Peninsula was included in the regulation to simplify hunting regulations for users. ADF&G suggested that the Unit 3 deer population had recovered sufficiently to support a more liberal season length. The BOG decided to extend the end of the season to November 7 in an effort to provide additional harvest opportunity. The non-resident deer hunting season on the Lindenberg Peninsula remains closed.

Biological Background

Sitka black-tailed deer are native to the wet coastal rainforests of southeast Alaska. Deer populations in Alaska are dynamic and fluctuate considerably with the severity of the winters, predation, and altered habitat. When winters are mild, deer numbers generally increase. Periodically, however, a

severe winter will cause a major decline in the population. Deer have high reproductive potential, and reduced populations normally recover rapidly. In some cases, predation may accelerate a decline in deer numbers, or slow recovery (ADF&G 2017a).

Unit 3 experienced above average winter snowfall from 2006-2009, and those harsh winter conditions are believed to have caused a decline in the deer population. Deer harvest in Unit 3 has been steadily increasing, following the harsh winters of 2006-2009 (**Figure 1**) possibly reflecting an increased population.

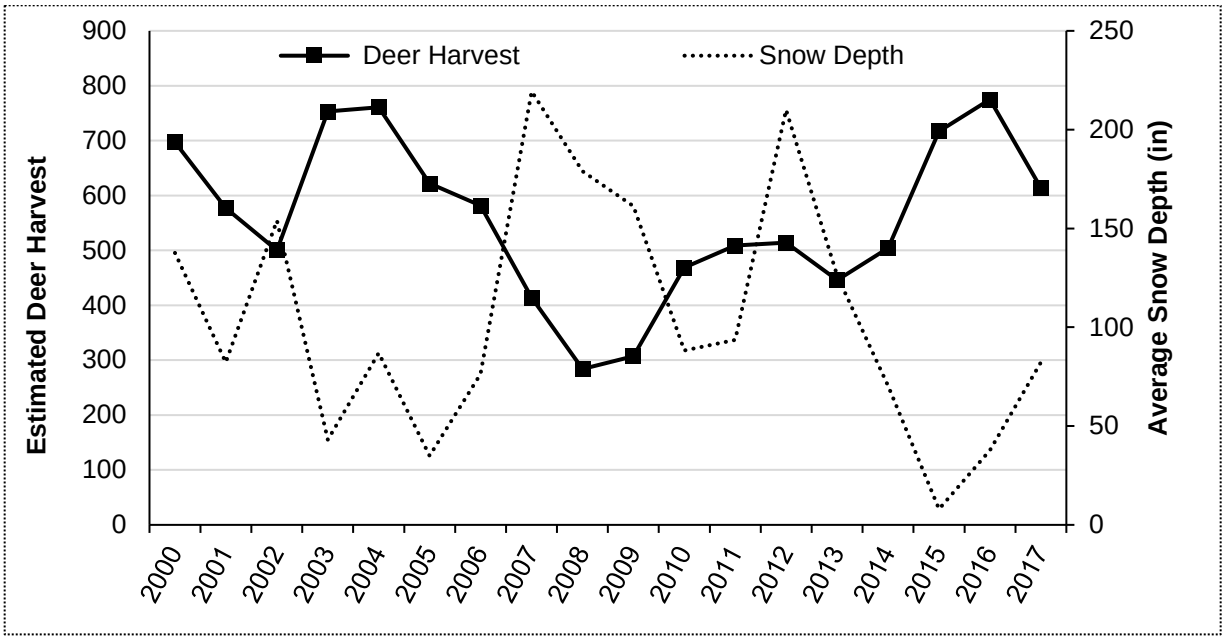

Figure 1. Estimated deer harvest in Unit 3 from 2000-2017. Harvest numbers from 2000-2010 are estimates based on ADF&G mail surveys. Harvest from 2011-2017 are based on ADF&G mandatory harvest reporting. Average snow depth in inches, Petersburg Ridge, Petersburg, Alaska, 1,650 foot elevation, January-March 2000-2017 (NRCS 2016).

There are no methods to directly count deer in southeast Alaska, so ADF&G deer pellet surveys are the primary source of available population information (**Figure 2**; **Figure 3**). However, relating pellet group data to population levels is difficult because factors other than changes in deer population size can affect deer pellet-group density. Snowfall patterns influence the annual distribution and density of deer pellets, and snow persisting late into the spring at elevations below 1,500 feet limits the ability to consistently survey the same elevation zones among years. In mild winters, deer can access forage in a greater variety of habitats, not all of which are surveyed. Conversely, in severe winters, deep snow concentrates deer in certain areas (McCoy 2017). Brinkman et al. (2013) questioned the value of pellet-group surveys for monitoring population trends due to the variability in the data compared to DNA based counts. Due to variability in deer pellet-group surveys, they are only used to identify large changes in deer density (> 30%)(McCoy 2017). Relating pellet groups between sites is also difficult so they are only used for general comparison.

The State management goal for GMU 3 is to achieve and maintain a population of 15,000 deer while maintaining an annual harvest of 900 deer (Harper and McCarthy, eds., 2015). This goal has not been reached since the year 2000 and as a result the department prepared an operational plan for the intensive management of Sitka black-tailed deer in a portion of GMU 3 (ADF&G 2013). ADF&G's management objectives for GMU 3 are to maintain winter range (<1,500 foot elevation) that is capable of supporting 32 deer/mi2 (average 1.0 pellet group/20 m2 plot), monitor long-term trends in deer abundance using pellet-group surveys, and monitor deer harvest using mandatory harvest ticket reports.

Figure 2 shows pellet-group survey results for units within Unit 3. Woewodski survey area has the highest frequency of pellet group surveys in Unit 3 and is shown on its own in **Figure 3**. These data suggest a declining population following the deep snow winters starting in 2006–07. Based on the pellet-group data for Unit 3, the deer population appears to have rebounded slightly in recent years; However, ADF&G considers the deer population in Unit 3 to be well below carrying capacity (Lowell 2011, Division of Wildlife Conservation 2012).

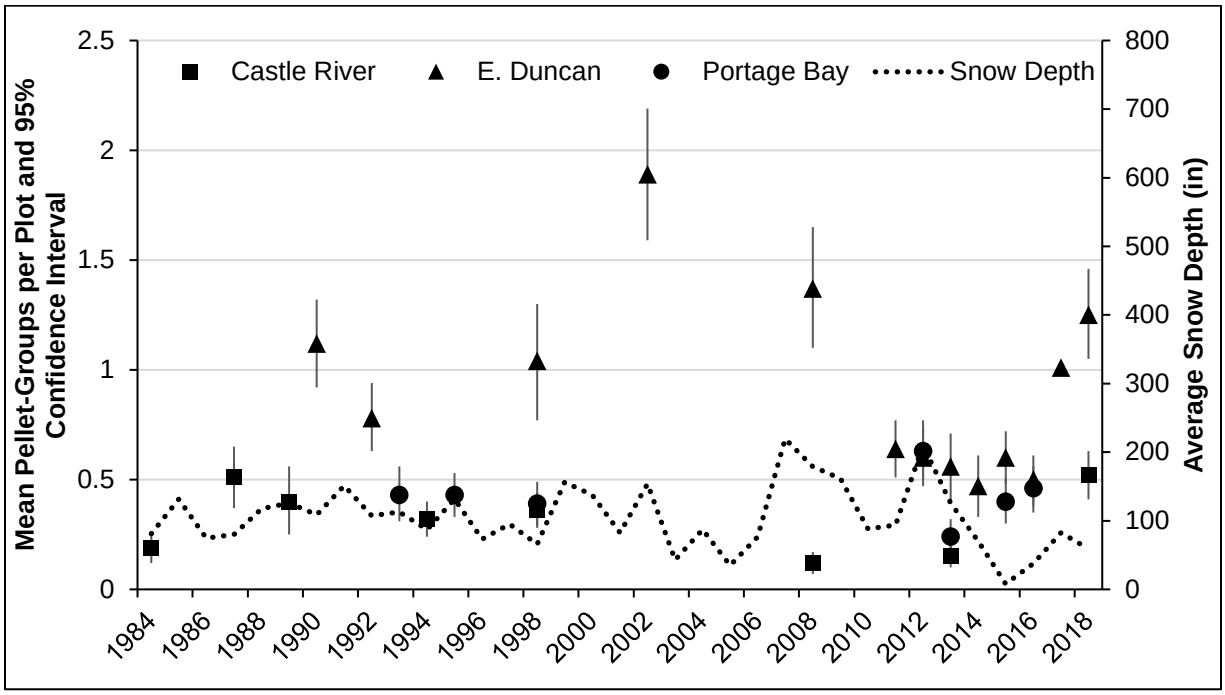

Figure 2. Historical Unit 3 mean pellet-group counts and 95% confidence interval from East Duncan, Castle River, and Portage Bay from 1984-2018. Pellet data provided by ADF&G (McCoy 2017; McCoy 2019, Unpublished). Average snow depth in inches, Petersburg Ridge, Petersburg, Alaska, 1,650 foot elevation, January-March 1984-2018 (NRCS 2016).

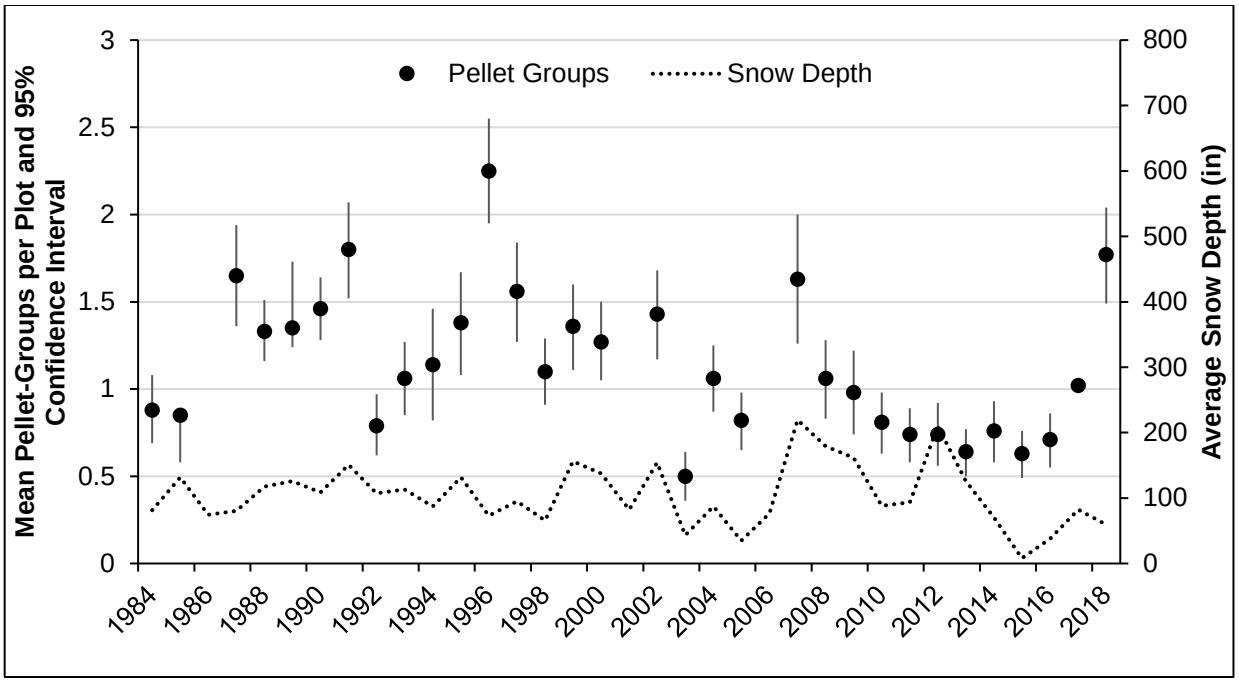

Figure 3. Historical mean pellet group counts and 95% confidence interval from the Woewodski survey area (Mitkof Island) from 1984-2018. Pellet data provided by ADF&G (McCoy 2017; McCoy 2019, Unpublished). Average snow depth in inches, Petersburg Ridge, Petersburg, Alaska, 1,650 foot elevation, January-March 1984-2018 (NRCS 2016).

Habitat

Sitka black-tailed deer use a variety of habitat types throughout the year. Deer spend the winter and early spring at low elevation where there is less snow accumulation, and forests provide foraging opportunity. Fawning occurs in late May and early June as vegetation greens-up, providing abundant forage to meet the caloric needs of lactating does. Some deer are migratory and follow the greening vegetation up to the alpine for the summer, while others remain at lower elevations. In late fall and early winter, the migratory deer return to lower elevations as snow covers available forage. In winters with increased snowfall, deer in southeast Alaska decrease their use of open habitats (e.g., muskegs and young clearcuts) and increase their use of old growth forests, which intercept snow most effectively (Kirchhoff and Schoen 1987). Optimum habitat during a deep snow winter is low elevation, old-growth forest on south-facing slopes. Commercial timber harvest within high volume old-growth stands diminishes the value and amount of winter deer habitat.

The quantity, quality, distribution, and arrangement of winter habitat for deer is considered the most important limiting factor for deer in southeast Alaska. The overall effect of snow restricts the range of suitable habitats and lowers the quality of all habitats (Hanley 1984). The ability of winter habitat to support deer is a function of forage availability and quality (Hanley et al. 1989); the ability of the habitat to intercept snow (Hanley and Rose 1987, Kirchhoff and Schoen 1987); and the climate of the habitat as influenced by the elevation, slope, and aspect of the area (Hanley and Rose 1987). In southeast Alaska, low-elevation, high-volume old-growth habitats are particularly important to deer, especially during severe winters (Yeo and Peek 1992). These old-growth stands intercept snow,

provide thermal cover, and support the largest biomass of herb and shrub forage for deer (Alaback 1982). As snow depth increases, selection of high-volume old-growth forests on south facing slopes increases (Gilbert et al. 2017).

Harvest History

Harvest data reported below were provided by ADF&G and were gathered by the Unit 3 deer survey and the State-wide deer management report. From 1980 to 2010 (with the exception of 1981), ADF&G estimated Unit 3 harvest data using a regional questionnaire that was mailed to a random sample of 33% of deer harvest ticket holders (Harper and McCarthy, eds., 2015). Survey results for hunter effort, success, and harvest location were then expanded to estimate results for all harvest ticket holders. Beginning in the fall of 2011, the mailed questionnaire was replaced by mandatory hunt report cards issued in conjunction with deer harvest tickets.

The number of deer harvested in Unit 3 has fluctuated since 2000 (**Figure 4**). Total deer harvest steadily declined from 2004 to 2008 (ADF&G 2017b). Deer harvest increased after 2009 in Unit 3, including the Mitkof, Woewodski, and Butterworth Islands, indicating the population may have rebounded at least in some areas. Another factor in the area is that for three winters in a row, (2006–2007, 2007–2008, and 2008–2009) snow cover was well above average (**Figure 5**); Petersburg received record-breaking snowfall in 2006–2007 (NRCS 2016). It is unknown how much deer mortality occurred during these hard winters, but low harvest and increased hunter effort per deer reflect a possible decrease in the deer population following those winters (**Figure 5; Figure 6**). Since the low number of deer harvested in 2008, there has been a general increase in deer harvest.

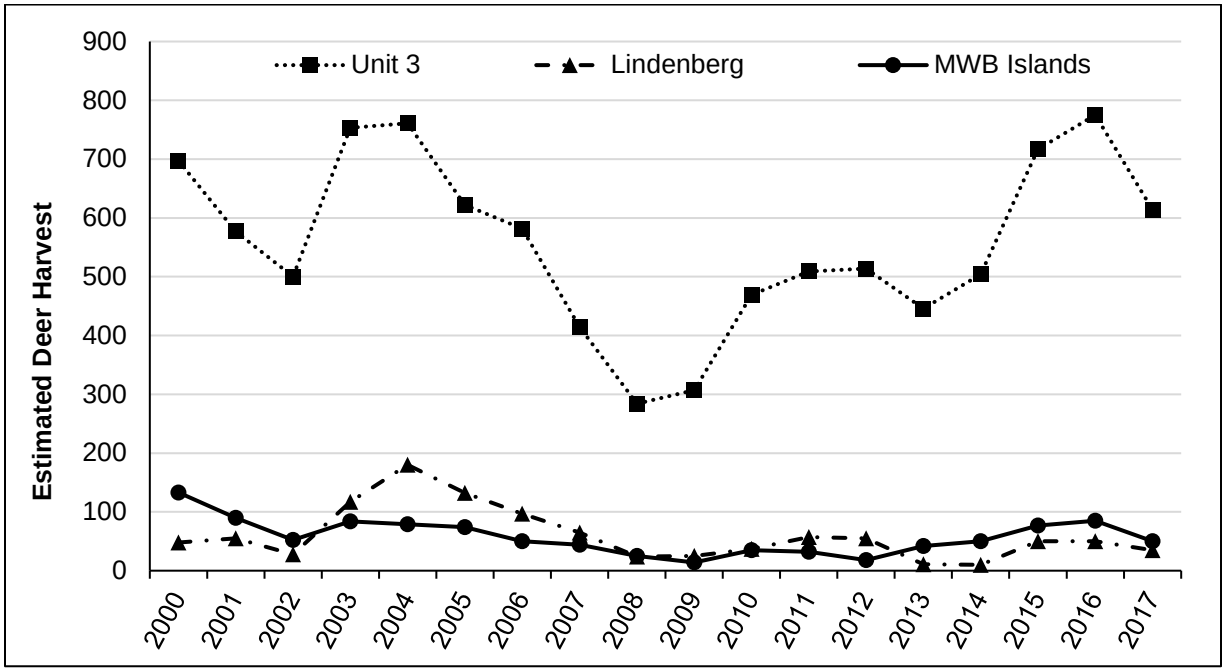

Figure 4. Estimated deer harvest in Unit 3, Lindenberg Peninsula, and Mitkof, Woewodski, and Butterworth Islands (MWB Islands) from 2000-2017. Harvest numbers from 2000-2010 are estimates based

on ADF&G mail surveys. Harvest from 2011-2017 are based on ADF&G mandatory harvest reporting. Data provided by ADF&G deer harvest surveys.

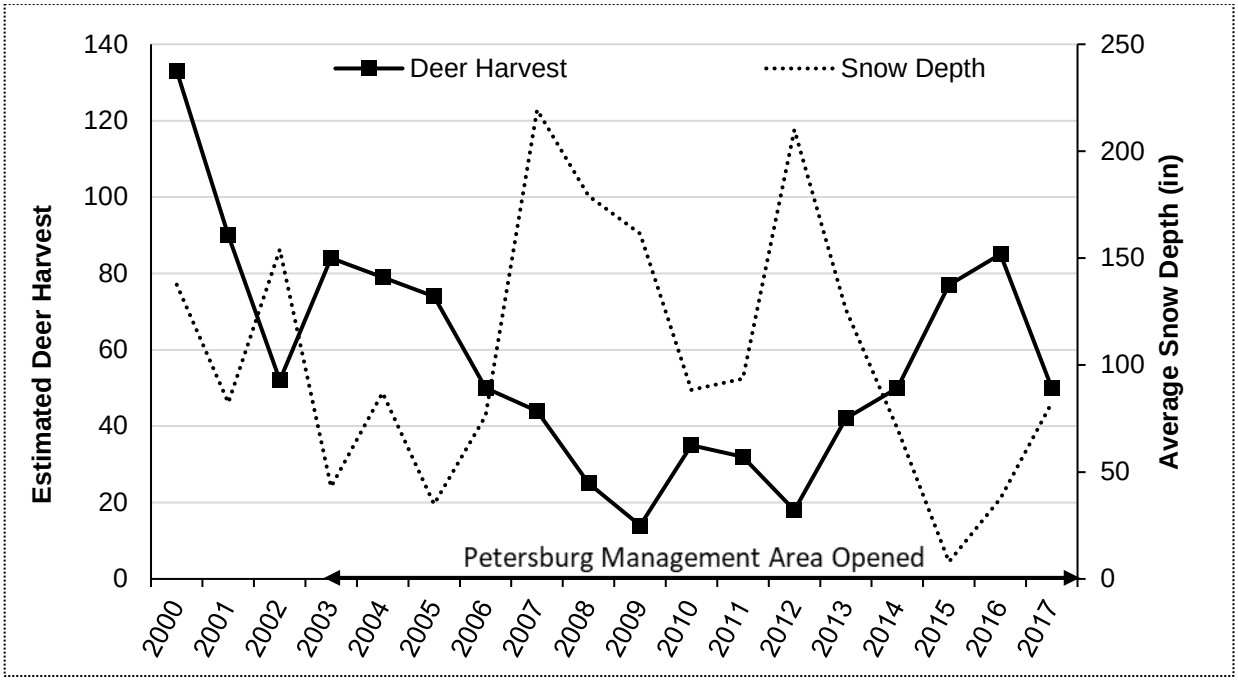

Figure 5. Estimated deer harvest on Mitkof, Woewodski, and Butterworth Islands (MWB Islands) 2000-2017. Harvest numbers from 2000-2010 are estimates based on ADF&G mail surveys. Harvest from 2011-2017 are based on ADF&G mandatory harvest reporting. Average snow depth in inches, Petersburg Ridge, Petersburg, Alaska, 1,650 foot elevation, January-March 2000-2017 (NRCS 2016).

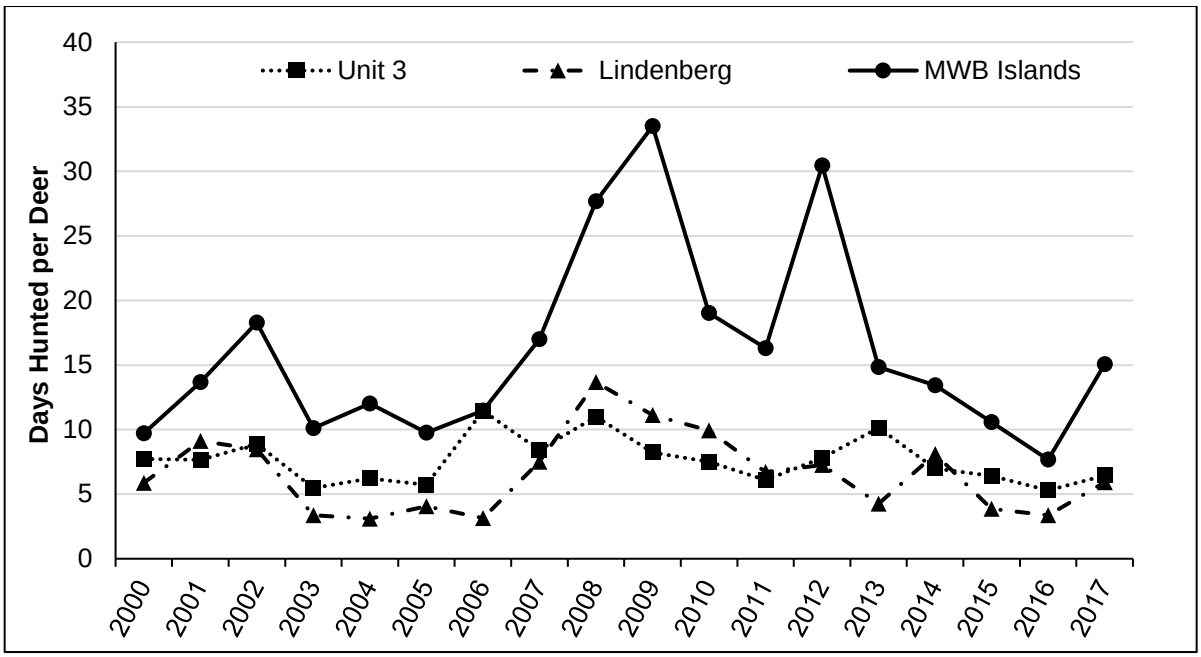

Figure 6. The number of days hunted per deer harvested in Unit 3, Lindenberg Peninsula, and Mitkof, Woewodski, and Butterworth Islands (MWB Islands) from 2000-2017. Data provided by ADF&G deer harvest surveys.

The Lindenberg Peninsula has had variable deer harvest, which can partially be explained by changes in harvest regulations. From 1993 to 2003, the Lindenberg Peninsula had a harvest limit of one antlered deer from Oct. 15 – Oct. 31. In 2003, the peninsula had a harvest limit of two antlered deer from Aug. 1 – Nov. 30, which may explain the spike in deer harvest following that year (**Figure 7, 8**). Beginning in 2013, the Lindenberg Peninsula was separated from the majority of Unit 3, reducing the season once again to Oct. 15 – Oct. 31 and limiting harvest to one buck. The peninsula was subject to the same harsh winters from 2006-2009, which may have led to a decline in deer harvest (**Figure 8**). Deer harvest has rebounded slightly in recent years.

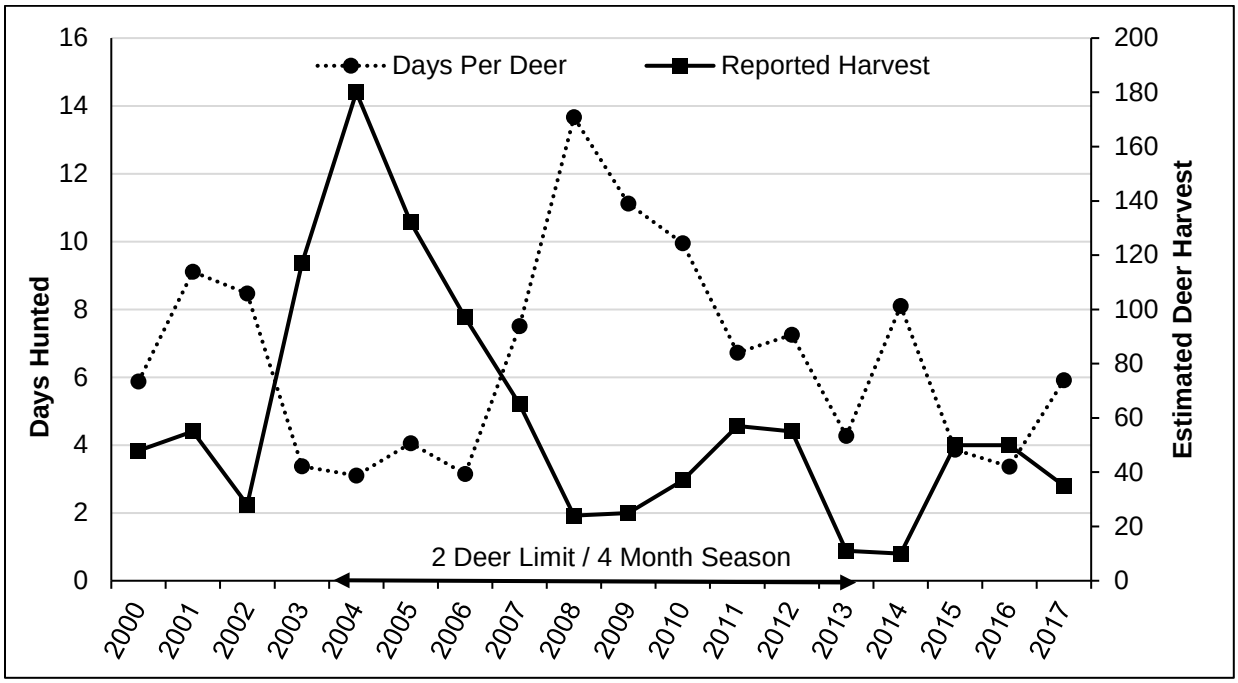

Figure 7. Total days hunted per deer harvested and estimated deer harvest on the Lindenberg Peninsula from 2000-2017. Harvest numbers from 2000-2010 are estimates based on ADF&G mail surveys. Harvest from 2011-2017 are based on ADF&G mandatory harvest reporting.

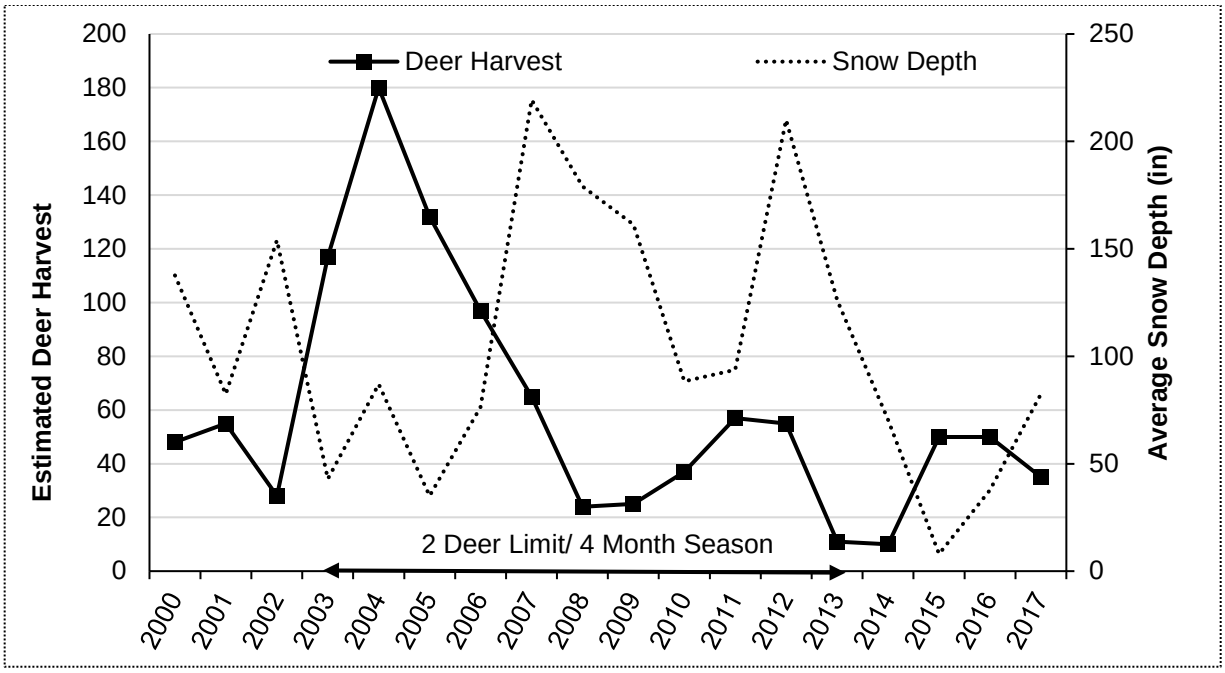

Figure 8. Estimated deer harvest and snow depth on the Lindenberg Peninsula from 2000-2017. Harvest numbers from 2000-2010 are estimates based on ADF&G mail surveys. Harvest from 2011-2017 are based on ADF&G mandatory harvest reporting. Average snow depth in inches, Petersburg Ridge, Petersburg, Alaska, 1,650 foot elevation, January-March 2000-2017 (NRCS 2016).

Federal designated hunting regulations allow a Federally qualified subsistence user to hunt for another Federally qualified subsistence user (recipient) who also qualifies for that particular hunt. There are no age or disability provisions required of the recipient. The designated hunter is required to have a current Federal designated hunting permit in their possession, along with the recipient's harvest ticket(s) or permit for that particular species. The designated hunter can hunt for any number of recipients, but may not possess more than two harvest limits at a time. Federal designated hunter harvest contributed between 6-19% of the total deer harvest in Unit 3 from 2003 to 2017 (**Table 1**). The number of designated hunter permits issued in the unit varies, but has remained between 15 and 38 permits per year since 2003.

Table 1. Summary of estimated deer harvest and total reported Federal designated hunter harvest in Unit 3, 2003-2017 (USFWS 2019, ADF&G 2017b).

Year	Total estimated deer harvest	Total hunters	Deer harvested per hunter	Federal designated harvest	Percent Federal designated hunter harvest	Permits used
2003	833	917	0.9	69	8%	32
2004	890	1,015	0.9	75	8%	33
2005	730	913	0.8	60	8%	29
2006	644	1,067	0.6	47	7%	26
2007	516	750	0.7	31	6%	15
2008	371	617	0.6	36	10%	15
2009	585	617	0.9	36	6%	15
2010	665	720	0.9	95	14%	41
2011	525	704	0.7	101	19%	38
2012	536	822	0.7	68	13%	35
2013	473	807	0.6	45	10%	27
2014	514	781	0.7	76	15%	28
2015	723	889	0.8	101	14%	55
2016	787	1,017	0.8	144	18%	56
2017	625	916	0.7	97	16%	63

Effects of the Proposal

If this proposal is adopted, it would lengthen the deer season from 16 days to 38 days, which would provide greater opportunity for Federally qualified subsistence users. The longer season would allow Federally qualified subsistence users other opportunities to hunt in the event of factors such as inclement weather conditions. The extended season would correspond with cooler weather allowing harvesters to continue harvesting longer before meat spoils, as stated by the proponent.

Although buck-only harvest may alter buck/doe ratios and age structure of the male segment of population, it does not reduce the reproductive potential of the population because the same number of does are still bred by remaining bucks. Hunters sometimes blame declines in the number of fawns per doe on a scarcity of bucks or a lack of mature bucks available for breeding. However, research has failed to support a biologically meaningful relationship; the number of bucks per 100 does is unrelated to fawn recruitment the following year (Zwank 1976, Erickson et al. 2003).

The proposal would align Federal and State deer hunting regulations for this portion of Unit 3, reducing confusion among user groups and making enforcement easier. Changing the definition of a legal deer from "antlered" to "buck" could slightly increase harvest of yearling male deer (button bucks) in the proposed areas and mature male deer in the remainder of the unit that may have shed

their antlers, as these animals do not meet the definition of antlered. Changes allowing harvest of antlerless bucks may lead to an increase in illegal harvest of does mistaken as antlerless bucks.

No large increase in harvest is expected as the harvest limit will remain the same and harvesters already have the ability to hunt during this timeframe under State regulations. However, harvest may increase slightly due to the increased amount of time that designated hunters will have to harvest for other Federally qualified subsistence users. In the past 15 years, Federal designated hunter harvest has only accounted for 6-19% of the total deer harvest in Unit 3. Increased Federal designated hunter harvest in the proposed area will not likely have a large effect on the total deer harvest.

OSM CONCLUSION

Support Proposal WP20-12.

Justification

The current Federal harvest regulations for Mitkof, Woewodski, and Butterworth Islands were set in 1993 after an 18 year closure due to declines in deer populations. The population declines were attributed to a series of harsh winters (late 1960's and early 1970's) and liberal harvest regulations. Federal subsistence deer hunting regulations within the Lindenberg Peninsula were most recently restricted in 2013 in response to a decline in deer population (harvest) likely attributed to a series of harsh winters. However, the deer population in Unit 3 appears to be recovering in recent years and currently presents no conservation concerns.

The 22 day addition to the season would increase opportunity for Federally qualified subsistence users. Factors such as weather conditions can often limit access to the many remote islands in Unit 3. Extending the season would allow Federally qualified subsistence users more time to harvest a deer in these areas. Given that harvest is limited to one buck, it is unlikely that the overall harvest will increase dramatically as deer populations in the unit are more affected by habitat and winter weather conditions than by harvest.

Aligning Federal regulations and gender terminology (antlered deer vs buck) in Unit 3 with those of the State will reduce confusion and simplify enforcement. Currently, Federal deer regulations in Unit 3 are more restrictive to Federal subsistence users than State regulations.

LITERATURE CITED

ADF&G. 2013. Operational plan for intensive management of Sitka black-tailed deer in a portion of Game Management Unit 3. Division of Wildlife Conservation. Unit 3 p.1-29.

ADF&G. 2017a. Alaska hunting information. http://www.adfg.alaska.gov/index.cfm?adfg=deerhunting.main Retrieved: June 11th, 2019.

ADF&G. 2017b. Alaska deer harvest statistics. http://www.adfg.alaska.gov/index.cfm?adfg=deerhunting.deerharvest Retrieved: June 11th, 2019.

Alaback, P.B. 1982. Dynamics of understory biomass in Sitka spruce-western hemlock forests of southeast Alaska. Ecology 63: 1932-1948.

Brinkman, T.J., D.K. Person, W. Smith, F.S. Chapin, III, K. McCoy, M. Leonawicz, K.J. Hundertmark. 2013. Using DNA to test the utility of pellet-group counts as an index of deer counts. Wildlife Society Bulletin; DOI:10.1002/wsb.270.

Division of Wildlife Conservation. 2012. Feasibility assessment for increasing sustainable harvest of Sitka blacktailed deer in a portion of game management unit 3. ADF&G.

Erickson, G. L., J. R. Heffelfinger, and J. H. Ellenberger. 2003. Potential effects of hunting and hunt structure on mule deer abundance and demographics. Pages 119–138 in J. C. deVos, Jr., M .R. Conover, and N. E. Headrick, editors. Mule deer conservation: issues and management strategies. Jack H. Berryman Institute Press, Utah State University, Logan, USA.

Gilbert, S. L., K. J. Hundertmark, D. K. Person, M. S. Lindberg, and M. S. Boyce. 2017. Behavioral plasticity in a variable environment: snow depth and habitat interactions drive deer movement in winter. Journal of Mammalogy, 98(1): 246-259.

Hanley, T.A. 1984. Relationships between Sitka black-tailed deer and their habitat. USDA Forest Service Pacific Northwest Forest and Range Experiment Station, Portland, OR. Gen. Tech. Rep. PNW-168. 21 pp.

Hanley, T.A. and C.L Rose. 1987. Influence of overstory on snow depth and density in hemlock-spruce stands: Implications for management of deer habitat in Southeast Alaska. USDA Forest Service Research Note PNW-RN-459. 11 pp.

Hanley, T.A., C.T. Robbins, and D.E. Spalinger. 1989. Forest habitats and the nutritional ecology of Sitka black-tailed deer: a research synthesis with implications for forest management. USDA Forest Service. Pacific Northwest Forest and Range Experiment Station, Portland, OR. Gen. Tech. Rep. PNW-GTR-230.

Harper, P., and L. A. McCarthy, editors. 2015. Deer management report of survey-inventory activities 1 July 2012–30 June 2014. ADF&G, Species Management Report ADF&G/DWC/SMR-2015-3, Juneau, AK.

Kirchhoff, M.D., and J.W. Schoen. 1987. Forest cover and snow: implications for deer habitat in Southeast Alaska. Journal of Wildlife Management 51(1):28-33.

Lowell, R.E. 2011. Unit 3 deer management report. Pages 45–57 *in* P. Harper, editor. Deer management report of survey and inventory activities 1 July 2008–30 June 2010. ADF&G. Juneau, AK.

McCoy, K. 2017. Sitka black-tailed deer pellet-group surveys in southeast Alaska, 2016 report. ADF&G, Juneau, AK. 80 pages.

McCoy, K. 2019. 2018 traditional deer pellet survey preliminary results. Unpublished Memorandum. Alaska Department of Fish and Game, Juneau, AK. 1 page.

Natural Resources Conservation Service (NRCS). 2016. Monthly snow data [online database]. National Weather and Climate Center, Natural Resources Conservation Service, U.S. Department of Agriculture. https://wcc.sc.egov.usda.gov/nwcc/rgrpt?report=snowmonth_hist&state=AK&operation=View Retrieved June 12th, 2019.

USFWS. 2019. Federal Subsistence Permit System Database, US Fish & Wildlife Service, Office of Subsistence Management. Anchorage, AK.

Yeo, J.J., and J.M. Peek. 1992. Habitat selection by female Sitka black-tailed deer in logged forests of southeast Alaska. Journal of Wildlife Management 56(2): 253-261.

Zwank, P.J. 1976. Mule deer productivity – past and present. Pages 79-86 *in* G.W. Workman and J.B. Low (eds). Mule deer decline in the west: a symposium. Utah State University, Agr. Exp. Sta., Logan. 134 pp.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southeast Alaska Subsistence Regional Advisory Council

Support WP20-12. The Council supports this proposal because there is no conservation concern even though it is a smaller population of deer. The proposal is supported biologically; it will benefit subsistence users, and will not have any effect on other users. In addition, it will also align Federal regulations with less restrictive State regulations.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-12: This proposal, submitted by the Southeast Alaska Subsistence Regional Advisory Council (Council), would change the Unit 3 deer regulations for federally qualified hunters on Mitkof, Woewodki, and Butterworth islands and on the Lindenberg Peninsula of Kupreanof Island by expanding the open season from 2 weeks (October 15-October 31) to 5 weeks (October 1-November 7). This proposal would also change the federal bag limit language from one "antlered deer" to one "buck" for the above-described portion of Unit 3.

Introduction: This proposal seeks to align federal subsistence deer hunting regulations for a portion of Game Management Unit 3 with new state regulations. At their January 2019 meeting the Alaska Board of Game adopted new regulations expanding the open season for deer on Mitkof, Woewodski, and Butterworth islands and the Lindenberg Peninsula on Kupreanof Island from 15 days to 5 weeks (October 1 – November 7). The new season dates include a portion of the rut, during which deer tend to be more vulnerable to hunting, although the bag limit remains one buck. Indices of deer abundance and observations by local hunters suggest the deer population has grown and is capable of supporting additional harvest opportunity. In 2018 the Federal Subsistence Board expanded the customary and traditional use finding for deer in this area to include all federally qualified users in Units 1-5. Historically, over 90% of the deer harvested in this area are taken by federally qualified hunters (Figure 1).

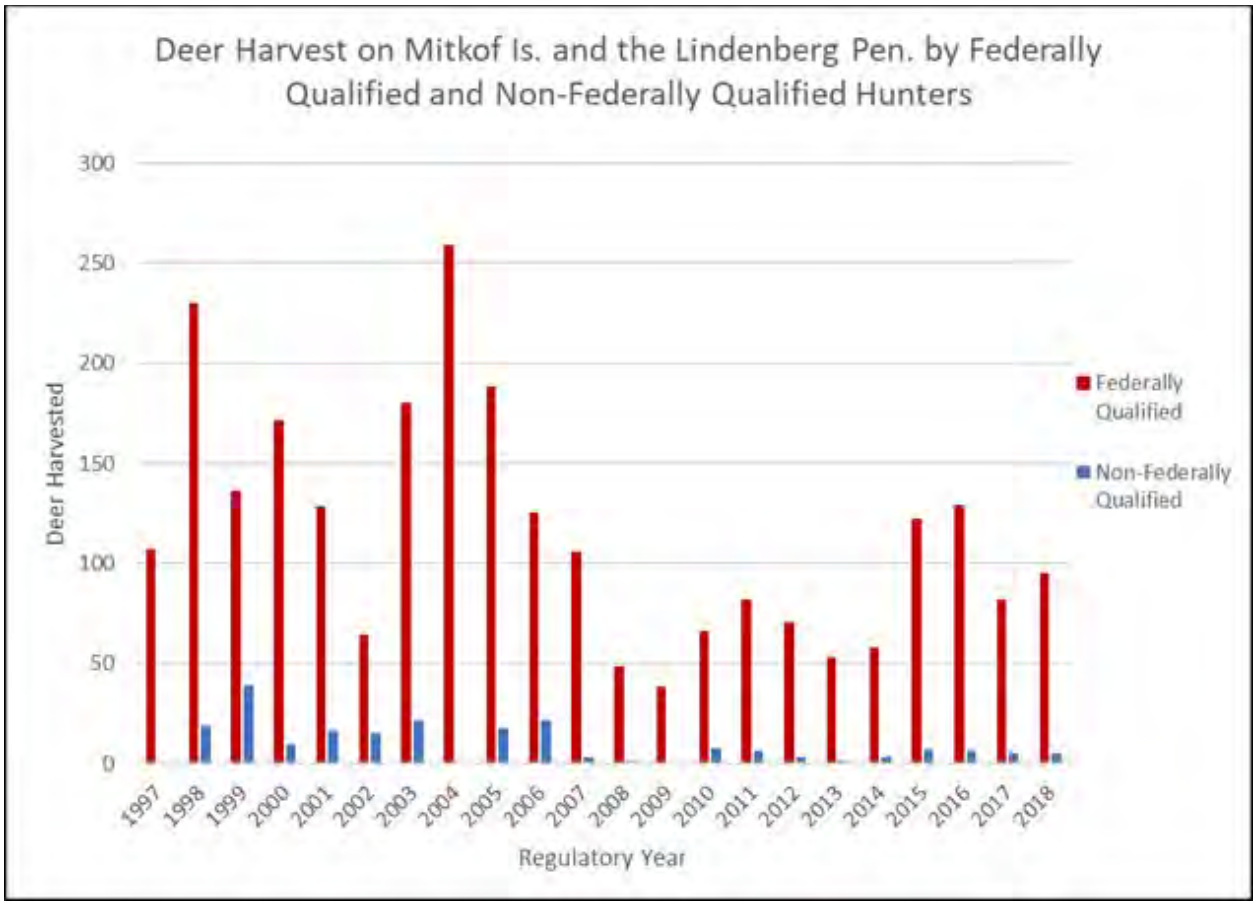

Figure 1. Deer harvest by user group on Mitkof, Woewodki, and Butterworth islands and on the Lindenberg Peninsula of Kupreanof Island, 1997 – 2018.

Impact on Subsistence Users: This proposal will expand hunting opportunity for federally qualified users hunting under federal regulations in Unit 3. Because federally qualified hunters could already hunt under the state regulations, the primary benefit is to reduce regulatory complexity by aligning state and federal regulations.

Impact on Other Users: If adopted this proposal will have no effect on other users.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made a positive customary and traditional use finding for deer in Unit 3.

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for deer in Unit 3 is 150-175 animals. The season and bag limit for Unit 3 is:

		Open Season	
Unit/Area	Bag Limit	Resident[a]	Nonresident
3-Mitkof, Woewodski, and Butterworth islands	*One buck*	*Oct 1-Nov 7*	*Oct 15-Oct 31*
3- Portion of Kupreanof Island on the Lindenberg Peninsula east of the Portage Bay-Duncan Canal Portage	*One buck*	*Oct 1-Nov 7*	*no open season*
3 Remainder	*Two bucks*	*Aug 1-Nov 30*	*Aug 1-Nov 30*

[a] Subsistence and General Hunts.

Conservation Issues: None.

Enforcement Issues: The alignment of both state and federal regulations would decrease confusion amongst users and enforcement officers.

Recommendation: ADF&G **SUPPORTS** this proposal because it will benefit users by aligning federal regulations with current state regulations.

APPENDIX 1

Appendix 1: Regulatory history for Unit 3 deer since 1925.

Year	Season Type	Season	Limit	Conditions and Limitations
1925	Open	Sep. 16–Dec. 15	3	Bucks, 3 inch antlers or longer
1926–1929	Open	Sep. 1–Nov. 30	3	Bucks, 3 inch antlers or longer
1930–1941	Open	Aug. 20–Nov. 15	3	Bucks, 3 inch antlers or longer
1942–1943	Resident	Sep. 16–Nov. 15	2	Bucks, 3 inch antlers or longer
1942–1943	Nonresident	Sep. 16–Nov. 15	1	Bucks, 3 inch antlers or longer
1944–1948	Resident	Sep. 1–Nov. 15	2	Bucks, 3 inch antlers or longer
1944–1948	Nonresident	Sep. 1–Nov. 15	1	Bucks, 3 inch antlers or longer
1949	Resident	Sep. 1–Nov. 7	2	Bucks, 3 inch antlers or longer
1949	Nonresident	Sep. 1–Nov. 7	1	Bucks, 3 inch antlers or longer
1950–1951	Resident	Sep. 1–Nov. 15	2	Bucks, 3 inch antlers or longer
1950–1951	Nonresident	Sep. 1–Nov. 15	1	Bucks, 3 inch antlers or longer
1952	Open	Aug. 20–Nov. 15	2	Bucks, 3 inch antlers or longer
1953–1954	Open	Aug. 20–Nov. 22	2	Bucks, 3 inch antlers or longer
1955	Open	Aug. 20–Nov. 22	3	3 bucks or 2 bucks and 1 antlerless deer, bucks 3 inch antlers or longer, antlerless deer may be taken Nov. 15–Nov. 22
1956	Open	Aug. 20–Nov. 26	3	3 bucks or 2 bucks and 1 antlerless deer, bucks 3 inch antlers or longer, antlerless deer may be taken Nov. 15–Nov. 26
1957–1959	Open	Aug. 20–Nov. 30	4	4 deer, does may be taken Oct. 15–Nov. 30
1960	Open	Aug. 20–Dec. 15	4	4 deer, does may be taken Oct. 1–Dec. 15
1961	Open	Aug. 1–Nov. 30	4	4 deer, antlerless deer may be taken Sep. 15–Nov. 30
1962	Open	Aug. 1–Dec. 15	4	4 deer, antlerless deer may be taken Sep. 15–Dec. 15
1963–1966	Open	Aug. 1–Dec. 31	4	4 deer, antlerless deer may be taken Sep. 15–Dec. 31
1967	Open	Aug. 1–Dec. 31	4	4 deer, antlerless deer may be taken Oct. 1–Dec. 31
1968	Open	Aug. 1–Dec. 15	4	4 deer, antlerless deer may be taken Sep. 15–Dec. 15
1969–1970	Open	Aug. 1–Dec. 31	4	4 deer, antlerless deer may be taken Oct. 1–Dec. 31

Year	Season Type	Season	Limit	Conditions and Limitations
1969–1970	Open	Aug. 1–Nov. 30	2	Mitkof Island; 2 antlered deer
1969–1970	Open	Aug. 1–Dec. 15	4	Remainder of Unit 3; antlerless deer may be taken Nov. 1–Nov. 31
1971	Open	Aug. 1–Nov. 30	2	Mitkof, Wrangell, Etolin & Woronkofski Islands; 2 antlered deer
1971	Open	Aug. 1–Nov. 30	3	Remainder of Unit 3; antlerless deer may be taken Oct. 1–Oct. 31
1972	Open	Aug. 1–Nov. 30	2	2 antlered deer
1973–1974	Open	Sep. 1–Nov. 30	1	1 antlered deer
1975–1979	No open season			
1980	Open	Aug. 1–Dec. 31	1	South of Sumner Strait and Eastern Passage, including Level, Vank, Sokolof, Rynda, and Kadin islands; 1 buck
1980	Open	No open season		Remainder of Unit 3
1981–1984	Open	Aug. 1–Nov. 30	1	South of Sumner Strait and Eastern Passage, including Level, Vank, Sokolof, Rynda, and Kadin islands; 1 antlered deer
1981–1984	Open	No open season		Remainder of Unit 3
1985–1987	State Subsistence/ General	Aug. 1–Nov. 30	1	South of Sumner Strait and Eastern Passage, including Level, Vank, Sokolof, Rynda, Conclusion, and Kadin islands; 1 antlered deer
1985–1987	State Subsistence/ General	No open season		Remainder of Unit 3
1988–1990	State Subsistence/ General	Aug. 1–Nov. 30	2	South of Sumner Strait and Decision Point, including Level, Vank Island group but not Level, Conclusion, or Channel islands; 2 antlered deer
1988–1990	State Subsistence/ General	No open season		Remainder of Unit 3
1991–1992	State Subsistence/ General, Federal Subsistence	Aug. 1–Nov. 30	2	South of Sumner Strait and Decision Point, including Level, Vank Is. group but not Level, Conclusion, or Channel islands; 2 antlered deer.
1991–1992	State Subsistence/ General, Federal Subsistence	Oct. 15–Oct. 31	1	Mitkof Island south of the Petersburg city limits, Woedwodski and Butterworth islands; 1 antlered deer by registration permit
1991–1992	State Subsistence/ General, Federal Subsistence	No open season		Remainder of Unit 3
1993–1994	State Subsistence/ General, Federal Subsistence	Oct. 15–Oct. 31	1	Mitkof Island south of the Petersburg city limits, Kupreanof Island on Lindenberg Peninsula east of Portage Bay/Duncan Canal Portage, Woedwodski and Butterworth islands; 1 antlered deer by registration permit
1993–1994	State Subsistence/ General, Federal Subsistence	No open season		Mitkof Island within Petersburg city limits, Kupreanof Island within Kupreanof city limits
1993–1994	State Subsistence/ General, Federal Subsistence	Aug. 1–Nov. 30	2	Remainder of Unit 3, 2 antlered deer

Year	Season Type	Season	Limit	Conditions and Limitations
1995–2002	State Subsistence/ General	Oct. 15–Oct. 31	1	Mitkof Island south of Petersburg city limits, Kupreanof Island on Lindenberg Peninsula east of Portage Bay-Duncan Canal portage outside the Kupreanof city limits, and Woewodski and Butterworth Islands; 1 buck by harvest permit only
1995–2002	State Subsistence/ General	No open season		Mitkof Island within the Petersburg city limits and that portion of Kupreanof Island within Kupreanof city limits
1995–2013	State Subsistence/ General	Aug. 1–Nov. 30	2	Remainder of Unit 3; 2 bucks by harvest permit only
1995–1997	Federal Subsist-ence	Oct. 15–Oct. 31	1	Mitkof, Woewodski, Butterworth Islands, and that portion of Kupreanof Island which includes the Lindenberg Peninsula east of the Portage Bay/Duncan Canal Portage; 1 antlered deer by State registration permit only; Petersburg and Kupreanof are closed to hunting
1995–1997	Federal Subsist-ence	Aug. 1–Nov. 30	2	Remainder of Unit 3; 2 antlered deer
1997–2003	Federal Subsist-ence	Oct. 15–Oct. 31	1	Mitkof, Woewodski, Butterworth Islands, and that portion of Kupreanof Island which includes the Lindenberg Peninsula east of the Portage Bay/Duncan Canal Portage; 1 antlered deer by State registration permit only; Petersburg and Kupreanof are closed to hunting
1997–2003	Federal Subsist-ence	Aug. 1–Nov. 30	2	Remainder of Unit 3; 2 antlered deer
2001–2002	State Subsistence/ General	Oct. 15–Oct. 31	1	Mitkof Island, Kupreanof Island on the Linden-berg Peninsula east of Portage Bay-Duncan ca-nal portage, and Woewodski and Butterworth Is-lands; 1 buck by harvest permit only
2003–2006	State Subsistence/ General	Oct. 15–Nov. 15	1	Mitkof Island, the Petersburg Management Area; 1 buck by bow and arrow only with harvest per-mit
2003–2013	State Subsistence/ General	Oct. 15–Oct. 31	1	Remainder of Mitkof Island, Woewodski, and Butterworth Islands; 1 buck by harvest permit only
2003–2013	Federal Subsist-ence	Oct. 15–Oct. 31	1	Mitkof, Woewodski, and Butterworth Islands; 1 antlered deer
2003–2008	Federal Subsist-ence	Aug. 1–Nov. 30	2	Remainder of Unit 3; 2 antlered deer
2007–2013	State Subsistence/ General	Oct. 15–Dec. 15	2	Mitkof Island, the Petersburg Management Area; 2 bucks by bow and arrow only with harvest per-mit
2008–2013	Federal Subsist-ence	Aug. 1–Nov. 30	2	Remainder of Unit 3; 2 antlered deer; Dec. 1–Dec 31 season to be announced.
2013	State Subsistence/ General, residents	Oct. 15–Oct. 31	1	That portion of Kupreanof Island on the **Linden-berg Peninsula** east of the Portage Bay-Duncan Canal Portage; 1 buck by harvest ticket
2013	State General, nonresidents	No open season		That portion of Kupreanof Island on the **Linden-berg Peninsula** east of the Portage Bay-Duncan Canal Portage

Year	Season Type	Season	Limit	Conditions and Limitations
2014	Federal Subsist-ence	Oct. 15-Oct 31	1	By Special Action - Kupreanof Island, that portion east of Portage Bay-Duncan Canal Portage – 1 antlered deer
2014	Federal Subsist-ence	Oct. 15-Oct 31	1	Kupreanof Island, that portion east of Portage Bay-Duncan Canal Portage – 1 antlered deer
2019	State General, resident	Oct. 15-Nov. 7	2	Mitkof Island, the Petersburg Management Area; 2 bucks by bow and arrow only with harvest per-mit
2019	State General, residents	Oct. 1-Nov. 7	1	Mitkof, Woewodski, and Butterworth islands, and that portion of Kupreanof Island on the Linden-berg Peninsula east of the Portage Bay - Duncan Canal Portage – 1 buck

WP20–13 Executive Summary	
General Description	Proposal WP20-13 requests a customary and traditional use determination for elk in Unit 3 for rural residents of Units 1 through 5. *Submitted by: Southeast Alaska Regional Advisory Council.*
Proposed Regulation	**Customary and Traditional Use Determination—Elk** *Unit 3* ~~All rural residents~~ **Rural residents of Units 1–5**
OSM Conclusion	**Support**
Southeast Alaska Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**2 Oppose**

STAFF ANALYSIS
WP20-13

ISSUES

Wildlife Proposal WP20-13, submitted by the Southeast Alaska Subsistence Regional Advisory Council (Council), requests the Federal Subsistence Board (Board) to recognize customary and traditional uses of elk in Unit 3 for rural residents of Southeast Alaska, Units 1 through 5.

DISCUSSION

The proponent states that residents of the region have a long history of obtaining large wildlife resources, both historically and contemporarily, employing a multitude of transportation methods extensively for this purpose, and that rural Southeast Alaska residents depend upon large wildlife species for sustaining the mixed subsistence-cash economy of the region.

Considering elk specifically, the Council notes that harvest, use, and sharing of elk by rural Southeast Alaska residents has been frequently documented, despite the species' relatively recent introduction to the region in 1986. The Council indicates that elk now provide substantial cultural, economic, social, and nutritional benefit to the region. The Council additionally notes that elk have been available for harvest for more than thirty years and that patterns of use and reliance have been established. Council members explained that large land mammals like elk provide a substantial amount of meat that helps to offset the expense of commercial goods, and that elk provide an efficiency of economy when they can be harvested near communities. The Council stated that elk are reasonably accessible to area residents and that elk commonly venture far from the island to which they were introduced. Furthermore, Council members noted that residents teach their children about elk and pass on hunting knowledge in the same way that Council members do for other species.

Existing Federal Regulation

Customary and Traditional Use Determination—Elk

Unit 3	*All rural residents*

Proposed Federal Regulation

Customary and Traditional Use Determination—Elk

Unit 3	~~*All rural residents*~~ ***Rural residents of Units 1–5***

Relevant Federal Regulation

36 CFR 242.5 Eligibility for subsistence use.

. . .

(c) Where customary and traditional use determinations for a fish stock or wildlife population within a specific area have not yet been made by the Board (e.g., "no determination"), all Alaskans who are residents of rural areas or communities may harvest for subsistence from that stock or population under the regulations in this part.

Extent of Federal Public Lands

Unit 3 is comprised of 90% Federal public lands, all of which are encompassed by the Tongass National Forest and managed by the U.S. Forest Service (see **Unit 3 Map**).

Regulatory History

The Alaska Legislature passed a law in 1985 requiring the introduction of 50 elk to Etolin Island. Introductions began in 1987. By 1996, the Alaska Department of Fish and Game estimated that the elk population had reached at least 250 animals and could sustain a hunt of 20 bulls (Lowell 2004). The Alaska Board of Game established the first hunt for elk by drawing permit in 1997, and authorized up to 30 permits for hunters to harvest 1 bull between October 1 and October 31 (Lowell 2002). That same year, the State Legislature passed House Bill 59, which required the Alaska Department of Fish and Game to make available an additional four Unit 3 elk permits per year to be donated for competitive auctions or raffles to benefit nonprofit corporations that promote fish and game management of hunted species based in Alaska (Lowell 2002). The Alaska Board of Game added a September 15 through September 30 archery hunt in 1999, and expanded that hunt to September 1 through 30 in 2001 (Lowell 2002).

In 2006, Proposal WP06-11a was submitted to establish a customary and traditional use determination for elk in Units 1, 2, and 3 for the residents of Units 1B, 2, 3, and Meyer's Chuck. The proponent concurrently submitted WP06-11b to establish a Federal season for the harvest of elk in Units 1, 2, and 3. The Board voted to "take no action" on both proposals which appeared on the consensus agenda at its May 2006 Board meeting. The Council recommended that the Board take no action, citing the short duration since introduction of elk in Unit 3, a lack of data concerning elks' role in local subsistence patterns, and limited public input.

During its January 2019 meeting, the Alaska Board of Game eliminated the general season elk hunt outside of drawing permit hunt areas in Unit 3. That left one archery draw hunt (DE318), two rifle draw hunts (DE321, DE323), and a rifle registration hunt (RE325) in State regulations.

In 2010, the Secretary of the Interior asked the Board to review, with Regional Advisory Council input, the customary and traditional use determination process and present recommendations for regulatory

changes (Salazar 2010). During the Southeast Alaska Council's review in 2016, it requested, among other things, that the Board adopt customary and traditional use determinations broadly (Bangs 2016). The Council requested the Board to in the future recognize customary and traditional uses of all fish and wildlife in Southeast Alaska that have been taken for food or other purposes, including handicrafts, ceremonies, and customary trade. The Council said its recommendations to the Board in the future would tend to include residents of all rural Southeast communities and areas, and the three criteria in Section 804 of ANILCA was the regulatory process the Board should use to allocate resources, when necessary, and not customary and traditional use determinations. The Council intended to submit regulatory proposals to the Board requesting to broaden the complex web of customary and traditional use determinations that currently existed in Southeast Alaska (Bangs 2016). The Board responded that the Southeast Alaska Council's recommendation regarding customary and traditional use determinations aligned well with the current process followed statewide in the Federal Subsistence Management Program (Towarak 2016: 5). Since then, the Council has requested, and the Board has adopted, customary and traditional use determinations for all fish (Proposal FP19-17) and for deer (Proposal WP18-02) that include all rural residents of Southeast Alaska. This has greatly simplified these determinations that were originally adopted from State regulations at the formation of the Federal Subsistence Management Program in 1992.

Biological Background

Elk are not endemic to Alaska and were first successfully introduced onto Afognak Island near Kodiak in 1929. There were several unsuccessful attempts to introduce elk to Gravina, Kruzof, and Revillagigedo islands in Southeast Alaska between 1925 and 1962, but these attempts failed (O'Gara and Dundas 2002). After the Alaska State Legislature passed a bill in 1985 requiring introduction of elk, 33 Roosevelt elk captured in the Jewell Meadows Wildlife Management Area, and 17 Rocky Mountain elk captured in the Elkhorn Wildlife Management Area, were translocated from Oregon to separate locations on Etolin Island in 1987. About two-thirds of translocated elk died within 18 months of their release (Lowell 2002). This introduction was strongly supported and partially funded by the Ketchikan Sports and Wildlife Club.

Community Characteristics

The rural area of the Southeast Region is comprised of about 33 small to medium sized communities, ranging in population from 20 or less (Point Baker, Elfin Cove, and Game Creek) to over 8,000 (Sitka) (**Table 1**). Many were established by Tlingit and are situated at historical village sites or were established by Haida (Hydaburg and Kasaan) or Tsimshian (Metlakatla). Population growth in the Southeast Region during the historical period (beginning about 1750) was affected by several waves of in-migration, first by Russian fur traders who established Sitka as their headquarters in the late 1700s. After the sale of Alaska to the United States in 1867, new industries (such as commercial fishing, canneries, mining, and fox farming) and commercial trade, were pursued with the associated influx of outsiders (Worl 1990, George and Bosworth 1988, Smythe 1988).

Table 1. The number of people living in Southeast Region rural communities, from 1960 to 2010 (Sources: ADLWD 2017, ADCCED 2017, and U.S. Bureau of the Census 1995).

Community	1960	1970	1980	1990	2000	2010	2010 House-holds
Angoon	395	400	465	638	572	459	167
Coffman Cove	0	0	193	186	199	176	89
Craig	273	272	527	1,260	1,397	1,201	523
Edna Bay	135	112	6	86	49	42	19
Elfin Cove	0	49	28	57	32	20	15
Game Creek	0	0	0	61	35	18	10
Gustavus	107	64	98	258	429	442	199
Haines Borough	1,000	1,504	1,680	2,117	2,392	2,508	991
Hollis	0	0	0	111	139	112	55
Hoonah	686	748	680	795	860	760	300
Hydaburg	251	214	298	384	382	376	133
Hyder	32	49	77	99	97	87	47
Kake	455	448	555	700	710	557	246
Kasaan	36	30	25	54	39	49	17
Klawock	251	213	318	722	854	755	313
Klukwan	112	103	135	129	139	95	44
Kupreanof	26	36	47	23	23	27	15
Metlakatla	1,135	1,245	1,333	1,464	1,375	1,405	469
Naukati Bay	0	0	0	93	135	113	60
Pelican	135	133	180	222	163	88	70
Petersburg Borough	1,502	2,042	2,821	3,207	3,224	2,948	1,252
Point Baker	0	80	90	39	35	15	8
Port Alexander	18	36	86	119	81	52	22
Port Protection	0	0	40	62	63	48	26
Saxman	153	135	273	369	431	411	120
Sitka Borough	3,237	6,109	7,803	8,588	8,835	8,881	3,545
Skagway	659	675	814	692	862	920	410
Tenakee Springs	109	86	138	94	104	131	72
Thorne Bay	0	443	377	569	557	471	214
Whale Pass	0	0	90	75	58	31	20
Whitestone	0	0	NA	164	116	114	30
Wrangell Borough	2,165	2,358	2,658	2,479	2,448	2,369	1,053
Yakutat Borough	230	190	449	534	808	662	270
Total	**13,102**	**17,774**	**22,284**	**26,450**	**27,643**	**26,343**	**10,824**

Beginning in the 1970s, logging camps sprang up and some have persisted as new communities, such as Game Creek and Thorne Bay. Many rural communities in the Southeast Region have at their core a *kwaan* or tribe of Alaska Natives. The territories mapped in 1947 by Goldschmidt and Haas covered all of the Southeast Region (Goldschmidt and Haas 1998). Since 1960 the rural population of the Southeast Region has doubled from 13,102 people in 1960 to 26,343 people in 2010 (**Table 1**). Some

of this growth was from new communities established near logging activities and growth in the recreation and tourism industries (Cerveny 2005).

Eight Factors for Determining Customary and Traditional Use

A community or area's customary and traditional use is generally exemplified through these eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) a pattern of use recurring in specific seasons for many years; (3) a pattern of use consisting of methods and means of harvest, which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area; (5) 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; (6) a pattern of use, which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use, in which the harvest is shared or distributed within a definable community of persons; and (8) 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 the community or area.

The Board makes customary and traditional use determinations based on a holistic application of these 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.

State harvest data for elk in Unit 3 is available from 1997 to 2017. Harvest related data for this 20-year period is found in **Table 2**. The table includes harvest reporting data for rural Alaska communities and suggests a pattern of use for elk in Unit 3. Of the total number of hunters (n=359) over this period, 203 (57%) were Federally qualified subsistence users. Among the Federally qualified subsistence users, 182 (90%) were rural residents of Units 1, 2, 3, 4, or 5.

Only 21 elk hunting events in Unit 3 by rural residents of Alaska from other regions of the state have occurred over this 20-year period. The maximum number of hunting events by rural residents of a community outside of Southeast Alaska was six over this 20–year period (by residents of Tok), but most of these communities were represented by a single elk hunting event in Unit 3. There is no available information indicating a customary and traditional use pattern for elk in Unit 3 by rural residents outside of Southeast Alaska.

Table 2. Reported hunting activity and elk harvest in Unit 3 by unit of residency, 1997-2017 (ADF&G 2019a). Highlighted cells represent rural communities.

Unit of Residency	Community of Residency	Unit 3 Number of Hunters 1997-2017	Unit 3 Number of Elk Harvested 1997-2017
1	AUKE BAY	4	0
1	DOUGLAS	5	1
1	HAINES	8	1
1	JUNEAU	21	6
1	KETCHIKAN	21	33*
1	METLAKATLA	5	0
1	MEYERS CHUCK	12	1
1	WARD COVE	17	5
2	COFFMAN COVE	18	3
2	CRAIG	19	24
2	EDNA BAY	7	3
2	HOLLIS	4	2
2	HYDABURG	6	7
2	KLAWOCK	14	7
2	NAUKATI BAY	2	1
2	POINT BAKER	2	0
2	THORNE BAY	19	11
3	KAKE	2	0
3	PETERSBURG	21	25
3	WRANGELL	21	28
4	HOONAH	2	0
4	PELICAN	2	0
4	PORT ALEXANDER	2	0
4	SITKA	15	5
4	TENAKEE SPRINGS	1	0
6	CORDOVA	3	1
6	VALDEZ	3	0
7	SEWARD	5	0
8	KODIAK	1	0
9	KING COVE	1	0
9	KING SALMON	1	1
12	TOK	6	2
13	GAKONA	1	0
13	GLENNALLEN	1	0
14	ANCHORAGE	18	2
14	BIG LAKE	1	0
14	BUTTE	1	1

Continued on next page

Table 2. Reported hunting activity and elk harvest in Unit 3 by unit of residency, 1997-2017 (ADF&G 2019a). Highlighted cells represent rural communities. (*Continued from previous page*)

Unit of Residency	Hunter Residency	Unit 3 Number of Hunters 1997-2017	Unit 3 Number of Elk Harvested 1997-2017
14	CHUGIAK	2	0
14	EAGLE RIVER	5	0
14	GIRDWOOD	1	0
14	PALMER	7	0
14	PETERS CREEK	1	0
14	WASILLA	11	1
15	HOMER	2	1
15	KASILOF	1	0
15	KENAI	3	0
15	NINILCHIK	1	0
15	SOLDOTNA	1	0
15	STERLING	2	0
17	DILLINGHAM	1	0
20	DELTA JCT	3	0
20	EIELSON AFB	1	0
20	ESTER	1	0
20	FAIRBANKS	15	2
20	FORT WAINWRIGHT	1	0
20	NORTH POLE	5	1
22	NOME	1	0
22	UNALAKLEET	1	1
-	AK RESIDENT, NON-AK CITY	1	0

*Some harvest tickets with a Ketchikan address may represent residents of Saxman (Federally qualified subsistence users) that use a post office box.

The customary and traditional use determinations for other large wildlife species in Unit 3 can provide additional insights on which residents generally exhibit the eight factors for elk, using these other species as proxies. **Table 3** lists the customary and traditional use determinations for moose, deer, and bear in Unit 3 as they relate to those communities that reported elk hunting activity from 1997 to 2017.

Residents of Units 1, 2, 3, and 4 that reported elk hunting activity also have a customary and traditional use determination for three or more other large wildlife species in Unit 3. While residents of Unit 5 have not reported elk hunting activity in Unit 3 between 1997 and 2017, they do have a customary and traditional use determination for deer and black bears in Unit 3 and for moose in Unit 3 remainder. No residents of Units 1, 2, 3, 4, or 5 have a customary and traditional use determination for elk in Unit 8, the only other unit in Alaska where elk occur.

Table 3. Customary and traditional use determinations for moose, deer, and black bears in Unit 3 among communities that reported elk hunting activity from 1997 to 2017 (ADF&G 2019a).

CUSTOMARY AND TRADITIONAL USE DETERMINATIONS					
		Moose			
Management Unit	Rural Community	Unit 3	Unit 3 Remainder	Deer	Black Bear
1	HAINES		Yes	Yes	Yes
1	METLAKATLA		Yes	Yes	Yes
1	MEYERS CHUCK	Yes	Yes	Yes	Yes
2	COFFMAN COVE	Yes	Yes	Yes	Yes
2	CRAIG	Yes	Yes	Yes	Yes
2	EDNA BAY	Yes	Yes	Yes	Yes
2	HOLLIS	Yes	Yes	Yes	Yes
2	HYDABURG	Yes	Yes	Yes	Yes
2	KLAWOCK	Yes	Yes	Yes	Yes
2	NAUKATI BAY	Yes	Yes	Yes	Yes
2	POINT BAKER	Yes	Yes	Yes	Yes
2	THORNE BAY	Yes	Yes	Yes	Yes
3	KAKE	Yes	Yes	Yes	Yes
3	PETERSBURG	Yes	Yes	Yes	Yes
3	WRANGELL	Yes	Yes	Yes	Yes
4	HOONAH		Yes	Yes	Yes
4	PELICAN		Yes	Yes	Yes
4	PORT ALEXANDER		Yes	Yes	Yes
4	SITKA		Yes	Yes	Yes
4	TENAKEE SPRINGS		Yes	Yes	Yes
6	CORDOVA		Yes		Yes
8	KODIAK		Yes		Yes
9	KING COVE		Yes		Yes
9	KING SALMON		Yes		Yes
12	TOK		Yes		Yes
13	GAKONA		Yes		Yes
13	GLENNALLEN		Yes		Yes
15	NINILCHIK		Yes		Yes
17	DILLINGHAM		Yes		Yes
20	DELTA JCT		Yes		Yes
22	NOME		Yes		Yes
22	UNALAKLEET		Yes		Yes

Alaska Department of Fish and Game's Division of Subsistence also conducts household subsistence harvest surveys periodically throughout Alaska. Though this survey data is only available for some communities in some years, it is an additional source for documenting patterns of use in rural Alaska. Use, harvest activity, and sharing of elk in Southeast Alaska, as documented by these surveys over time, is represented in **Table 4**. This data, collected from 1996 to 2016, shows a clear pattern of use and sharing of the elk resource throughout rural Southeast Alaska communities.

Residents of Units 1 through 5 have hunted elk in Unit 3 since hunting began in the late 1990s. Their pattern of use of elk has developed in the decades since elk were introduced and hunting has been incorporated into the seasonal round of subsistence harvesting undertaken by residents in the region. This species is harvested with the methods and means common in Southeast Alaska. Subsistence harvesters reach harvest sites by boat, and hunt on foot or with motorized vehicles from the limited Forest Service road system in hunt areas (OSM 2006, SERAC 2019). Elk in Unit 3 are difficult to hunt, and overall success rate of residents from the proposed customary and traditional use communities has been 61% (ADF&G 2019). Although good hunter effort data are not available, elk hunting in Unit 3 appears to be more demanding and less productive in terms of the likelihood of success than deer

Table 4. The harvest and use of elk by rural communities in the Southeast Region during one-year study periods between 1996 and 2016 (Source: ADF&G 2019b).

Community	Study year	% Households using elk	% Households attempting to harvest elk	% Households Harvesting elk	% Households giving away elk	% Households Receiving elk
Angoon	2012	0.0	0.0	0.0	0.0	0.0
Coffman Cove	1998	12.0	2.0	2.0	0.0	10.0
Craig	1997	1.2	0.0	0.0	0.6	1.2
Edna Bay	1998	0.0	0.0	0.0	0.0	0.0
Haines	2012	1.5	0.0	0.0	0.0	1.5
Hollis	1998	6.5	0.0	0.0	2.2	6.5
Hoonah	2012	0.0	0.8	0.0	0.0	0.0
Hoonah	2016	0.0	0.0	0.0	0.0	0.0
Hydaburg	2012	2.1	0.0	0.0	0.0	2.1
Kake	1996	0.0	0.0	0.0	0.0	0.0
Kasaan	1998	14.3	0.0	0.0	0.0	14.3
Klukwan	1996	3.2	0.0	0.0	0.0	3.2
Naukati Bay	1998	8.0	0.0	0.0	0.0	8.0
Petersburg	2000	4.8	0.8	0.0	0.0	4.8
Saxman	1999	8.2	1.4	1.4	1.4	6.8
Sitka	1996	0.9	0.0	0.0	0.0	0.9
Sitka	2013	2.4	0.0	0.0	0.0	2.4
Thorne Bay	1998	3.4	1.1	1.1	1.1	2.2
Whale Pass	1998	6.7	0.0	0.0	0.0	6.7
Whale Pass	2012	0.0	0.0	0.0	0.0	0.0
Wrangell	2000	8.2	2.0	0.0	0.0	8.2
Yakutat	2000	1.4	0.0	0.0	0.0	1.4

hunting, and may be equivalent to the success rate of hunters in many moose hunts (OSM 2006). A successful elk hunt provides the hunter with a large quantity of prized meat (OSM 2006, SERAC 2019).

Knowledge of elk hunting skills, values, and lore are transmitted from generation to generation in ways common throughout Southeast Alaska (SERAC 2019). These include transmission through clan and family ties and through participation in hunting with more experienced family and friends. Subsistence hunting and fishing are extremely important to residents of rural Southeast Alaska communities included in this proposal. These activities play a vital social, economic, and cultural role in these communities (OSM 2006).

Residents in these rural communities proposed for customary and traditional use determination depend on a wide range of fish and wildlife resources. The species used include a variety of fish, shellfish, migratory birds, bird eggs, small land mammals, furbearers, marine mammals, berries, plants, and seaweed (George and Bosworth 1988). Large land mammals are particularly important resources needed to meet the subsistence requirements of rural residents (SERAC 2019). Elk specifically now provide substantial cultural, economic, social, and nutritional elements of subsistence to the region's residents (SERAC 2019).

Effects of the Proposal

If this proposal is adopted, it would establish a customary and traditional use determination for elk in Unit 3 for rural residents of Units 1–5. This would exclude rural residents from outside of Southeast Alaska from hunting elk under Federal regulations in Unit 3.

OSM CONCLUSION

Support Proposal WP20-13.

Justification

Rural residents of Units 1 through 5 have demonstrated use of elk in Unit 3 and incorporation of this resource into subsistence patterns of the region. Rural residents of these units have also demonstrated use of other large wildlife species within Unit 3 and have a customary and traditional use determination for these species in that unit. This suggests a pattern of use of the area that is likely to extend to elk. Units 1 through 5 are also near and reasonably accessible to Unit 3 for the harvest of elk by rural residents of these units. Furthermore, 90% of rural residents of Alaska reporting hunting activity for elk in Unit 3 between 1997 and 2017 have been rural residents of Units 1 through 5. Rural residents from outside of Southeast Alaska may be reasonably excluded from the customary and traditional use determination for elk in Unit 3 due to the limited evidence of historical hunt activity and their distances from the resource.

LITERATURE CITED

ADCCED. 2017. Community and Regional Affairs, Community Index. https://www.commerce.alaska.gov/dcra/DCRAExternal/community, retrieved June 19, 2017. Alaska Department of Commerce, Community, and Economic Development. Juneau, AK.

ADF&G. 2019a. WinfoNet. https://winfonet.alaska.gov/. Retrieved May 30, 2019. Juneau, AK.

ADF&G. 2019b. Community subsistence information system. Online database http://www.adfg.alaska.gov/sb/CSIS/. Division of Subsistence. Retrieved May 30, 2019. Anchorage, AK.

ADLWD. 2017. Research and Analysis, Population and Census, Historical Data: Boroughs/Census Areas. Juneau, AK. http://live.laborstats.alaska.gov/pop/index.cfm, retrieved June 19, 2017. Alaska Department of Labor and Workforce Development, Anchorage, AK.

Bangs, M. 2016. Letter to Tim Towarak, Chair, Federal Subsistence Board, dated January 22. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 3 pages.

Cerveny L.K. 2005. Tourism and its effects on Southeast Alaska communities and resources: case studies from Haines, Craig, and Hoonah, Alaska. U.S. Department of Agriculture Forest Service, Pacific Northwest Research Station Research Paper PNW-RP-566. Portland, OR. 163 pages.

George, G.D., and R.G. Bosworth. 1988. Use of fish and wildlife by residents of Angoon. Admiralty Island, Alaska. ADF&G, Division of Subsistence Technical Paper No. 159. Juneau.

Goldschmidt, W.R., and T. Haas. 1998. *Haa Aani*: Our Land. Tlingit and Haida land rights and use. University of Washington Press, Seattle and London and Sealaska Heritage Foundation, Juneau, AK. 219 pages.

Lowell, R. 2002. Unit 3 Elk Management Report. Pages 1-9 *in* C. Healy, ed. Management report of survey-inventory activities, 1 July 1999-30 June 2001. ADF&G Fed. Aid in Wildl. Rest. Prog. Rep. W-27-3 and W-27-4 Proj. 13.0. Juneau, AK. 23 pages.

Lowell, R. 2004. Unit 3 Elk Management Report. Pages 1-9 *in* C. Brown, ed. Management report of survey inventory activities, 1 July 2001-30 June 2003. ADF&G Fed. Aid in Wildl. Rest. Prog. Rep. W-27-5 and W-33-1 Proj. 13.0. Juneau, AK. 23 pages.

O'Gara, B. W. and R. G. Dundas. 2002. Distribution: past and present. Pages 67-119 *in* D. E. Toweill and J. W.

Thomas, eds. North American elk: ecology and management. Smithsonian Institution Press, Washington, DC. 962 pages.

OSM. 2006. Staff analysis WP06-11a. Pages 102-131 *in* Federal Subsistence Board Meeting Materials May 16-18, 2006. Office of Subsistence Management, USFWS. Anchorage, AK. 579 pages.

Salazar, K. 2010. Letter to Tim Towarak, Chair, Federal Subsistence Board, dated December 17. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 4 pages.

SERAC. 2019. Transcripts of the Southeast Alaska Subsistence Regional Advisory Council proceedings, March 20, 2019 in Wrangell, AK. Office of Subsistence Management, FWS. Anchorage, AK.

Smythe, C.W. 1988. Harvest and use of fish and wildlife resources by residents of Petersburg, Alaska. ADF&G, Division of Subsistence Technical Paper No. 164. Juneau, AK.

Towarak, T. 2016. Letter to Mike Bangs, Chair, Southeast Alaska Subsistence Regional Advisory Council, dated June 21. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 5 pages.

U.S. Bureau of the Census. 1995. Alaska: population of counties by decennial Census: 1900 to 1990. Compiled and edited by Richard L. Forstall, Population Division, Washington D.C. https://www.census.gov/population/cencounts/ak190090.txt

Worl, R. 1990. History of Southeastern Alaska since 1867. Pages 149–158 *in* Handbook of North American Indians, vol. 7. W. Suttles, editor. Smithsonian Institute, Washington D.C.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATION

Southeast Alaska Subsistence Regional Advisory Council

Support WP20-13. The Council's intent of this proposal was to essentially continue to make good, rational, customary and traditional use determinations. This required a good analysis of the uses of elk throughout the region and now that this information has been received and is thorough, the Council relied on that information to make a good, informed decision in line with a lot of work this Council has done in past years on this issue. The analysis recognizes that customary and traditional use determinations were inherited from a regulations structure in place when the State administered the program. The Council did not agree with this structure and felt it did not fulfill the intent of ANILCA. Written public testimony illustrated the misunderstanding of the elk hunting situation. The Council was informed that if there is no determination, then all rural residents of Alaska are eligible, and this is very confusing to the public. This proposal would simplify regulations, clearly set out eligibility for participation, and be beneficial to subsistence users. The proposal would increase opportunities for subsistence users throughout the Southeast, and the analysis justifies this action. The Council noted that this justification would roughly be the same for all customary and traditional use determinations proposals discussed at the fall 2019 meeting. The Council supports this proposal to make regulations more clear for the public. Section 802 of ANILCA does not address any difference between introduced or natural wildlife. Section 804 of ANILCA establishes a Federal subsistence priority—all ungulates should be available for Southeast rural residents. What this proposal does, is it narrows it down from all rural residents of the State of Alaska down to rural residents of Southeast Alaska. Since the analysis shows that 90 percent of the harvest comes from rural residents of Southeast Alaska already, the proposal recognizes an established customary and traditional practice in Southeast. The customary and traditional use determination does not change the way users do things, it just reflects what people actually do in Southeast Alaska. If later on, the elk population expands to other areas because the terrain in places such as Baranof Island is so rugged that they are hard to hunt, than this subsistence priority is already set in place.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-13: This proposal, submitted by the Southeast Alaska Subsistence Regional Advisory Council, will limit the current pool of hunters eligible to harvest elk in Unit 3 under federal subsistence regulations to federally qualified residents of Units 1 – 5 only.

Introduction: In 1987 33 Roosevelt's and 17 Rocky Mountain elk were introduced to Etolin Island. By 1991 a small group of Rocky Mountain elk had dispersed to Zarembo Island. The first hunt

occurred on Etolin Island in 1997. Due to their potential to compete with native deer, in 1993 and 1998 the Alaska Board of Game (BOG) passed resolutions requiring the department to restrict elk to Etolin and Zarembo islands by maintaining the populations below carrying capacity.

Elk primarily live in forested habitat and their abundance is difficult to monitor. In 2006 the total Unit 3 elk population was estimated at 350-450 elk with 75-100 of those elk on Zarembo Island and the remainder on Etolin Island. Following hard winters from 2006 – 2009 elk numbers declined and in 2019 the BOG closed the hunt on Zarembo Island. Current estimates are that 150-250 elk occupy Etolin Island with fewer than 50 elk on Zarembo Island.

Elk hunting in the Etolin Island hunt area is currently managed through three state draw hunts (2 archery, 1 rifle) offering a total of 125 permits, and a late season registration permit hunt. Registration permits are not limited, and all hunts are open to all residents and nonresidents. This hunt is considered extremely difficult with challenging terrain and logistics. Hunter success rates are usually less than 10 percent. Harvest data indicate that the majority of elk harvested in Unit 3 have been taken by residents of Petersburg, Wrangell, Thorne Bay and Craig, all federally qualified communities.

This proposal was submitted by the Council as part of a broader effort to expand eligibility among federally qualified hunters residing in Southeast Alaska to harvest all big game species. The Council believes current eligibility does not reflect traditional harvest practices of rural residents of Units 1 – 5. The Federal Subsistence Board has not made customary and traditional use determinations for elk in Southeast Alaska.

Impact on Subsistence Users: This proposal will affect the pool of federally qualified users able to harvest elk under federal regulations. Currently, federal regulations do not provide for an elk hunt in Unit 3, so without further actions from the Federal Subsistence Board, ADF&G anticipates that adoption of this proposal will have no effect on elk harvest.

Impact on Other Users: Without further actions from the Federal Subsistence Board, if this proposal is adopted ADF&G anticipates it will have no effect on elk harvest for non-federally qualified hunters. Current federal regulations do not provide for an elk hunt, so adopting this proposal will provide no additional opportunity or incentive for federally qualified hunters to harvest elk.
However, considering the small population size, if the Federal Subsistence Board eventually establishes a federal season for Unit 3 elk, it will likely deprive non-federally qualified hunters of opportunity.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made a negative customary and traditional use finding for elk in Unit 3.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. Because there is a negative C&T finding for elk in Unit 3, there is no ANS determination required.

The State season and bag limit for Unit 3 is:

		Open Season (Permit/Hunt #)	
Unit/Area	Bag Limit	Resident[a]	Nonresident
Unit 3, that portion bounded by a line beginning at the intersection of Stikine Strait and Clarence Strait, running southeast following the midline of Clarence Strait, down to the intersection with Earnest Sound, then northeast following the midline of Earnest Sound, excluding the Niblack Islands, to its intersection with Zimovia Strait, then northwest following the western shoreline of Zimovia Strait to its intersection with Chichagof Passage, then west along the midline of Chichagof Passage to its intersection with Stikine Strait, then west and south Along the midline of Stikine Strait, back to the point of beginning.	1 bull by drawing permit only, and by bow and arrow only; up to 50 permits will be issued; OR 1 bull by drawing permit only; up to 250 permits will be issued; OR 1 bull be registration permit only	Sept. 1−Sept. 30 (General Hunt only) Oct. 1−Oct. 31 (General Hunt only) Nov. 15−Nov. 30 (General hunt only)	Sept. 1− Sept. 30 Oct. 1− Oct. 31 Nov. 15− Nov. 30

Special instructions: Evidence of sex must remain naturally attached to the meat.

Conservation Issues: In recent years the BOG has closed elk hunting on Zarembo Island, and in Units 1, 2, and 3 outside of the Etolin Island hunt area. Zarembo Island was closed to hunting due to apparent low numbers of elk. The general season elk hunt in Unit 1, 2, and 3 was originally opened to limit the anticipated spread of this introduced population. However, in the nearly 40 years since elk were introduced there is little evidence that they have dispersed from the introduction area, and the general season hunt was believed to facilitate illegal harvest within the Etolin Island hunt area. The general season hunt was closed by the BOG in 2019.

Enforcement Issues: None.

Recommendation: ADF&G is **NEUTRAL** on this proposal. Its passage will have no effect on elk hunting or harvest opportunity without further actions by the FSB.

WRITTEN PUBLIC COMMENT

Ketchikan Advisory Committee
June 6th, 2019
ADF&G Conference Room

I. **Call to Order**: 5:40pm by Matt Allen, Secretary

II. **Roll Call:** 8 voting members present, 1 via phone
Members Present: Allen, Crittenden, Dale, James, Westlund, Roth, Shaw, Bezneck, Fox, Scoblic (Phone)
Members Absent (Excused): Doherty, McQuarrie, Skan, Franulovich, Miller
Members Absent (Unexcused):
Number Needed for Quorum on AC: 8
List of User Groups and Public Present: Public, Sportfish Charter, ADFG (Sport Fish, Wildlife)
Motion: Bezneck, motion to make **Allen** meeting Chair, **Roth**, second. 9-0 in favor. **Allen** sits as meeting Chair

III. **Approval of Agenda:**
Allen, motion to amend agenda to include discussion of Federal Subsistence Proposals 10, 11, 13,14. **Westlund** seconded. Motion passed unanimously (9-0). **Westlund,** moved to approve agenda, **Dale** seconded. Motion passed unanimously (9-0)

IV. **Approval of Previous Meeting Minutes:**
Previous meeting minutes incomplete at this time

V. **Fish and Game Staff Present:**
Kelly Reppert, Ross Dorendorf, Tessa Hasbrouck

VI. **Guests Present: Jim Moody, Nick Hashagan, Martin Caplan, Tony Azure**

VII. **Chairman Report: Allen** read co-chair letter from Scoblic/Doherty

VIII. **ADF&G Sportfish Report: Reppert,** report regarding catch and release chinook fishing. Discussion and comment followed report.

IX. **Old Business:**
Federal Subsistence Proposals 2020-2022, WP20-01-08, WP20-10-15

X. **New Business:**
Catch and Release of chinook by Charter fishermen
Set next meeting date, September 12th, 2019, 5:30pm ADFG Conference Room

Federal Subsistence Management Program
2020-2022 Wildlife Proposal Comments

Proposal Number	Proposal Description		
Support, Support as Amended, Oppose, No Action	**Number Support**	**Number Oppose /Abstain**	**Comments, Discussion (list Pros and Cons), Amendments to Proposal, Voting Notes**
WP20-01	Southeast, Moose, Unit 1C, Eliminate Unit 1C – Berners Bay moose hunt		
Support	8	0/1 abstain	A biological concern does not currently exist necessitating a subsistence priority. Majority of traditional use comes from Juneau area. A fair system is currently in place to provide for opportunity
WP20-02	Southeast, Deer, Unit 2, Remove harvest limits to non-federally qualified users		
Support	9	0	We support State managers in their assessment of the deer population and the opportunity it can support.
WP20-03	Southeast, Deer, Unit 2, Eliminate doe harvest		
Oppose	1	8	Though the AC does not agree with doe harvest, we do not support this proposal because it would have minimal impact.
WP20-04	Southeast, Deer, Unit 2, Revise harvest limit		
Oppose	3	6	Some AC members support cessation of doe harvest if only for a short period of time.
WP20-05	Southeast, Deer, Unit 2, Establish a registration permit for does		
Support	7	1/1	AC supports the proposal as it may lead to better data for management.
WP20-06	Southeast, Deer, Unit 2, Revise season		
Support	9	0	AC supports removal of January hunt due to small amount of harvest, reduced quality of meat and difficulty in distinguishing bucks and does.
WP20-07	Southeast, Deer, Unit 2, Revise harvest limit		
Support	9	0	
WP20-08	Statewide, All Trapping Species, Require traps or snares to be marked with name or State Identification number		
Oppose	1	8	Though some type of compromise should be reached in regards to labelling of traps/snares a one size fits all regulation could be overly burdensome in some areas
WP20-09	Southeast, Beaver, Units 1-4, Revise trapping season		
No Action			
WP20-10	Statewide, Black Bear, Units 1-5, Revise Customary and Traditional Use Determination		

Oppose	2	6	Hunting of Black Bear is not customary and traditional in all units residing in Southeast
WP20-11	Statewide, Brown Bear, Units 1-5, Revise Customary and Traditional Use Determination		
	3	4	Hunting of Brown Bear is not customary and traditional in all units residing in Southeast.
WP20-12	Southeast, Deer, Unit 3, Revise hunt areas, season dates, and harvest limits		
WP20-13	Statewide, Elk, Unit 3, Establish Customary and Traditional Use Determination		
	0	9	This is a population introduced by the State in 1986, due to this fact we do not believe this population is traditional and customary for any Unit in Southeast Alaska. The authors of this proposal do not demonstrate how this particular species in this area has been used to meet the definition as customary and traditional.
WP20-14	Statewide, Goat, Unit 1-5, Revise Customary and Traditional Use Determination		
	4	4	Hunting of Mountain Goat is not Customary and Traditional in all Units residing in Southeast.
WP20-15	Statewide, Moose, Unit 1-5, Revise Customary and Traditional Use Determination		
	0	8	Hunting of Moose is not customary and traditional in all units residing in Southeast.
WP20-16	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			
WP20-17	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			

Adjournment:

Minutes Recorded By: _____
Minutes Approved By: _____
Date: _____

Matuskowitz, Theo <theo_matuskowitz@fws.gov>

Fwd: [EXTERNAL] Wildlife Proposal

1 message

AK Subsistence, FW7 <subsistence@fws.gov> Thu, Jun 27, 2019 at 7:37 AM
To: Theo Matuskowitz <theo_matuskowitz@fws.gov>, Kayla Mckinney <kayla_mckinney@fws.gov>, Paul Mckee <paul_mckee@fws.gov>

--------- Forwarded message ---------
From: **Chris Guggenbickler** <ccgugg@gci.net>
Date: Wed, Jun 26, 2019 at 4:10 PM
Subject: [EXTERNAL] Wildlife Proposal
To: <subsistence@fws.gov>

FSB,

As a resident of Wrangell and someone who has hunted elk on Etolin Island since inception I would like to take the opportunity to comment on proposal WP20-13 which would make a customary and traditional use designation on elk in unit 3. This proposal would lay the groundwork for a later proposal where a rural resident in these areas could put in a proposal asking for subsistence priority on this herd. Consequently this would prohibit residents of Ketchikan and Juneau from participating in this hunt. Ketchikan by the way is where the goats were taken from to trade for the elk that were transplanted on Etolin. I'll just say I am adamantly opposed to someone's effort to use this determination to try to exclude others from participating in this hunt. I actually as a resident of Wrangell would be eligible and benefit from this however I morally can't stomach the thought of using this avenue in a resource grab of a transplanted animal that the legislature intended to be a novelty hunt to benefit all.

Thanks
Chris Guggenbickler

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OSM is in receipt of your comments.

Thank you.

WP20–14 Executive Summary	
General Description	Proposal WP20-14 requests to modify the customary and traditional use determination for goats in Units 1, 4, and 5 to include residents of Units 1 through 5. *Submitted by: Southeast Alaska Regional Advisory Council.*
Proposed Regulation	**Customary and Traditional Use Determination—Goat** ***Units 1, 4, and 5*** — ***Rural residents of Units 1–5.*** ~~*Unit 1A*~~ — ~~*All rural residents*~~ ~~*Unit 1B*~~ — ~~*Residents of Units 1B and 3*~~ ~~*Unit 1C*~~ — ~~*Residents of Haines, Kake, Klukwan, Petersburg, Hoonah, and Gustavus*~~ ~~*Unit 1D*~~ — ~~*All rural residents*~~ ~~*Unit 4*~~ — ~~*Residents of Angoon, Elfin Cove, Funter Bay, Hoonah, Pelican, Port Alexander, Sitka, and Tenakee*~~ ~~*Unit 5*~~ — ~~*Residents of Unit 5A*~~
OSM Conclusion	**Support**
Southeast Alaska Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**1 Oppose**

STAFF ANALYSIS
WP20-14

ISSUES

Wildlife Proposal WP20-14, submitted by the Southeast Alaska Subsistence Regional Advisory Council (Council), requests to modify the customary and traditional use determination for mountain goats (referred to as goats hereafter) in Units 1, 4, and 5 to include residents of Units 1 through 5.

DISCUSSION

The proponent states that customary and traditional use patterns carried over from State management in 1992 inappropriately restrict subsistence use. For this reason the Council has been working to improve customary and traditional use determinations for its region. Under the approach the Council has developed, customary and traditional use determinations will be made broadly to ensure that subsistence uses are protected and will be allowed to continue. The Council believes customary and traditional use determinations should not be used to limit or restrict subsistence uses. When there are resource shortages and all subsistence needs cannot be met, the Council believes an Alaska National Interest Lands Conservation Act (ANILCA) Section 804 Subsistence User Prioritization can be used to allocate scarce resources.

Considering goats specifically, the proponent states that historical and contemporary use and sharing of goats is well documented, that local residents travel long distances and with a variety of transportation modes to access this resource, and that goats play an important role in meeting the cultural, economic, social, and nutritional needs of the region's rural residents. Along with other large land mammals in the region, goats are depended on to sustain the region's mixed cash-subsistence economy.

Existing Federal Regulation

Customary and Traditional Use Determination—Goat

Unit 1A	*All rural residents*
Unit 1B	*Residents of Units 1B and 3*
Unit 1C	*Residents of Haines, Kake, Klukwan, Petersburg, Hoonah, and Gustavus*
Unit 1D	*All rural residents*
Unit 4	*Residents of Angoon, Elfin Cove, Funter Bay, Hoonah, Pelican, Port Alexander, Sitka, and Tenakee*
Unit 5	*Residents of Unit 5A*

Proposed Federal Regulation

Customary and Traditional Use Determination—Goat

Unit 1, 4, and 5	***Rural residents of Units 1-5.***
~~*Unit 1A*~~	~~*All rural residents*~~
~~*Unit 1B*~~	~~*Residents of Units 1B and 3*~~
~~*Unit 1C*~~	~~*Residents of Haines, Kake, Klukwan, Petersburg, Hoonah, and Gustavus*~~
~~*Unit 1D*~~	~~*All rural residents*~~
~~*Unit 4*~~	~~*Residents of Angoon, Elfin Cove, Funter Bay, Hoonah, Pelican Port Alexander, Sitka, and Tenakee*~~
~~*Unit 5*~~	~~*Residents of Unit 5A*~~

Relevant Federal Regulation

§100.5 Eligibility for subsistence use.

. . .

(c) Where customary and traditional use determinations for a fish stock or wildlife population within a specific area have not yet been made by the Board (e.g., "no determination"), all Alaskans who are residents of rural areas or communities may harvest for subsistence from that stock or population under the regulations in this part.

Extent of Federal Public Lands

Unit 1 is comprised of approximately 86% Federal public lands and consist of 69% U.S. Department of Agriculture Forest Service (USFS), 17% National Park Service (NPS), and less than 1% Bureau of Land Management (BLM) managed lands **(see Unit Map)**.

Unit 4 is comprised of approximately 92% Federal public lands and consists of 92% USFS and less than 1% BLM managed lands **(see Unit Map)**.

Unit 5 is comprised of approximately 97% Federal public lands and consists of 63% NPS, 33% USFS, 1% BLM, and less than 1% USFWS managed lands **(see Unit Map)**.

Special Requirements for National Park Service Lands: Under the guidelines of ANILCA, National Park Service regulations identify qualified local rural subsistence users in National Parks and Monuments open to subsistence by: 1) identifying resident zone communities which include a significant concentration of people who have customarily and traditionally used subsistence resources on park lands; and 2) identifying and

issuing subsistence use permits to individuals residing outside of the resident zone communities who have a personal or family history of subsistence use.

Regulatory History

At the beginning of the Federal Subsistence Management Program in Alaska in 1992, the Federal Subsistence Board (Board) adopted the State's customary and traditional use determination for goats in 1C (50 FR 22958,May 29, 1992), which included residents of Haines, Klukwan, and Hoonah. The Board did not make a determination for Units 1A, 1D, 4, and 5; therefore, all rural residents were eligible to hunt under Federal regulations. The Board adopted a customary and traditional use determination of "no Federal subsistence priority" for goats in Unit 1B.

Several proposals were submitted in 1997 to expand the customary and traditional use determination for goats in Unit 1B. Proposal C079 was submitted by the State Southeast Regional Fish and Game Advisory Council. Proposal P97-02c, submitted by Joe Doerr, was adopted by the Board establishing a customary and traditional use determination for goats in Unit 1B to include residents of Units 1B and 3 (50 FR 66229, December 17, 1997).

In 1998, the Board adopted proposals P98-07 and P98-08 submitted by the Wrangell and Petersburg Ranger Districts of the Tongass National Forest, respectively (50 FR 35336; June 29, 1998). This action expanded the customary and traditional use determination for goats in Unit 1C to include the residents of Haines, Kake, Klukwan, Petersburg, and Hoonah. In 2018 the Board adopted proposal WP18-12, submitted by Calvin Casipit, to add the residents of Gustavus to the customary and traditional use determination for goats in Unit 1C (50 FR 50763, October 9, 2018).

In 1997, proposal P96-06, submitted by the Sitka Tribe of Alaska, was adopted by the Board with modification. This action established a customary and traditional use determination for goats in Unit 4 for the residents of Angoon, Elfin Cove, Funter Bay, Hoonah, Pelican, Port Alexander, Sitka, and Tenakee Springs (FSB 1996: 128).

In 1998, proposal P98-17, submitted by the Southeast Alaska Subsistence Regional Advisory Council, was adopted by the Board with modification. This action established a customary and traditional use determination for goats in Unit 5 for the residents of Unit 5A (FSB 1998: 87).

In 2010, the Secretary of the Interior asked the Board to review, with Regional Advisory Council input, the customary and traditional use determination process and present recommendations for regulatory changes (Salazar 2010). During this review in 2016, the Southeast Alaska Council described its view. For example, the Southeast Alaska Council requested, among other things, that the Board adopt customary and traditional use determinations broadly (Bangs 2016). The Council requested the Board to in the future recognize customary and traditional uses of all fish and wildlife in Southeast Alaska that have been taken for food or other purposes, including handicrafts, ceremonies, and customary trade. The Council said its recommendations to the Board in the future would tend to include residents of all rural Southeast communities and areas, and the three criteria in Section 804 of ANILCA was the regulatory process the Board should use to allocate resources, when necessary, and not customary and traditional use determinations. The

Council intended to submit regulatory proposals to the Board requesting to broaden the complex web of customary and traditional use determinations that currently exist in Southeast Alaska (Bangs 2016). The Board responded that the Southeast Alaska Council's recommendation regarding customary and traditional use determinations aligned well with the current process followed statewide in the Federal Subsistence Management Program (Towarak 2016: 5). Since then, the Council has requested, and the Board has adopted, customary and traditional use determinations for all fish (Proposal FP19-17) and for deer (Proposal WP18-02) that include all rural residents of Southeast Alaska. This has greatly simplified these determinations that were originally adopted from State regulations at the formation of the Federal Subsistence Management Program in 1992.

Community Characteristics

The rural area of the Southeast Region is comprised of about 33 small to medium sized communities, ranging in population from 20 or less (Point Baker, Elfin Cove, and Game Creek) to over 8,000 (Sitka) (**Table 1**). Many were established by Tlingit and are situated at historical village sites or were established by Haida (Hydaburg, Kasaan) or Tsimshian (Metlakatla). Population growth in the Southeast Region during the historical period (beginning about 1750) has been affected by several waves of in-migration, first by Russian fur traders who established Sitka as their headquarters in the late 1700s. After the sale of Alaska to the United States in 1867, new industries (such as commercial fishing, canneries, mining, and fox farming) and commercial trade were pursued with the associated influx of outsiders (Worl 1990, George and Bosworth 1988, Smythe 1988).

Beginning in the 1970s, timber logging camps sprang up and some have persisted as new communities, such as Game Creek and Thorne Bay. Many rural communities in the Southeast Region have at their core a *kwaan* or tribe of Alaska Natives. The territories mapped in 1947 by Goldschmidt and Haas covered all of the Southeast Region (Goldschmidt and Haas 1998). Since 1960, the rural population of the Southeast Region has doubled from 13,102 people in 1960 to 26,343 people in 2010 (**Table 1**). Some of this growth has been from new communities established near logging activities and growth in the recreation and tourism industries (Cerveny 2005).

Eight Factors for Determining Customary and Traditional Use

A community or area's customary and traditional use is generally exemplified through these eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) a pattern of use recurring in specific seasons for many years; (3) a pattern of use consisting of methods and means of harvest, which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area; (5) 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; (6) a pattern of use, which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use, in which the harvest is shared or distributed within a definable community of persons; and (8) 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 the community or area.

Table 1. The number of people living at Southeast Region rural communities, from 1960 to 2010 (Sources: ADLWD 2017, ADCCED 2017, and U.S. Bureau of the Census 1995).

Community	1960	1970	1980	1990	2000	2010	Number of house-holds
Angoon	395	400	465	638	572	459	167
Coffman Cove	0	0	193	186	199	176	89
Craig	273	272	527	1,260	1,397	1,201	523
Edna Bay	135	112	6	86	49	42	19
Elfin Cove	0	49	28	57	32	20	15
Game Creek	0	0	0	61	35	18	10
Gustavus	107	64	98	258	429	442	199
Haines Borough	1,000	1,504	1,680	2,117	2,392	2,508	991
Hollis	0	0	0	111	139	112	55
Hoonah	686	748	680	795	860	760	300
Hydaburg	251	214	298	384	382	376	133
Hyder	32	49	77	99	97	87	47
Kake	455	448	555	700	710	557	246
Kasaan	36	30	25	54	39	49	17
Klawock	251	213	318	722	854	755	313
Klukwan	112	103	135	129	139	95	44
Kupreanof	26	36	47	23	23	27	15
Metlakatla	1,135	1,245	1,333	1,464	1,375	1,405	469
Naukati Bay	0	0	0	93	135	113	60
Pelican	135	133	180	222	163	88	70
Petersburg Borough	1,502	2,042	2,821	3,207	3,224	2,948	1,252
Point Baker	0	80	90	39	35	15	8
Port Alexander	18	36	86	119	81	52	22
Port Protection	0	0	40	62	63	48	26
Saxman	153	135	273	369	431	411	120
Sitka Borough	3,237	6,109	7,803	8,588	8,835	8,881	3,545
Skagway	659	675	814	692	862	920	410
Tenakee Springs	109	86	138	94	104	131	72
Thorne Bay	0	443	377	569	557	471	214
Whale Pass	0	0	90	75	58	31	20
Whitestone	0	0	NA	164	116	114	30
Wrangell Borough	2,165	2,358	2,658	2,479	2,448	2,369	1,053
Yakutat Borough	230	190	449	534	808	662	270
Total	**13,102**	**17,774**	**22,284**	**26,450**	**27,643**	**26,343**	**10,824**

The Board makes customary and traditional use determinations based on a holistic application of these 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.

Goat hunting data between 1990 and 2018 shows extensive hunting effort in Units 1, 4, and 5 among rural residents of communities throughout Southeast Alaska, including Yakutat (**Table 2**). For Units 1A and 1D, in which all rural residents can hunt goats under Federal regulations, 87% (n=170) and 98% (n=1,977), respectively, of reported goat hunting activity by rural residents of Alaska from 1990 to 2018 was undertaken by rural residents of Units 1 through 5.

Goat hunting activity in Units 1A and 1D by rural residents of Alaska residing outside of Units 1 through 5 is found in **Table 3**. Though there were numerous goat hunting events in Unit 1A and 1D by rural residents of Alaska living outside of Southeast Alaska between 1990 and 2018, there is no additional evidence that residents of these units have established a customary and traditional use pattern for this species in these units, or that they directly depend on goats from these populations to meet their subsistence needs. Residents of Unit 12 may occasionally access the Haines Highway area of Unit 1D via the international road system, though that area is dominated by State managed lands.

The Alaska Department of Fish and Game's Division of Subsistence conducts household subsistence harvest surveys periodically throughout Alaska. Though this survey data is only available for some communities in some years, it is an additional source for documenting patterns of use in rural Alaska.

Use, harvest, and sharing of goat in Southeast Alaska, as documented by these surveys over time, is represented in **Appendix 1**. This data, collected from 1983 to 2016, shows clear patterns of use and sharing of goat throughout rural Southeast Alaska communities.

Rural residents of Southeast Alaska have used mountain goat continuously throughout recorded history wherever goat has been found. Goat has been an important source of food, clothing, tools, and fat or grease to the Tlingit, Tsimshian, and Haida groups of Southeast Alaska (de Laguna 1990). Archaeological evidence obtained from the Prince William Sound area suggests that mountain goat "seems to have played a fairly important part in the diet of those who lived or came near the areas where it could be obtained" (de Laguna 1972).

The Tlingit historically exhibited a pattern of hunting mountain goats recurring in specific seasons for many years including the fall, early winter, and spring. During the fall and early winter, when goats are at their fattest, hunts took place in mountainous areas (OSM 1998). Temporary camps were utilized and berries picked and preserved while smoking fish and processing goat meat, providing both efficiency and economy of effort. Oberg's (1973) sources indicated that any meat to be stored was hunted and dried in August. In the spring, when snow had pushed the goats into the tree-line, they were hunted in timbered areas and their fleece collected from brush and branches for use in weaving ceremonial blankets. Starting in the mid-

Table 2. Cumulative reported goat hunting events in Units 1, 4, and 5 by rural residents of Units 1 through 5, from 1990 to 2018 (ADF&G 2019a). Includes successful and unsuccessful hunts. Highlighted cells indicate an existing customary and traditional use determination for residents of the management unit. Empty cells indicate no reported hunting activity.

Community	Residency Unit	Unit 1A	Unit 1B	Unit 1C	Unit 1D	Unit 4	Unit 5A	Unit 5B
HYDER	1A	5						
METLAKATLA	1A	28	7					
NEETS BAY	1A	2				1		
YES BAY	1A	2	2					
MEYERS CHUCK	1B	3	3					
EXCURSION INLET	1C			2				
GUSTAVUS	1C			33	1			
HOBART BAY	1C			31				
HAINES	1D			30	1498	5		
KLUKWAN	1D				3			
SKAGWAY	1D	1		4	386			
COFFMAN COVE	2	6	7			3		
CRAIG	2	41	30	2	1	7	3	
EDNA BAY	2		15	6				
HOLLIS	2	2						
HYDABURG	2	1						
KLAWOCK	2	7	2		1			
NAUKATI BAY	2	3		1		1		
THORNE BAY	2	28	61			2	1	
WHALE PASS	2	1	11	1				
KAKE	3		3	4		10		
PETERSBURG	3	12	777	20	2	6		
WRANGELL	3	11	277	4	2	2		
ANGOON	4			1		22		
BARANOF	4					2		
CUBE COVE	4			1		3		
ELFIN COVE	4			3	1			
FALSE ISLAND	4					4		
FUNTER BAY	4							
GAME CREEK	4			1				
HIDDEN FALLS HCHRY	4					26		
HOONAH	4		5	44	15	7		
PELICAN	4			1	1	3		
PORT ALEXANDER	4					12		
PORT ARM-STRONG	4					16		
PORT WALTER	4					3		
SITKA	4	15	21	38	27	2756	1	
TENAKEE SPRINGS	4	1		2		11		
WHITESTONE CAMP	4		1	1				
YAKUTAT	5A	1					109	6

Table 3. Cumulative reported goat hunting events in Units 1A and 1D by rural residents residing outside of Units 1 through 5, from 1990 to 2018 (ADF&G 2019a). Includes successful and unsuccessful hunts. Empty cells indicate no reported hunting activity.

Community	Residency Unit	Unit 1A	Unit 1D
BARROW	26A		1
BETHEL	18	1	
CANTWELL	13	2	
COLD BAY	9D		2
COPPER CENTER	13		1
CORDOVA	6C		2
DELTA JUNCTION	20D		6
FORT GREELY	20D		2
GLENNALLEN	13	1	2
KODIAK	8	7	2
NENANA			4
NOME	22C	2	
NORTHWAY	12		13
NOORVIK	23	3	
PRUDHOE BAY	26B	1	
TOK	12	5	4
UNALAKLEET	22A	1	
UNALASKA	10	2	

nineteenth century, some Tlingit groups would go directly from salmon fish camps to hunt mountain goat, deer, and bear (Goldschmidt and Haas 1946: de Laguna 1990).

The people of Southeast Alaska employ a variety of means of handling, preparing, preserving, and storing mountain goats, which have been traditionally used by past generations. Mountain goats have been used by indigenous peoples of the region as a source of food, clothing, tools, and fat or grease. Goat horns, skins, and fleece were common trade items among Tlingits. Horns were used to make spoons, personal ornaments, boxes for storing powder and shot, tool handles, and feast dishes. Goat skin was thought to make the best drum heads (Emmons 1991 and de Laguna 1990), while the wool was used to weave ceremonial blankets, which could require the wool of approximately three goats and take up to a year to complete. These blankets were found among Tlingit, Haida, and Tsimshian. According to Tlingit tradition, they originated with the Tsimshian and were carried to other groups by intermarriage or migration (Emmons 1991). Goat wool was also used for bedding, twisted into cords, and used for decoration, as in ear ornaments. The fat of the goat was melted and formed into cakes for use as food or to grease the face before blackening or painting (Emmons 1991). Traditionally, the meat was dried or boiled and preserved in oil (Goldschmidt and Haas 1946). If killed in the mountains, the goat was usually butchered and the meat dried on site to make it easier to pack out (de Laguna 1990).

Goat hunting knowledge, skills, values, and lore were traditionally passed down to young men by their maternal uncles. In many communities, a goat hunting area may not be shown to newcomers without kinship ties until they become established as a resident. Young women are taught the weaving of the

ceremonial Chilkat blankets, made from goat hair, by their mother or maternal grandmother. These blankets and other items made from goat horns, fleece, and skin are important ceremonial regalia. Blanket wearing is still practiced and taught among Tlingit groups (OSM 1998).To reach goat hunting areas, Tlingit hunters had to climb high into the mountains (Krause 1956). These areas were reached by canoe, with hunting taking place from heads of rivers and lakes adjacent to steep mountains (Oberg 1973). Traditionally, Tlingit groups used bow and arrow or spears to hunt goat. Trained dogs were used to drive the goats down into canyons where hunters waited to spear them (de Laguna 1990). In a harvest study conducted by the Alaska Department of Fish and Game in 1987-88, one Wrangell elder recalled a story his grandfather had told regarding goat hunting. As a young man, the grandfather was sent along with other young men up a mountain to surround and drive the goats down into the valley where hunters waited at the valley entrance (Cohen 1989). Contemporary hunters use firearms for goat hunting, and boats or aircraft to reach goat hunting areas (Scott 2014).

Both past and present harvest of goat in Southeast Alaska is demonstrative of a pattern of use in which the harvest is shared or distributed within a defined community. In Tlingit tradition, the meat of a boy's first kill is divided up and distributed, with the belief that this act of sharing would bring luck to the boy in his future hunting. This tradition is still in practice (de Laguna 1972). Goat meat continues to be sought, harvested, used, and shared within and among the communities of Southeast Alaska (**Table 2** and **Appendix 1**).

Effects of the Proposal

If this proposal is adopted, it would establish a customary and traditional use determination for goats in Units 1A and 1D for rural residents of Units 1 through 5, and remove eligibility of other rural residents of Alaska living outside of these management units. Adoption would also expand the customary and traditional use determinations for goats in Units 1B, 1C, 4, and 5 to include all rural residents of Units 1 through 5.

OSM CONCLUSION

Support Proposal WP20-14.

Justification

Rural residents of Units 1 through 5 have demonstrated use, harvest, and sharing of goats in Units 1, 4, and 5. Goats have a clear historical and contemporary role in the subsistence patterns of the region. Residents frequently travel long distances with a variety of transportation types to harvest and share goat resources. Units 1 through 5 are also near and reasonably accessible to Units 1, 4, and 5 for the harvest and use of goats by residents of these management units. Furthermore, more than 87% of rural residents of Alaska hunting in Units 1A and 1D between 1990 and 2018 were rural residents of Units 1 through 5. Rural residents from outside of Southeast Alaska may be reasonably excluded from the customary and traditional use determination for goats in Units 1A and 1D due to limited evidence of historical hunt activity and their distance from the resource.

LITERATURE CITED

ADCCED. 2017. Community and Regional Affairs, Community Index. https://www.commerce.alaska.gov/dcra/DCRAExternal/community, retrieved June 19, 2017. Alaska Department of Commerce, Community, and Economic Development. Juneau, AK.

ADF&G. 2019a. WinfoNet. https://winfonet.alaska.gov/. Retrieved May 30, 2019. Juneau, AK.

ADF&G. 2019b. Community subsistence information system. Online database http://www.adfg.alaska.gov/sb/CSIS/. Division of Subsistence. Retrieved May 30, 2019. Anchorage, AK.

ADLWD. 2017. Research and Analysis, Population and Census, Historical Data: Boroughs/Census Areas. Juneau, AK. http://live.laborstats.alaska.gov/pop/index.cfm, retrieved June 19, 2017. Alaska Department of Labor and Workforce Development, Anchorage, AK.

Bangs, M. 2016. Letter to Tim Towarak, Chair, Federal Subsistence Board, dated January 22. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 3 pages.

Cohen, K.A. 1989. Wrangell Harvest Study: A Comprehensive Study of Wild Resource Harvest and Use by Wrangell Residents. ADF&G Division of Subsistence Technical Paper No. 165.

de Laguna, F. 1972. Under Mount Saint Elias: the History and Culture of the Yakutat Tlingit. Smithsonian Institution Press, Washington, D.C.

de Laguna, F. 1990. Tlingit *in* Handbook of North American Indians. Volume 7, Northwest Coast. W. Suttles volume editor. Smithsonian Institution Press, Washington, D.C.

Emmons, G.T. 1991. The Tlingit Indians. F. de Laguna, ed. University of Washington Press, Seattle, WA.

FSB. 1996. Transcripts of the Federal Subsistence Board proceedings, May 2, 1996 in Anchorage, AK. Office of Subsistence Management, FWS. Anchorage, AK. Vol. IV. 159 pp.

FSB. 1998. Transcripts of the Federal Subsistence Board proceedings, May 6, 1998 in Anchorage, AK. Office of Subsistence Management, FWS. Anchorage, AK. Vol. III. 96 pp.

George, G.D., and R.G. Bosworth. 1988. Use of fish and wildlife by residents of Angoon. Admiralty Island, Alaska. ADF&G, Division of Subsistence Technical Paper No. 159. Juneau.

Goldschmidt W., and T. Haas. 1946. Possessory Rights of the Natives of Southeastern Alaska. Unpublished report. Washington, D.C.: Commissioner of Indian Affairs.

Goldschmidt, W.R., and T. Haas. 1998. *Haa Aani*: Our Land. Tlingit and Haida land rights and use. University of Washington Press, Seattle and London and Sealaska Heritage Foundation, Juneau, AK. 219 pages.

Krause, A. 1956 [1885]. The Tlingit Indians. University of Washington Press, Seattle, WA.

Oberg, K. 1973. The Social Economy of the Tlingit Indians. University of Washington Press, Seattle, WA.

OSM. 1998. Staff analysis WP07-07/08. Pages 76-92 *in* Federal Subsistence Board Meeting Materials. Office of Subsistence Management, USFWS. Anchorage, AK.

Salazar, K. 2010. Letter to Tim Towarak, Chair, Federal Subsistence Board, dated December 17. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 4 pages.

Scott, R. 2014. Unit 1C mountain goat management report. Pages 36-49 [In] P. Harper, editor. Mountain goat management report of survey and inventory activities 1 July 2011-30 June 2013. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR 2014-3, Juneau, AK.

Smythe, C.W. 1988. Harvest and use of fish and wildlife resources by residents of Petersburg, Alaska. ADF&G, Division of Subsistence Technical Paper No. 164. Juneau, AK.

Towarak, T. 2016. Letter to Mike Bangs, Chair, Southeast Alaska Subsistence Regional Advisory Council, dated June 21. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 5 pages.

U.S. Bureau of the Census. 1995. Alaska: population of counties by decennial Census: 1900 to 1990. Compiled and edited by Richard L. Forstall, Population Division, Washington D.C.
https://www.census.gov/population/cencounts/ak190090.txt

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATION

Southeast Alaska Subsistence Regional Advisory Council

Support WP20-14. The Council's intent of this proposal was to essentially continue to make good, rational, customary and traditional use determinations. This required a good analysis of the uses of mountain goat throughout the region, and now that this information has been received and is thorough, the Council relied on that information to make a good, informed decision in line with a lot of work this Council has done in past years on this issue. The analysis recognizes that customary and traditional use determinations were inherited from a regulations structure in place when the State administered the program. The Council did not agree with this structure and felt it did not fulfill the intent of ANILCA. This proposal would simplify regulations, clearly set out eligibility for participation, and be beneficial to subsistence users. The proposal would increase opportunities for subsistence users throughout the Southeast, would clean up confusing regulatory language, and the thorough analysis justifies this action. The Council noted that this justification would roughly be the same for all customary and traditional use determination proposals discussed at the fall 2019 meeting.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-14: This proposal, submitted by the Southeast Alaska Subsistence Regional Advisory Council, will alter the current pool of hunters eligible to harvest goats in units 1, 4, and 5 under federal subsistence regulations to include all federally qualified residents of Units 1 – 5.

Introduction: This proposal was submitted by the council as part of a broader effort to expand eligibility among federally qualified hunters residing in Southeast Alaska to harvest all big game species. The council believes current eligibility is too narrowly defined and does not reflect traditional harvest practices of rural residents of units 1 – 5.

Mountain goats occur naturally in units 1 and 5, and have been introduced on Baranof Island in Unit 4 and Revillagigedo Island in Unit 1A. Mountain goats live in challenging terrain and harvest occurs in the relatively few areas where hunters can access goat habitat. ADF&G uses a variety of strategies to manage mountain goat hunting with the goal of providing maximum harvest opportunity while guarding against localized overharvest. ADF&G manages most goat hunts through registration permits, but three hunt areas on Revillagigedo Island are currently managed through draw permits and a new draw hunt on the southern Cleveland Peninsula in Unit 1 will open in RY2020. All registration and draw hunts are open to resident and nonresident hunters.

Impact on Subsistence Users: This proposal will expand opportunity to harvest goats under federal subsistence regulations in units 1B, 1C, 4, and 5 to include all federally qualified residents of Units 1 – 5. In units 1A and 1D, the pool of eligible hunters would contract from all rural residents to rural residents of Units 1-5 only.

Impact on Other Users: If this proposal is adopted ADF&G anticipates it will have little or no effect on goat harvest for non-federally qualified hunters in most units. Current state resident harvest regulations are identical to or more liberal than federal regulations in portions of units 1 and 4, so adopting this proposal will provide no additional opportunity or incentive for federally qualified hunters to harvest goats in those areas. Additional opportunity for federally qualified hunters would be offered in units 1A and 1B Remainder as well as in Unit 5.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made positive customary and traditional use findings for goats in units 1 and 5 and a negative finding in Unit 4.

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

The ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for goats are as follows:
Unit 1A (outside the state nonsubsistence area): 5-10
Unit 1B: 5-10
Unit 1C (outside the state nonsubsistence area): 25-30
Unit 1D: 10-15
Unit 5: 1-2

Conservation Issues: None. Over the last decade ADF&G has learned much about mountain goat biology and life history and has applied this information to the management strategy used by ADF&G management biologists. Mountain goats are highly susceptible to overharvest and disturbance. ADF&G uses a weighted point system to determine harvest opportunity and routinely uses Emergency Orders to close registration hunts when guideline harvest levels are reached. The weighted point

system favors female goats in order to reduce harvest on reproductive female goats. Mountain goats have a long period before first reproduction and live in extreme conditions where natural mortality is high. Mountain goats also show high levels of site fidelity and are unlikely to move to new areas to repopulate areas where harvest has depleted animals. This is a critical factor of mountain goat management because accessible areas receive more hunter effort than more remote locations. While ADF&G does not believe there are broad conservation concerns, mountain goats must be carefully managed for harvest and small populations must be closely monitored, or not hunted, to avoid overharvest. Use of a draw permit system to manage mountain goat hunting does not imply a conservation concern. Draw hunts provide predictability to both managers and hunters rather than anticipating an Emergency Order closure as is done for registration hunts.

Enforcement Issues: None.

Recommendation: ADF&G is **NEUTRAL** on this proposal**.** Adoption of this proposal will have little or no effect on goat hunting or harvest opportunity without further actions by the FSB.

WRITTEN PUBLIC COMMENTS

Ketchikan Advisory Committee
June 6th, 2019
ADF&G Conference Room

I. **Call to Order**: 5:40pm by Matt Allen, Secretary

II. **Roll Call:** 8 voting members present, 1 via phone
Members Present: Allen, Crittenden, Dale, James, Westlund, Roth, Shaw, Bezneck, Fox, Scoblic (Phone)
Members Absent (Excused): Doherty, McQuarrie, Skan, Franulovich, Miller
Members Absent (Unexcused):
Number Needed for Quorum on AC: 8
List of User Groups and Public Present: Public, Sportfish Charter, ADFG (Sport Fish, Wildlife)
Motion: Bezneck, motion to make **Allen** meeting Chair, **Roth**, second. 9-0 in favor. **Allen** sits as meeting Chair

III. **Approval of Agenda:**
Allen, motion to amend agenda to include discussion of Federal Subsistence Proposals 10, 11, 13,14. **Westlund** seconded. Motion passed unanimously (9-0). **Westlund**, moved to approve agenda, **Dale** seconded. Motion passed unanimously (9-0)

IV. **Approval of Previous Meeting Minutes:**
Previous meeting minutes incomplete at this time

V. **Fish and Game Staff Present:**
Kelly Reppert, Ross Dorendorf, Tessa Hasbrouck

VI. **Guests Present: Jim Moody, Nick Hashagan, Martin Caplan, Tony Azure**

VII. **Chairman Report: Allen** read co-chair letter from Scoblic/Doherty

VIII. **ADF&G Sportfish Report: Reppert**, report regarding catch and release chinook fishing. Discussion and comment followed report.

IX. **Old Business:**
Federal Subsistence Proposals 2020-2022, WP20-01-08, WP20-10-15

X. **New Business:**
Catch and Release of chinook by Charter fishermen
Set next meeting date, September 12th, 2019, 5:30pm ADFG Conference Room

Federal Subsistence Management Program
2020-2022 Wildlife Proposal Comments

Proposal Number	**Proposal Description**		
Support, Support as Amended, Oppose, No Action	**Number Support**	**Number Oppose /Abstain**	**Comments, Discussion (list Pros and Cons), Amendments to Proposal, Voting Notes**
WP20-01	Southeast, Moose, Unit 1C, Eliminate Unit 1C – Berners Bay moose hunt		
Support	8	0/1 abstain	A biological concern does not currently exist necessitating a subsistence priority. Majority of traditional use comes from Juneau area. A fair system is currently in place to provide for opportunity
WP20-02	Southeast, Deer, Unit 2, Remove harvest limits to non-federally qualified users		
Support	9	0	We support State managers in their assessment of the deer population and the opportunity it can support.
WP20-03	Southeast, Deer, Unit 2, Eliminate doe harvest		
Oppose	1	8	Though the AC does not agree with doe harvest, we do not support this proposal because it would have minimal impact.
WP20-04	Southeast, Deer, Unit 2, Revise harvest limit		
Oppose	3	6	Some AC members support cessation of doe harvest if only for a short period of time.
WP20-05	Southeast, Deer, Unit 2, Establish a registration permit for does		
Support	7	1/1	AC supports the proposal as it may lead to better data for management.
WP20-06	Southeast, Deer, Unit 2, Revise season		
Support	9	0	AC supports removal of January hunt due to small amount of harvest, reduced quality of meat and difficulty in distinguishing bucks and does.
WP20-07	Southeast, Deer, Unit 2, Revise harvest limit		
Support	9	0	
WP20-08	Statewide, All Trapping Species, Require traps or snares to be marked with name or State Identification number		
Oppose	1	8	Though some type of compromise should be reached in regards to labelling of traps/snares a one size fits all regulation could be overly burdensome in some areas
WP20-09	Southeast, Beaver, Units 1-4, Revise trapping season		
No Action			
WP20-10	Statewide, Black Bear, Units 1-5, Revise Customary and Traditional Use Determination		

Oppose	2	6	Hunting of Black Bear is not customary and traditional in all units residing in Southeast
WP20-11	Statewide, Brown Bear, Units 1-5, Revise Customary and Traditional Use Determination		
	3	4	Hunting of Brown Bear is not customary and traditional in all units residing in Southeast.
WP20-12	Southeast, Deer, Unit 3, Revise hunt areas, season dates, and harvest limits		
WP20-13	Statewide, Elk, Unit 3, Establish Customary and Traditional Use Determination		
	0	9	This is a population introduced by the State in 1986, due to this fact we do not believe this population is traditional and customary for any Unit in Southeast Alaska. The authors of this proposal do not demonstrate how this particular species in this area has been used to meet the definition as customary and traditional.
WP20-14	Statewide, Goat, Unit 1-5, Revise Customary and Traditional Use Determination		
	4	4	Hunting of Mountain Goat is not Customary and Traditional in all Units residing in Southeast.
WP20-15	Statewide, Moose, Unit 1-5, Revise Customary and Traditional Use Determination		
	0	8	Hunting of Moose is not customary and traditional in all units residing in Southeast.
WP20-16	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			
WP20-17	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			

Adjournment:

Minutes Recorded By: _____
Minutes Approved By: _____
Date: _____

APPENDIX 1

Appendix 1. The harvest and use of goat by rural communities in the Southeast Region during one-year study periods between 1983 and 2016 (Blank cell=question not asked; Source: ADF&G 2019b).

Community	Study year	% Households using	% Households attempting to harvest	% Households harvesting	% Households giving away	% Households receiving
Angoon	1984	0.0	0.0	0.0	0.0	0.0
Angoon	1987	1.5		0.0	0.0	1.5
Angoon	1996	1.4	1.4	1.4	1.4	1.4
Angoon	2012	2.0	0.0	0.0	0.0	2.0
Beecher Pass	1987	0.0		0.0	0.0	0.0
Coffman Cove	1987	0.0		0.0	0.0	0.0
Coffman Cove	1998	2.0	0.0	0.0	0.0	2.0
Craig	1987	1.0		0.0	0.0	1.0
Craig	1997	0.0	0.0	0.0	0.0	0.0
Edna Bay	1987	15.0		0.0	0.0	15.0
Edna Bay	1998	0.0	0.0	0.0	0.0	0.0
Elfin Cove	1987	0.0		0.0	0.0	0.0
Game Creek	1996	0.0	0.0	0.0	0.0	0.0
Gustavus	1987	4.1		0.0	0.0	4.1
Haines	1983	12.9	18.4	9.5	2.7	4.1
Haines	1987	6.2		0.2	0.0	6.2
Haines	1996	19.4	6.5	5.4	6.5	14.0
Haines	2012	10.6	7.6	3.8	2.3	8.3
Hollis	1987	4.1		4.1	4.1	0.0
Hollis	1998	2.2	2.2	2.2	2.2	0.0
Hoonah	1985	0.0	0.0	0.0		
Hoonah	1987	0.5		0.0	0.0	0.5
Hoonah	1996	1.3	0.0	0.0	0.0	1.3
Hoonah	2012	0.0	0.8	0.0	0.0	0.0
Hoonah	2016	0.0	0.0	0.0	0.0	0.0
Hydaburg	1987	0.0		0.0	0.0	0.0
Hydaburg	1997	0.0	0.0	0.0	0.0	0.0
Hydaburg	2012	0.0	0.0	0.0	0.0	0.0
Hyder	1987	12.1		9.1	0.0	3.0
Kake	1985	0.0	2.9	0.0		
Kake	1987	0.0		0.0	0.0	0.0
Kake	1996	0.0	0.0	0.0	0.0	0.0
Kasaan	1987	0.0		0.0	0.0	0.0
Kasaan	1998	0.0	0.0	0.0	0.0	0.0
Klawock	1984	0.0	0.0	0.0	0.0	0.0
Klawock	1987	0.0		0.0	0.0	0.0
Klawock	1997	0.0	0.9	0.0	0.0	0.0
Klukwan	1983	3.0	12.1	3.0	3.0	0.0
Klukwan	1987	7.1		0.0	0.0	7.1

Continued on next page

Appendix 1. The harvest and use of goat by rural communities in the Southeast Region during one-year study periods between 1983 and 2016 (Blank cell=question not asked; Source: ADF&G 2019b). *Continued from previous page*

Community	Study year	% Households using	% Households attempting to harvest	% Households harvesting	% Households giving away	% Households receiving
Klukwan	1996	25.8	9.7	6.5	6.5	19.4
Metlakatla	1987	0.6		0.3	0.3	0.3
Meyers Chuck	1987	0.0		0.0	0.0	0.0
Naukati Bay	1998	6.0	0.0	0.0	0.0	6.0
Pelican	1987	0.0		0.0	0.0	0.0
Petersburg	1987	1.1		0.0	0.0	1.1
Petersburg	2000	1.6	0.8	0.8	0.0	1.6
Point Baker	1987	0.0		0.0	0.0	0.0
Point Baker	1996	0.0	0.0	0.0	0.0	0.0
Port Alexander	1987	3.0		0.0	0.0	3.0
Port Protection	1987	4.0		0.0	0.0	4.0
Port Protection	1996	0.0	0.0	0.0	0.0	0.0
Saxman	1987	1.4		0.0	0.0	1.4
Saxman	1999	0.0	0.0	0.0	0.0	0.0
Sitka	1987	0.7		0.7	0.0	0.0
Sitka	1996	5.6	4.7	2.7	2.4	2.8
Sitka	2013	2.6	0.7	0.0	0.7	2.6
Skagway	1987	7.3		0.5	0.5	6.8
Tenakee Springs	1984	0.0	0.0	0.0	0.0	0.0
Tenakee Springs	1987	0.0		0.0	0.0	0.0
Thorne Bay	1987	6.1		1.1	0.0	5.1
Thorne Bay	1998	3.4	1.1	1.1	1.1	2.2
Whale Pass	1987	0.0		0.0	0.0	0.0
Whale Pass	1998	0.0	0.0	0.0	0.0	0.0
Whale Pass	2012	14.3	14.3	14.3	4.8	0.0
Whitestone Camp	1996	0.0	0.0	0.0	0.0	0.0
Wrangell	1987	7.7		3.0	2.3	6.2
Yakutat	1984	12.0	8.0	6.0	6.0	8.0
Yakutat	1987	2.3		0.0	0.0	2.3
Yakutat	2000	18.0	3.6	2.2	2.9	15.8
Yakutat	2015	5.0	0.0	0.0	4.0	5.0

WP20–15 Executive Summary	
General Description	Proposal WP20-15 requests to modify the customary and traditional use determination for moose in Units 1 and 3 to include rural residents of Units 1 through 5. *Submitted by: Southeast Alaska Regional Advisory Council.*
Proposed Regulation	**Customary and Traditional Use Determination—Moose** **Unit 1 and 3** — **Rural residents of Units 1–5** ~~Unit 1A~~ — ~~All rural residents~~ ~~*Unit 1B*~~ — ~~*Residents of Units 1, 2, 3, and 4*~~ ~~*Unit 1C*~~ — ~~*Residents of Units 1, 2, 3, 4, and 5*~~ ~~*Unit 1D*~~ — ~~*Residents of Unit 1D*~~ ~~*Unit 3 Mitkof and Wrangell Islands*~~ — ~~*Residents of Units 1B, 2, and 3*~~ ~~*Unit 3 remainder*~~ — ~~*All rural residents*~~
OSM Conclusion	**Support**
Southeast Alaska Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**1 Oppose**

STAFF ANALYSIS
WP20-15

ISSUES

Wildlife Proposal WP20-15, submitted by the Southeast Alaska Subsistence Regional Advisory Council (Council), requests to modify the customary and traditional use determination for moose in Units 1 and 3 to include rural residents of Units 1 through 5.

DISCUSSION

The proponent states that customary and traditional use determinations carried over from State management in 1992 have been inappropriately restricting subsistence use. For this reason, the Council has been working to improve customary and traditional use determinations for its region. Under the approach it has developed, customary and traditional use determinations will be made broadly to ensure that subsistence uses are protected and will be allowed to continue. The Council believes customary and traditional use determinations should not be used to limit or restrict subsistence uses. When there are resource shortages and all subsistence needs cannot be met, the Council believes an Alaska National Interest Lands Conservation Act (ANILCA) Section 804 Subsistence User Prioritization can be used to allocate scarce resources.

Considering moose specifically, the proponent indicates that historical and contemporary use and sharing of moose is well documented, that local residents travel long distances and with a variety of transportation modes to access this resource, and that moose play an important role in meeting the cultural, economic, social, and nutritional needs of the region's rural residents. Along with other large land mammals in the region, moose are depended on to sustain the region's mixed cash-subsistence economy.

Existing Federal Regulation

Customary and Traditional Use Determination—Moose

Unit 1A	*All rural residents*
Unit 1B	*Residents of Units 1, 2, 3, and 4*
Unit 1C	*Residents of Units 1, 2, 3, 4, and 5*
Unit 1D	*Residents of Unit 1D*
Unit 3 Mitkof and Wrangell Islands	*Residents of Units 1B, 2, and 3*
Unit 3 remainder	*All rural residents*

Proposed Federal Regulation

Customary and Traditional Use Determination—Moose

Units 1 and 3	***Rural residents of Units 1–5***
~~*Unit 1A*~~	~~*All rural residents*~~
~~*Unit 1B*~~	~~*Residents of Units 1, 2, 3, and 4*~~
~~*Unit 1C*~~	~~*Residents of Units 1, 2, 3, 4, and 5*~~
~~*Unit 1D*~~	~~*Residents of Unit 1D*~~
~~*Unit 3 Mitkof and Wrangell Islands*~~	~~*Residents of Units 1B, 2, and 3*~~
~~*Unit 3 remainder*~~	~~*All rural residents*~~

Relevant Federal Regulation

36 CFR **242.5 Eligibility for subsistence use.**

. . .

(c) Where customary and traditional use determinations for a fish stock or wildlife population within a specific area have not yet been made by the Board (e.g., "no determination"), all Alaskans who are residents of rural areas or communities may harvest for subsistence from that stock or population under the regulations in this part.

Extent of Federal Public Lands

Unit 1 is comprised of approximately 86% Federal public lands and consists of 69% U.S. Forest Service, 17% National Park Service, and less than 1% Bureau of Land Management managed lands **(**see **Unit Map)**.

Unit 3 is comprised of approximately 90% Federal public lands and consists entirely of U.S. Forest Service managed lands **(**see **Unit Map)**.

Background

Moose likely immigrated to Southeast Alaska quite a bit later than the initial human immigration. Most moose migrations were by way of river valley corridors from the Canadian interior through the Coast Range. Moose began naturally populating areas in Unit 1 in the early to mid-1900s (Barten 2004:22). The coastal mountains probably inhibited the rapid movement of moose into this area. By the 1950s, moose were present in all major drainages in Southeast Alaska (ADF&G 1989).

Moose are thought to have entered Unit 1A from interior British Columbia via the Unuk River drainage, with a resident population established in the management unit sometime in the early 1900s (OSM 2004). Some Unuk River moose may seasonally migrate across the international border; the

Canadian portion of the drainage has high quality moose habitat. Moose were transplanted to the Chickamin River drainage in 1963 but the transplant effort was not considered successful.

In Unit 1D, moose migrated to the Chilkat River Valley from drainages in Canada around 1930 (Barten 2004:45). In 1963, moose were observed in the Chilkat Range southwest of Haines. These animals probably originated from the Chilkat Valley population near Haines. Moose were first documented in western Unit 1C in 1962 on the Bartlett River just inside Glacier Bay**.** In 1965, moose were sighted for the first time along the Endicott River and St. James Bay areas, and moose were common in Adams Inlet at the head of Glacier Bay by the 1970s (Barten 2004:23). Fifteen moose calves were introduced to Berners Bay in 1958 and a supplemental release of six more calves occurred in 1960.

The first sightings of moose occurred in the Gustavus area in 1968 (Barten 2004:22–23). It is unclear when moose began populating the downriver portions of the Taku River drainage, southeast of Juneau, but Taku Tlingit were harvesting moose prior to 1946 from upriver areas (Goldschmidt and Haas 1998:43, 112, 116). Moose have only been colonizing Unit 3 since the early 1960s and were likely established through natural migration of expanding moose populations along the Alaska portion of the Stikine River drainage in Unit 1B (OSM 1997).

Regulatory History

In 1990 the Federal Subsistence Management Program adopted most of the customary and traditional use determinations made by the State of Alaska. For moose in Unit 1B including only the Stikine River drainages, the determination was for residents of Wrangell. For moose in Unit 1B north of the LeConte Glacier, and in Unit 1C at Berner's Bay, no subsistence priority was provided. For moose in Unit 1D, the determination was for residents of Unit 1D. No determination was made for moose in Units 1A, 1C (other than Berner's Bay), or Unit 3, therefore all rural residents of Alaska were eligible to hunt under Federal regulations in these areas.

In 2004, Proposal WP04-18 was submitted by Louie Wagner to establish a customary and traditional use determination for moose in Unit 1A to include the residents of Unit 1A. The Federal Subsistence Board (Board) rejected this proposal in deference to the Council recommendation that there was no need to be more restrictive at that time and that the action would unnecessarily eliminate the ability of some rural residents to hunt for moose in Unit 1A (FSB 2004: 23).

The customary and traditional use determination for moose in Unit 1B received considerable attention in 1997 when five proposals were submitted to the Board to expand the determination in each part of Unit 1B. The Board opted to adopt Proposal P97-04 with modification, in deference to the Council, and rejected the others (FSB 1997: 15). This proposal was submitted by the U.S. Forest Service and the Council and sought to expand the customary and traditional use determination in Unit 1B, north of LeConte Glacier, to include all rural residents of Units 1B, 2, 3, and 4. The modification was to include the entirety of Unit 1B in the determination, thereby eliminating determinations specific to just portions of the Unit.

In 2002, Proposal WP02-14 requested removal of the "no Federal subsistence priority" determination for moose in Berners Bay drainages of Unit 1C. Although the Council requested that the Board defer the proposal for one year, they withdrew the proposal before the next regulatory cycle (SERAC 2002; FWS 2003). In 2008, Proposal WP08-06a was submitted by Chuck Burkhardt to establish a customary and traditional use determination for moose in Unit 1C at Berner's Bay to include residents of 1C and 1D. The Board voted to defer this proposal in deference to the Council to look at a broader scope of users that may have warranted inclusion in a determination (FSB 2008: 138). This proposal was then brought back to the Board in 2010 as Proposal WP10-18a. The Board took no action on the proposal as they adopted WP10-11 submitted by the Council, establishing a customary and traditional use determination for moose in all of Unit 1C to include residents of Units 1 through 5 (FSB 2010: 148).

In 1997, Proposal P97-10 was submitted by the U.S. Forest Service and the Council to establish a customary and traditional use determination for moose in Unit 3 on Wrangell and Mitkof Islands for the residents of Units 1B, 2, and 3. This proposal was adopted by the Board.

In 2010, the Secretary of the Interior asked the Board to review, with Regional Advisory Council input, the customary and traditional use determination process and present recommendations for regulatory changes (Salazar 2010). During this review in 2016, the Southeast Alaska Council described its view. For example, the Southeast Alaska Council requested, among other things, that the Board adopt customary and traditional use determinations broadly (Bangs 2016). The Council requested the Board to in the future recognize customary and traditional uses of all fish and wildlife in Southeast Alaska that have been taken for food or other purposes, including handicrafts, ceremonies, and customary trade. The Council said its recommendations to the Board in the future would tend to include residents of all rural Southeast communities and areas, and the three criteria in Section 804 of ANILCA was the regulatory process the Board should use to allocate resources, when necessary, and not customary and traditional use determinations. The Council intended to submit regulatory proposals to the Board requesting to broaden the complex web of customary and traditional use determinations that currently exist in Southeast Alaska (Bangs 2016). The Board responded that the Southeast Alaska Council's recommendation regarding customary and traditional use determinations aligned well with the current process followed statewide in the Federal Subsistence Management Program (Towarak 2016: 5). Since then, the Council has requested, and the Board has adopted, customary and traditional use determinations for all fish (Proposal FP19-17) and for deer (Proposal WP18-02) that include all rural residents of Southeast Alaska. This has greatly simplified these determinations that were originally adopted from State regulations at the formation of the Federal Subsistence Management Program in 1992.

Community Characteristics

The rural area of the Southeast Region is comprised of about 33 small to medium sized communities, ranging in population from 20 or less (Point Baker, Elfin Cove, and Game Creek) to over 8,000 (Sitka) (**Table 1**). Many were established by Tlingit and are situated at historical village sites or were established by Haida (Hydaburg and Kasaan) or Tsimshian (Metlakatla). Population growth in the Southeast Region during the historical period (beginning about 1750) has been affected by several

waves of in-migration, first by Russian fur traders who established Sitka as their headquarters in the late 1700s. After the sale of

Table 1. The number of people living in Southeast Region rural communities, 1960–2010, based on the U.S. Census, NA=not available, *italic*=estimated (Sources: ADLWD 2017, ADCCED 2017, and U.S. Bureau of the Census 1995).

Community	1960	1970	1980	1990	2000	2010	Number of house-holds
Angoon	395	400	465	638	572	459	167
Coffman Cove	0	0	193	186	199	176	89
Craig	273	272	527	1,260	1,397	1,201	523
Edna Bay	135	112	6	86	49	42	19
Elfin Cove	0	49	28	57	32	20	15
Game Creek	0	0	0	61	35	18	10
Gustavus	107	64	98	258	429	442	199
Haines Borough	*1,000*	1,504	1,680	2,117	2,392	2,508	991
Hollis	0	0	0	111	139	112	55
Hoonah	686	748	680	795	860	760	300
Hydaburg	251	214	298	384	382	376	133
Hyder	32	49	77	99	97	87	47
Kake	455	448	555	700	710	557	246
Kasaan	36	30	25	54	39	49	17
Klawock	251	213	318	722	854	755	313
Klukwan	112	103	135	129	139	95	44
Kupreanof	26	36	47	23	23	27	15
Metlakatla	1,135	1,245	1,333	1,464	1,375	1,405	469
Naukati Bay	0	0	0	93	135	113	60
Pelican	135	133	180	222	163	88	70
Petersburg Borough	1,502	2,042	2,821	3,207	3,224	2,948	1,252
Point Baker	0	80	90	39	35	15	8
Port Alexander	18	36	86	119	81	52	22
Port Protection	0	0	40	62	63	48	26
Saxman	153	135	273	369	431	411	120
Sitka Borough	3,237	6,109	7,803	8,588	8,835	8,881	3,545
Skagway	659	675	814	692	862	920	410
Tenakee Springs	109	86	138	94	104	131	72
Thorne Bay	0	443	377	569	557	471	214
Whale Pass	0	0	90	75	58	31	20
Whitestone	0	0	NA	164	116	114	30
Wrangell Borough	2,165	2,358	2,658	2,479	2,448	2,369	1,053
Yakutat Borough	230	190	449	534	808	662	270
Total	**13,102**	**17,774**	**22,284**	**26,450**	**27,643**	**26,343**	**10,824**

Alaska to the United States in 1867, new industries (such as commercial fishing, canneries, mining, and fox farming) and commercial trade, were pursued with the associated influx of outsiders (Worl 1990, George and Bosworth 1988, Smythe 1988).

Beginning in the 1970s, timber logging camps sprang up and some have persisted as new communities, such as Game Creek and Thorne Bay. Many rural communities in the Southeast Region have at their core a *kwaan* or tribe of Alaska Natives. The territories mapped in 1947 by Goldschmidt and Haas covered all of the Southeast Region (Goldschmidt and Haas 1998). Since 1960 the rural population of the Southeast Region has doubled from 13,102 people in 1960 to 26,343 people in 2010. Some of this growth has been from new communities established near logging activities and growth in the recreation and tourism industries (Cerveny 2005).

Eight Factors for Determining Customary and Traditional Use

A community or area's customary and traditional use is generally exemplified through these eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) a pattern of use recurring in specific seasons for many years; (3) a pattern of use consisting of methods and means of harvest, which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area; (5) 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; (6) a pattern of use, which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use, in which the harvest is shared or distributed within a definable community of persons; and (8) 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 the community or area.

The Board makes customary and traditional use determinations based on a holistic application of these 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.

Moose hunting data between 1990 and 2018 shows extensive hunting effort in Units 1 and 3 among rural residents of communities throughout Southeast Alaska, including Yakutat (**Table 2**). For Units 1A and 3 remainder, in which all rural residents can hunt moose under Federal regulations, 100%

(n=104) and 99% (n=4,336), respectively, of reported moose hunting activity by rural residents of Alaska was undertaken by rural residents of Units 1 through 5.

Moose hunting activity in Unit 3 remainder by Federally qualified subsistence users residing outside of Units 1 through 5 is represented in **Table 3**. Only 23 moose hunting events in Unit 3 remainder by Federally qualified subsistence hunters from other regions of the state have occurred over the 20-year

Table 2. Cumulative reported moose hunting events in Units 1 and 3 by rural residents of Units 1 through 5, from 1990 to 2018 (ADF&G 2019a). Includes successful and unsuccessful hunts. Highlighted cells indicate an existing moose customary and traditional use determination for residents of the unit. Empty cells indicate no reported hunting activity.

Community	Residency Unit	Unit 1A	Unit 1B	Unit 1C	Unit 1D	Unit 3 Wrangell / Mitkof	Unit 3 Remainder
LORING	1A	1					
METLAKATLA	1A	62	6	1			7
MEYERS CHUCK	1B		6	2			1
EXCURSION INLET	1C			23			
GUSTAVUS	1C			1838		1	2
HOBART BAY	1C		2	14			
SWANSON HARBOR	1C			5			
HAINES	1D		4	221	3959	2	13
KLUKWAN	1D				188		
MOSQUITO LAKE	1D				2		
PORT CHILKOOT	1D				1		
SKAGWAY	1D			23	73		1
COFFMAN COVE	2	2	12			20	21
CRAIG	2	10	29	8		19	79
DORA BAY	2	4					
EDNA BAY	2		7	1		4	3
HOLLIS	2	1				1	4
HYDABURG	2		1	1			10
KLAWOCK	2	2	6	1		1	52
NAUKATI BAY	2	4	1	1		2	4
POINT BAKER	2						15
POLK INLET	2	1	2				
PORT ALICE	2		2				
PORT PROTECTION	2		4			2	10
THORNE BAY	2	8	23	1		10	31
WHALE PASS	2		1			1	7
KAKE	3		4	1		10	1792
PETERSBURG	3	3	3517	135		5996	1566
WRANGELL	3	6	3866	5	1	1495	359
ANGOON	4			16			5

Community	Residency Unit	Unit 1A	Unit 1B	Unit 1C	Unit 1D	Unit 3 Wrangell / Mitkof	Unit 3 Remainder
CUBE COVE	4						1
ELFIN COVE	4			32			
FUNTER BAY	4			2			
GAME CREEK	4			3			
HIDDEN FALLS HATCH.	4						2
HOONAH	4		2	278	3	1	27
PELICAN	4			11		4	
PORT ALEXANDER	4		4	9			12
PORT ARMSTRONG	4						
PORT WALTER	4						3
PYBUS BAY	4						6
SITKA	4		103	322	31	58	286
TENAKEE SPRINGS	4			16	6	1	3
WHITESTONE CAMP	4			1			
YAKUTAT	5A			5			2

Table 3. Cumulative reported moose hunting events in Unit 3 remainder by rural residents residing outside of Units 1 through 5, from 1990 to 2018 (ADF&G 2019a). Includes successful and unsuccessful hunts.

Community	Residency Unit	Unit 3 Remainder
KODIAK	8	17
UNALASKA	10	1
TOK	12	2
GLENNALLEN	13	1
NINILCHIK	15C	2

period. The maximum number of hunting events by rural residents of a community outside of Southeast Alaska was 17 over the 20-year period (residents of Kodiak), but all other communities were represented by one or two moose hunting events in Unit 3 remainder. There is no available information indicating a customary and traditional use pattern for moose in Unit 3 by rural residents of communities outside of southeast Alaska.

The Alaska Department of Fish and Game Division of Subsistence also conducts household subsistence harvest surveys periodically throughout Alaska. Though this survey data is only available for some communities in some years, it is an additional source for documenting patterns of use in rural Alaska. Use, harvest activity, and sharing of moose in Southeast Alaska, as documented by these surveys over time, is represented in **Appendix 1**. This data, collected from 1983 to 2016, show a clear pattern of use and sharing of the moose resource throughout rural Southeast Alaska communities.

Even before moose migrated into the region, moose skins and sinew were valued and traded, probably along with moose meat, by the Tlingit, Haida, and Tsimshian of Southeast Alaska (OSM 1997). It appears that the Tlingit had traded with hunters in other regions well before moose were in locally huntable areas (ADF&G 1992). As soon as moose became available, both Native and non-Native local hunters began utilizing this resource.

Use of moose in Southeast Alaska extends back to its first appearance in the region by the 1930s. Emmons (1991) lists among Tlingit crests that of moose for the Raven moiety, and several house groups throughout Southeast Alaska are named after moose. Traditional teaching about and understanding of moose extends well into prehistory as is indicated by documented trading between the indigenous people of Southeast Alaska and those of the Canadian interior (OSM 1997).

Southeast Alaska moose populations are associated with mainland riparian habitats with suitable forage of willow and dogwood. Moose are confined to the valleys around the large transmontane rivers and to areas recently exposed by receding glaciers. The habitat being restricted in such a way makes boat access particularly effective, especially for communities that live relatively close to hunting areas (OSM 1997). Traditionally, Native peoples of Southeast Alaska were able to travel throughout the region by boat, and that tradition continues with fishing boats, skiffs, and other small boats (OSM 1997). Contemporary access is enhanced over much of the area because of the presence of roads.

Techniques for preparation and preservation of moose by indigenous residents of the region are not well documented. Even though moose is a recent arrival in the region, its use generally follows patterns established and modified by application of contemporary technology for other wild meats (OSM 1997). Most moose meat is now frozen or processed into sausage or jerky (ADF&G 1992).

Patterns of sharing moose are evident throughout the region. Nearly every rural community in the region used moose in the years in which subsistence use studies were conducted, even though no moose were harvested in many (**Appendix 1**). This illustrates the cross-community sharing in Southeast Alaska. Moose is actively exchanged in potlatches and other feasts, as well as for non-ceremonial food (OSM 1997).

Residents of Southeast Alaska harvest a wide variety of resources. These include marine and intertidal resources, as well as upland wildlife species including birds, goats, deer, moose, and black and brown bear (OSM 1997). Moose can be an important food resource because of its large size compared to other land mammals. Its large size promotes inter-community and intra-community sharing, allowing many people to use moose while a relatively small number of people harvest moose. Resource use in these communities tends to be opportunistic, with resources harvested when available (ADF&G 1992). Household surveys indicate that in communities across Southeast Alaska, a small proportion of households in a community produce the greatest amount of fish and wildlife resources, which is then redistributed among households in the community and beyond (Smythe 1988).

Effects of the Proposal

If this proposal is adopted, it will establish a customary and traditional use determination for moose in Units 1A and 3 remainder for residents of Units 1 through 5. Rural residents of Alaska living outside of these units will no longer be eligible to hunt moose under Federal regulations in Units 1A and 3 remainder. Adoption will also expand the customary and traditional use determinations for moose in Units 1B, 1C, 1D, and Unit 3 (Wrangell and Mitkof Islands) to include all rural residents of Units 1 through 5.

OSM CONCLUSION

Support Proposal WP20-15.

Justification

Residents of Units 1 through 5 have demonstrated use, harvest, and sharing of moose in Units 1 and 3. Moose have a clear historical and contemporary role in the subsistence patterns of the region. Residents frequently travel long distances with a variety of transportation types to harvest and share moose resources. Units 1 through 5 are also near and reasonably accessible to Units 1 and 3 for the harvest and use of moose by residents of these units. Furthermore, more than 99% of moose hunting by rural residents of Alaska in Units 1A and 3 remainder was by rural residents of Units 1 through 5 between 1990 and 2018. Rural residents from outside of southeast Alaska may be reasonably excluded from the customary and traditional use determination for moose in Unit 3 due to the limited evidence of historical hunt activity and their distance from the resource.

LITERATURE CITED

ADCCED. 2017. Community and Regional Affairs, Community Index. https://www.commerce.alaska.gov/dcra/DCRAExternal/community, retrieved June 19, 2017. Alaska Department of Commerce, Community, and Economic Development. Juneau, AK.

ADLWD. 2017. Research and Analysis, Population and Census, Historical Data: Boroughs/Census Areas. Juneau, AK. http://live.laborstats.alaska.gov/pop/index.cfm, retrieved June 19, 2017. Alaska Department of Labor and Workforce Development, Anchorage, AK.

ADF&G (Alaska Department of Fish and Game), Division of Subsistence. 1992. Customary and traditional uses of Southeast Alaska, black bear, brown bear, deer, goat, grouse and ptarmigan, moose, wolf, and wolverine populations in Southeast Alaska. Report to the Board of Game, November, 1992.

ADF&G (Alaska Department of Fish and Game), Division of Subsistence. 1989. Strategic plan for management of moose in Region I, Southeast Alaska. Juneau, AK.

ADF&G. 2019a. WinfoNet. https://winfonet.alaska.gov/. Retrieved May 30, 2019. Juneau, AK.

ADF&G. 2019b. Community subsistence information system. Online database http://www.adfg.alaska.gov/sb/CSIS/. Division of Subsistence. Retrieved May 30, 2019. Anchorage, AK.

Bangs, M. 2016. Letter to Tim Towarak, Chair, Federal Subsistence Board, dated January 22. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 3 pages.

Barten, N.L. 2004. Unit 1C moose management report. Pages 22–44 in C. Brown, editor. Moose management report of survey and inventory activities 1 July 2001–30 June 2003. ADF&G. Project 1.0. Juneau, AK.

Cerveny L.K. 2005. Tourism and its effects on Southeast Alaska communities and resources: case studies from Haines, Craig, and Hoonah, Alaska. U.S. Department of Agriculture Forest Service, Pacific Northwest Research Station Research Paper PNW-RP-566. Portland, OR. 163 pages.

FSB. 1997. Transcripts of the Federal Subsistence Board proceedings, April 9, 1997 in Anchorage, AK. Office of Subsistence Management, FWS. Anchorage, AK. Vol. III. 136 pp.

FSB. 2004. Transcripts of the Federal Subsistence Board proceedings, May 19, 2004 in Anchorage, AK. Office of Subsistence Management, FWS. Anchorage, AK. Vol. I. 142 pp.

FSB. 2008. Transcripts of the Federal Subsistence Board proceedings, April 29, 2008 in Anchorage, AK. Office of Subsistence Management, FWS. Anchorage, AK. Vol. I. 175 pp.

FSB. 2010. Transcripts of the Federal Subsistence Board proceedings, May 18, 2010 in Anchorage, AK. Office of Subsistence Management, FWS. Anchorage, AK. Vol. I. 187 pp.

FWS. 2003. Results log wildlife proposals for 2003–2004, May 23, 2003. Federal Subsistence Management Program. On file. Office of Subsistence Management. Anchorage, AK.

George, G.D., and R.G. Bosworth. 1988. Use of fish and wildlife by residents of Angoon. Admiralty Island, Alaska. ADF&G, Division of Subsistence Technical Paper No. 159. Juneau.

Goldschmidt, W.R., and T. Haas. 1998. *Haa Aani*: Our Land. Tlingit and Haida land rights and use. University of Washington Press, Seattle and London and Sealaska Heritage Foundation, Juneau, AK. 219 pages.

OSM. 1997. Staff analysis P97-10. Pages 84-95 in Federal Subsistence Board Meeting Materials. Office of Subsistence Management, USFWS. Anchorage, AK.

OSM. 2004. Staff analysis WP04-18. Pages 79-98 in Federal Subsistence Board Meeting Materials. Office of Subsistence Management, USFWS. Anchorage, AK.

Salazar, K. 2010. Letter to Tim Towarak, Chair, Federal Subsistence Board, dated December 17. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 4 pages.

SERAC. 2002. Transcripts of Southeast Alaska Subsistence Regional Advisory Council proceedings, March 14, 2002, in Juneau, Alaska. Lines 37–40. Office of Subsistence Management, FWS. Anchorage, AK.

Smythe, C. 1988. Harvest and Use of Fish and Wildlife Resources by Residents of Petersburg, Alaska. ADF&G Division of Subsistence Technical Paper No. 164. Juneau, AK.

Towarak, T. 2016. Letter to Mike Bangs, Chair, Southeast Alaska Subsistence Regional Advisory Council, dated June 21. On file, U.S. Fish and Wildlife Service, Office of Subsistence Management. Anchorage, AK. 5 pages.

U.S. Bureau of the Census. 1995. Alaska: population of counties by decennial Census: 1900 to 1990. Compiled and edited by Richard L. Forstall, Population Division, Washington D.C. https://www.census.gov/population/cencounts/ak190090.txt

Worl, R. 1990. History of Southeastern Alaska since 1867. Pages 149–158 *in* Handbook of North American Indians, vol. 7. W. Suttles, editor. Smithsonian Institute, Washington D.C.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATION

Southeast Alaska Subsistence Regional Advisory Council

Support WP20-15. The Council's intent of this proposal was to essentially continue to make good, rational, customary and traditional use determinations. This required a good analysis of the uses of moose throughout the region, and now that this information has been received and is thorough, the Council relied on that information to make a good, informed decision in line with a lot of work this Council has done in past years on this issue. The analysis recognizes that customary and traditional use determinations were inherited from a regulations structure in place when the State administered the program. The Council did not agree with this structure and felt it did not fulfill the intent of ANILCA. This proposal would simplify regulations, clearly set out eligibility for participation, and be beneficial to subsistence users. The proposal would increase opportunities for subsistence users throughout the Southeast and the analysis justifies this action. This proposal would spread the hunting out to take the pressure away from local subsistence hunting. The Council remarked that they would like to revisit this issue once an aerial survey is done and moose population can be assessed, as Unit 5 was excluded from this proposal. The Council noted that this justification would roughly be the same for all customary and traditional use determination proposals discussed at the fall 2019 meeting.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-15: This proposal, submitted by the Southeast Alaska Subsistence Regional Advisory Council, will alter the current pool of hunters eligible to harvest moose in Units 1 and 3 under federal subsistence regulations to include all federally qualified residents of Units 1 – 5.

Introduction: This proposal is a part of a broader effort to expand eligibility among federally qualified hunters residing in Southeast Alaska to harvest all big game species on federally managed public lands. The council believes current eligibility is too narrowly defined and does not reflect traditional harvest practices of rural residents of Units 1 – 5.

Impact on Subsistence Users: This proposal will expand opportunity to harvest moose under federal subsistence regulations in units 1B, 1C, 1D, and portions of Unit 3 to include all federally qualified residents of Units 1 – 5. In Unit 1A and the remainder of Unit 3, the pool of eligible hunters would contract from all rural residents to rural residents of Units 1-5 only.

Impact on Other Users: If this proposal is adopted ADF&G anticipates it will have little or no effect on moose harvest for non-federally qualified hunters in most units. Federally qualified hunters take an

estimated 75% of all moose harvested in Southeast Alaska. Current state resident harvest regulations are identical to or more liberal than federal regulations in portions of units 1 and 3, so adopting this proposal will provide no additional opportunity or incentive for federally qualified hunters to harvest moose in those areas. Additional opportunity for federally qualified hunters would be offered in Units 1A and 1C – Berners Bay drainages.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made positive customary and traditional use findings for moose in units 1B and 3, Unit 1D, and Unit 5 and a negative finding in Unit 1C (Gustavus Forelands).

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

The ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for moose Units 1, 3, and 5 are as follows:
Units 1B and 3: 40;
Unit 1D: 100% of allowable harvest
Unit 5: 1-2

Season and bag limits

Conservation Issues: None. Use of a draw permit system to manage hunts does not imply a conservation concern.

Enforcement Issues: None.

Recommendation: ADF&G's position on this proposal is **NEUTRAL**. Adoption of this proposal will have little or no effect on moose hunting or harvest opportunity without further actions by the FSB.

WRITTEN PUBLIC COMMENT

Ketchikan Advisory Committee
June 6th, 2019
ADF&G Conference Room

I. **Call to Order**: 5:40pm by Matt Allen, Secretary

II. **Roll Call:** 8 voting members present, 1 via phone
Members Present: Allen, Crittenden, Dale, James, Westlund, Roth, Shaw, Bezneck, Fox, Scoblic (Phone)
Members Absent (Excused): Doherty, McQuarrie, Skan, Franulovich, Miller
Members Absent (Unexcused):
Number Needed for Quorum on AC: 8
List of User Groups and Public Present: Public, Sportfish Charter, ADFG (Sport Fish, Wildlife)
Motion: Bezneck, motion to make **Allen** meeting Chair, **Roth**, second. 9-0 in favor. **Allen** sits as meeting Chair

III. **Approval of Agenda:**
Allen, motion to amend agenda to include discussion of Federal Subsistence Proposals 10, 11, 13,14. **Westlund** seconded. Motion passed unanimously (9-0). **Westlund**, moved to approve agenda, **Dale** seconded. Motion passed unanimously (9-0)

IV. **Approval of Previous Meeting Minutes:**
Previous meeting minutes incomplete at this time

V. **Fish and Game Staff Present:**
Kelly Reppert, Ross Dorendorf, Tessa Hasbrouck

VI. **Guests Present: Jim Moody, Nick Hashagan, Martin Caplan, Tony Azure**

VII. **Chairman Report: Allen** read co-chair letter from Scoblic/Doherty

VIII. **ADF&G Sportfish Report: Reppert**, report regarding catch and release chinook fishing. Discussion and comment followed report.

IX. **Old Business:**
Federal Subsistence Proposals 2020-2022, WP20-01-08, WP20-10-15

X. **New Business:**
Catch and Release of chinook by Charter fishermen
Set next meeting date, September 12th, 2019, 5:30pm ADFG Conference Room

Federal Subsistence Management Program
2020-2022 Wildlife Proposal Comments

Proposal Number	Proposal Description		
Support, Support as Amended, Oppose, No Action	Number Support	Number Oppose /Abstain	Comments, Discussion (list Pros and Cons), Amendments to Proposal, Voting Notes
WP20-01	Southeast, Moose, Unit 1C, Eliminate Unit 1C – Berners Bay moose hunt		
Support	8	0/1 abstain	A biological concern does not currently exist necessitating a subsistence priority. Majority of traditional use comes from Juneau area. A fair system is currently in place to provide for opportunity
WP20-02	Southeast, Deer, Unit 2, Remove harvest limits to non-federally qualified users		
Support	9	0	We support State managers in their assessment of the deer population and the opportunity it can support.
WP20-03	Southeast, Deer, Unit 2, Eliminate doe harvest		
Oppose	1	8	Though the AC does not agree with doe harvest, we do not support this proposal because it would have minimal impact.
WP20-04	Southeast, Deer, Unit 2, Revise harvest limit		
Oppose	3	6	Some AC members support cessation of doe harvest if only for a short period of time.
WP20-05	Southeast, Deer, Unit 2, Establish a registration permit for does		
Support	7	1/1	AC supports the proposal as it may lead to better data for management.
WP20-06	Southeast, Deer, Unit 2, Revise season		
Support	9	0	AC supports removal of January hunt due to small amount of harvest, reduced quality of meat and difficulty in distinguishing bucks and does.
WP20-07	Southeast, Deer, Unit 2, Revise harvest limit		
Support	9	0	
WP20-08	Statewide, All Trapping Species, Require traps or snares to be marked with name or State Identification number		
Oppose	1	8	Though some type of compromise should be reached in regards to labelling of traps/snares a one size fits all regulation could be overly burdensome in some areas
WP20-09	Southeast, Beaver, Units 1-4, Revise trapping season		
No Action			
WP20-10	Statewide, Black Bear, Units 1-5, Revise Customary and Traditional Use Determination		

Oppose	2	6	Hunting of Black Bear is not customary and traditional in all units residing in Southeast
WP20-11	Statewide, Brown Bear, Units 1-5, Revise Customary and Traditional Use Determination		
	3	4	Hunting of Brown Bear is not customary and traditional in all units residing in Southeast.
WP20-12	Southeast, Deer, Unit 3, Revise hunt areas, season dates, and harvest limits		
WP20-13	Statewide, Elk, Unit 3, Establish Customary and Traditional Use Determination		
	0	9	This is a population introduced by the State in 1986, due to this fact we do not believe this population is traditional and customary for any Unit in Southeast Alaska. The authors of this proposal do not demonstrate how this particular species in this area has been used to meet the definition as customary and traditional.
WP20-14	Statewide, Goat, Unit 1-5, Revise Customary and Traditional Use Determination		
	4	4	Hunting of Mountain Goat is not Customary and Traditional in all Units residing in Southeast.
WP20-15	Statewide, Moose, Unit 1-5, Revise Customary and Traditional Use Determination		
	0	8	Hunting of Moose is not customary and traditional in all units residing in Southeast.
WP20-16	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			
WP20-17	Statewide, Wolf, Unit 2, Eliminate harvest limit/quota and revise sealing requirement		
No Action			

Adjournment:

Minutes Recorded By: _____
Minutes Approved By: _____
Date: _____

APPENDIX 1

Appendix 1. The harvest and use of moose by rural communities in the Southeast Region during one-year study periods between 1983 and 2016 (Blank cell=question not asked; Source: ADF&G 2019b).

Community	Study year	% Households using moose	% Households attempting to harvest moose	% Households harvesting moose	% Households giving away moose	% Households receiving moose
Angoon	1984	5.3	0.0	0.0	0.0	5.3
Angoon	1987	8.4		0.0	1.5	8.4
Angoon	1996	2.7	0.0	0.0	0.0	2.7
Angoon	2012	5.9	0.0	0.0	2.0	5.9
Beecher Pass	1987	20.0		20.0	20.0	0.0
Coffman Cove	1987	4.9		0.0	0.0	4.9
Coffman Cove	1998	30.0	8.0	4.0	6.0	28.0
Craig	1987	7.4		1.0	0.0	6.4
Craig	1997	11.0	0.6	0.6	2.3	11.0
Edna Bay	1987	25.0		5.0	0.0	20.0
Edna Bay	1998	8.3	0.0	0.0	0.0	8.3
Elfin Cove	1987	0.0		0.0	0.0	0.0
Game Creek	1996	0.0	0.0	0.0	0.0	0.0
Gustavus	1987	14.1		0.0	0.0	14.1
Haines	1983	27.2	49.7	12.9	6.1	15.7
Haines	1987	45.4		3.7	3.5	42.3
Haines	1996	66.7	12.9	7.5	10.8	59.1
Haines	2012	55.3	25.8	8.3	8.3	48.5
Hollis	1987	6.0		0.0	0.0	6.0
Hollis	1998	8.7	4.3	4.3	4.3	8.7
Hoonah	1985	7.0	4.2	2.8		
Hoonah	1987	19.3		0.0	0.0	19.3
Hoonah	1996	15.6	6.5	3.9	3.9	11.7
Hoonah	2012	16.4	2.5	0.0	3.3	16.4
Hoonah	2016	16.9	4.6	1.5	4.6	15.4
Hydaburg	1987	6.0		0.0	0.0	6.0
Hydaburg	1997	3.9	0.0	0.0	3.9	3.9
Hydaburg	2012	4.2	0.0	0.0	2.1	4.2
Hyder	1987	33.3		6.1	0.0	27.3
Kake	1985	0.0	0.0	0.0		
Kake	1987	0.8		0.0	0.0	0.8
Kake	1996	4.1	5.5	1.4	0.0	2.7
Kasaan	1987	7.1		0.0	0.0	7.1
Kasaan	1998	7.1	0.0	0.0	7.1	7.1
Klawock	1984	2.8	0.0	0.0	0.0	2.8

Community	Study year	% Households using moose	% Households attempting to harvest moose	% Households harvesting moose	% Households giving away moose	% Households receiving moose
Klawock	1987	3.3		1.1	0.0	2.2
Klawock	1997	6.6	2.8	2.8	2.8	4.7
Klukwan	1983	24.2	57.6	9.1	6.1	15.2
Klukwan	1987	30.4		0.0	2.5	30.4
Klukwan	1996	64.5	19.4	6.5	6.5	61.3
Metlakatla	1987	4.0		0.0	0.0	4.0
Meyers Chuck	1987	10.0		10.0	10.0	0.0
Naukati Bay	1998	26.0	0.0	0.0	6.0	26.0
Pelican	1987	15.9		4.0	4.0	13.1
Petersburg	1987	27.4		8.4	7.3	22.1
Petersburg	2000	25.6	16.8	1.6	1.6	24.8
Point Baker	1987	5.3		0.0	0.0	5.3
Point Baker	1996	0.0	12.5	0.0	0.0	0.0
Port Alexander	1987	0.0		0.0	0.0	0.0
Port Protection	1987	28.0		0.0	0.0	28.0
Port Protection	1996	8.0	8.0	0.0	0.0	8.0
Saxman	1987	21.3		3.3	3.3	17.9
Saxman	1999	8.2	1.4	0.0	0.0	8.2
Sitka	1987	0.3		0.3	0.0	0.0
Sitka	1996	12.3	4.5	2.8	4.1	9.8
Sitka	2013	11.9	1.7	0.0	0.9	11.9
Skagway	1987	14.5		0.0	0.0	14.5
Tenakee Springs	1984	16.7	0.0	0.0	0.0	16.7
Tenakee Springs	1987	9.7		0.0	0.0	9.7
Thorne Bay	1987	13.4		1.1	0.0	13.4
Thorne Bay	1998	9.0	3.4	0.0	1.1	9.0
Whale Pass	1987	11.1		5.6	0.0	5.6
Whale Pass	1998	0.0	0.0	0.0	0.0	0.0
Whale Pass	2012	0.0	9.5	0.0	0.0	0.0
Whitestone Camp	1996	0.0	0.0	0.0	0.0	0.0
Wrangell	1987	42.5		6.3	6.2	37.7
Wrangell	2000	31.6	17.3	6.1	9.2	25.5
Yakutat	1984	70.0	62.0	22.0	22.0	62.0
Yakutat	1987	53.9		12.7	16.3	43.5
Yakutat	2000	77.0	39.6	17.3	30.2	64.7
Yakutat	2015	75.2	48.5	19.8	31.7	64.4

WP20–16/17 Executive Summary	
General Description	Wildlife Proposal WP20-16 requests extending the sealing period for wolf trapping and removing language referencing a combined Federal-State harvest quota for wolves in Unit 2. *Submitted by: Southeast Alaska Subsistence Regional Advisory Council.* Wildlife Proposal WP20-17 requests extending the sealing period for wolf hunting, changing the hunting harvest limit to "no limit," and removing language referencing a combined Federal-State harvest quota for wolves in Unit 2. *Submitted by: Southeast Alaska Subsistence Regional Advisory Council.*
Proposed Regulation	WP20-16 **Unit 2 –Wolf Trapping** *No limit.* — *Nov. 15-Mar. 31.* *~~Federal hunting and trapping season may be closed when the combined Federal-State harvest quota is reached~~.* *Any wolf taken in Unit 2 must be sealed within ~~14 days of harvest~~* ***30 days of the end of the season.*** WP20-17 **Unit 2 –Wolf Hunting** *~~5 wolves~~* ***No limit****.* — *Sep. 1-Mar. 31.* *~~Federal hunting and trapping season may be closed when the combined Federal-State harvest quota is reached~~.* *Any wolf taken in Unit 2 must be sealed within ~~14 days of harvest~~* ***30 days of the end of the season.***
OSM Conclusion	**Support** Proposal WP20-16 and Proposal WP20-17.

WP20–16/17 Executive Summary	
Southeast Alaska Subsistence Regional Advisory Council Recommendation	**Support**
Northwest Arctic Subsistence Regional Advisory Council Recommendation	**Take No Action**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Support**
Written Public Comments	**1 Oppose**

STAFF ANALYSIS
WP20-16/17

ISSUES

Wildlife Proposal WP20-16, submitted by the Southeast Alaska Subsistence Regional Advisory Council (Council), requests extending the sealing period for wolf trapping and removing language referencing a combined Federal-State harvest quota for wolves in Unit 2.

Wildlife Proposal WP20-17, also submitted by the Council, requests extending the sealing period for wolf hunting, changing the hunting harvest limit to "no limit," and removing language referencing a combined Federal-State harvest quota for wolves in Unit 2.

DISCUSSION

The Alaska Board of Game (BOG) recently adopted a new harvest management strategy for wolves in Unit 2, resulting in misalignment of State and Federal regulations. The proponent states that their intent is to align State and Federal regulations, to implement the new harvest management strategy under Federal regulations, and to increase harvest opportunity. The proponent also states no conservation concerns or any effects on other uses are expected from adoption of these proposals.

Note: Wolves in Southeast Alaska are classified as a subspecies called the Alexander Archipelago wolf (*Canis lupus ligoni*) and will be referred to as Alexander Archipelago wolf/wolves throughout this analysis.

Existing Federal Regulation

Unit 2 –Wolf Hunting

5 wolves.	*Sep. 1-Mar. 31.*

Federal hunting and trapping season may be closed when the combined Federal-State harvest quota is reached. Any wolf taken in Unit 2 must be sealed within 14 days of harvest

Unit 2 –Wolf Trapping

No limit.	*Nov. 15-Mar. 31.*

Federal hunting and trapping season may be closed when the combined Federal-State harvest quota is reached. Any wolf taken in Unit 2 must be sealed within 14 days of harvest

Proposed Federal Regulation

WP20-16

Unit 2 –Wolf Trapping

No limit.	*Nov. 15-Mar. 31.*

~~Federal hunting and trapping season may be closed when the combined Federal-State harvest quota is reached~~. Any wolf taken in Unit 2 must be sealed within ~~14 days of harvest~~ ***30 days of the end of the season.***

WP20-17

Unit 2 –Wolf Hunting

~~5 wolves~~ ***No limit****.*	*Sep. 1-Mar. 31.*

~~Federal hunting and trapping season may be closed when the combined Federal-State harvest quota is reached~~. Any wolf taken in Unit 2 must be sealed within ~~14 days of harvest~~ ***30 days of the end of the season.***

Existing State Regulation

Unit 2−Wolf Hunting

Residents and Non-residents—5 wolves	*Dec. 1-Mar. 31*

Hides must be sealed within 30 days of kill.

Unit 2−Wolf Trapping

Residents and Non-residents—No limit.	*Nov. 15-Mar. 31*

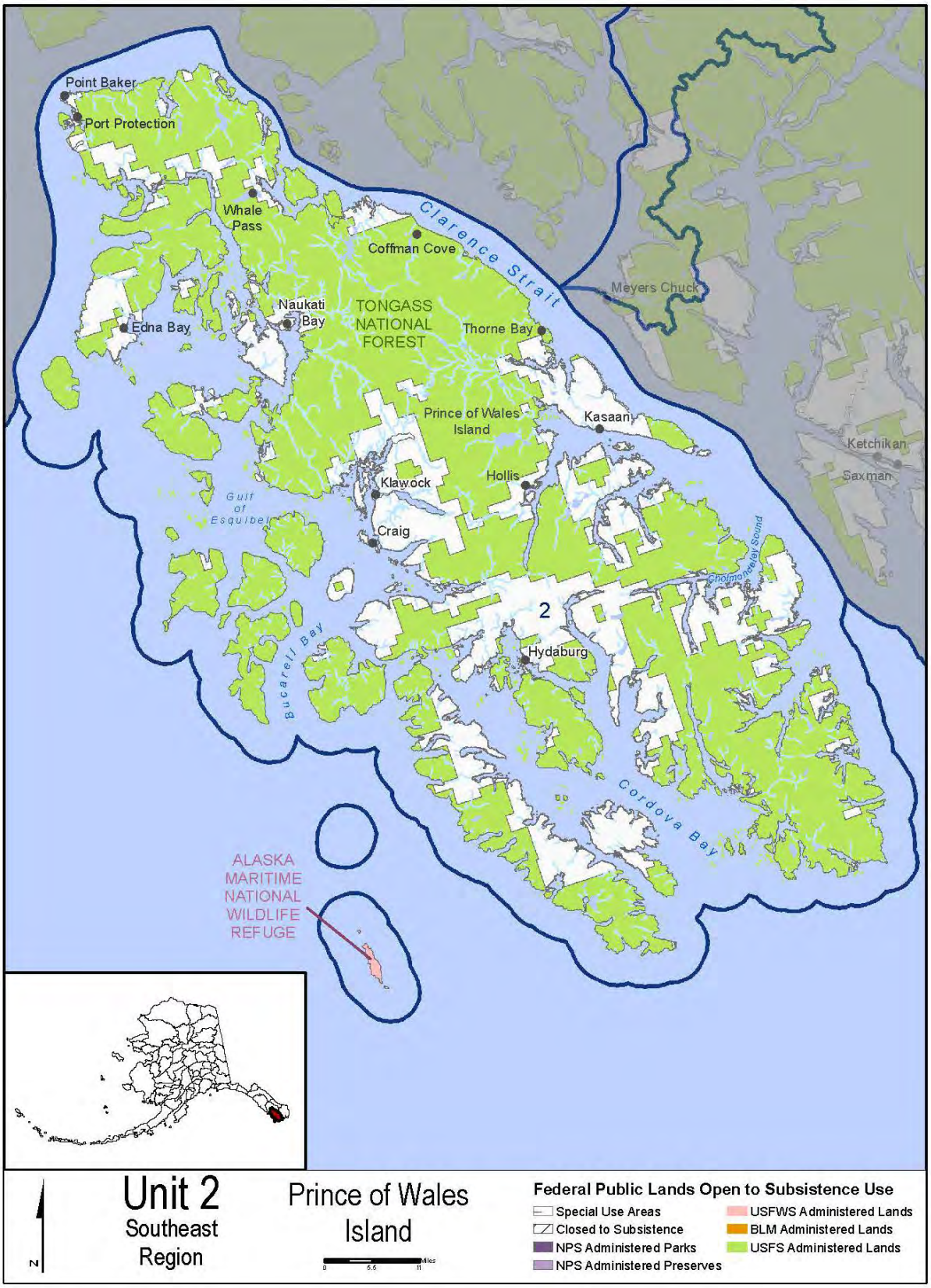
Hides must be sealed within 30 days after the close of the season.

Extent of Federal Public Lands

Unit 2 is comprised of 71.7% Federal public lands and consists of 71.6% USDA Forest Service (USFS) managed lands and 0.1% U.S. Fish and Wildlife Service (USFWS) managed lands (**Map 1**).

Customary and Traditional Use Determinations

The Federal Subsistence Board (Board) has not made a customary and traditional use determination for wolves in Unit 2. Therefore, all Federally qualified subsistence users may harvest wolves in Unit 2.


Point Baker
Port Protection
Whale Pass
Coffman Cove
Clarence Strait
Meyers Chuck
Naukati Bay
TONGASS NATIONAL FOREST
Edna Bay
Thorne Bay
Prince of Wales Island
Kasaan
Ketchikan
Saxman
Klawock
Hollis
Gulf of Esquibel
Craig
Cholmondeley Sound
2
Hydaburg
Bucarell Bay
Cordova Bay
ALASKA MARITIME NATIONAL WILDLIFE REFUGE
Unit 2
Southeast Region
Prince of Wales Island
Federal Public Lands Open to Subsistence Use
Special Use Areas
Closed to Subsistence
NPS Administered Parks
NPS Administered Preserves
USFWS Administered Lands
BLM Administered Lands
USFS Administered Lands

Map 1. Unit 2

Regulatory History

From 1915 through the early 1970s, the government paid a cash bounty for wolves in Southeast Alaska and during the 1950s, the Federal government poisoned wolves in the region to increase deer numbers (Porter 2018). Following the discontinuance of the wolf bounty program, wolf hunting and trapping regulations in Unit 2 remained the same until 1992 (Larsen 1994).

In 1990, Federal hunting and trapping regulations were adopted from State regulations. State and Federal trapping seasons were Nov. 10-Apr. 30 with no harvest limits, and State and Federal hunting seasons were year-round with no harvest limits.

Also in 1990, an interagency committee sponsored by the USFS had expressed concern about the viability of wolves in Southeast Alaska due to extensive timber harvesting on the Tongass National Forest (Porter 2018).

In 1992, the BOG restricted the State hunting season to Aug. 1-Apr. 30 and decreased the harvest limit to 5 wolves. The State hunting season has not changed since, and the State trapping season remained the same until 2019.

In 1993, the Biodiversity Legal Foundation and an independent biologist from Haines, Alaska petitioned the U.S. Fish and Wildlife Service (USFWS) to list the Alexander Archipelago wolf as a threatened subspecies pursuant to the Endangered Species Act (ESA) (Porter 2018).

In 1994, the Board adopted Proposal P94-02 to align the Federal wolf hunting season and harvest limit with the State hunting season (Aug. 1-Apr. 30 with a 5 wolf harvest limit).

In 1995 and 1997, the USFWS responded to the 1993 petition, finding the listing not to be warranted because the Alexander Archipelago wolf population appeared to be stable and because of a 1997 Tongass National Forest Management Plan, which identified a system of old-growth forest reserves geared toward conserving deer (primary prey of wolves) and, by extension, wolves (USFWS 1995, 2016, Porter 2003).

In 1997, the BOG implemented an annual Harvest Guideline Level (HGL) of 25% of the estimated Unit 2 fall wolf population (**Table 1**). The BOG established this maximum harvest level in response to a record and possibly unsustainable wolf harvest of 132 wolves in 1996 (Porter 2018). As the estimated wolf population was 350, the harvest quota was 90 wolves (see Biological Background section for sustainable harvest rates). The BOG also shortened the State hunting and trapping seasons to Dec. 1-Mar. 31 and required sealing within 30 days of harvest (Person and Logan 2012, Porter 2003).

Also in 1997, the Board adopted Proposal P97-08 to align Federal wolf hunting and trapping seasons and sealing requirements with the new State regulations. The Board also required that wolves must have the radius and ulna of the left foreleg naturally attached to the hide until sealing. Foreleg bone measurements are used as a proxy for wolf ages (pup, yearling, adult), providing population age structure and recruitment information.

In 1999, the Alaska Department of Fish and Game (ADF&G) closed the wolf season a month early (on February 29, 1999) because the HGL was predicted to be reached before the normal closing date (Person and Logan 2012, Bethune 2012, Porter 2003). Several new trappers worked Unit 2 in 1999 with good success, whereas historically only 3-4 trappers took more than 10 wolves each (Porter 2003).

In 2000, the BOG increased the HGL to 30% based on analyses indicating Unit 2 wolves experience low natural mortality (Porter 2018). The assumed wolf population was adjusted to 300 wolves, so the quota remained 90 wolves (Porter 2018).

In 2001, the Board adopted Proposal WP01-05 to shift both the hunting and trapping seasons from Dec. 1- Mar. 31 to Nov. 15- Mar. 15. The intent was to provide better access when less snow is on the ground and to coincide seasons with when wolf pelts are the most prime.

In 2003, the Board adopted Proposal WP03-10 with modification to extend the wolf hunting season from Nov. 15-Mar. 15 to Sept. 1-Mar. 31 to provide additional subsistence harvest opportunity, particularly during the fall deer hunting season and because wolf pelts prime early in Unit 2 (OSM 2003). The Board also delegated authority to the Craig and Thorne Bay District Rangers to close the Federal hunting and trapping season in consultation with ADF&G and the Chair of the Council when the combined Federal-State harvest quota is reached.

In 2007, the Board adopted Proposal WP07-15 with modification to change the closing date of the trapping season from March 15 to March 31 to provide more subsistence opportunity and to align the closing dates of State and Federal hunting and trapping seasons. The modification eliminated the requirement that wolves must have the radius and ulna of the left foreleg naturally attached to the hide until sealing.

In 2010, the BOG and the Board reduced the harvest quota to 60 wolves in response to a perceived decline in the wolf population (Porter 2018).

In 2011, the BOG changed the sealing requirement from 30 days to 14 days after harvest to help managers make quicker in-season management decisions (Bethune 2012).

Also in 2011, the Center for Biological Diversity and Greenpeace filed a second petition to list the Alexander Archipelago wolf as a threatened or endangered species under the ESA, including a request to consider Unit 2 wolves as a distinct population segment (DPS) (Porter 2018, Toppenberg et al. 2015).

In 2012, the Board adopted Proposal WP12-19 to change Federal sealing requirements to 14 days after harvest, aligning with State regulations. The Board shortened the sealing requirement to allow more efficient tracking of harvest to avoid exceeding harvest quotas.

From 2013-2018, ADF&G closed the Unit 2 wolf season early by emergency order because harvest quotas were expected to be met (**Table 1**). In 2014, ADF&G further reduced the harvest quota to 25 wolves based on recent population estimates (Porter 2018).

In 2015, the BOG revised the HGL to 20% in response to decreased population estimates and high estimates of unreported mortality (Porter 2018). As an additional conservation measure to account for unreported harvests and to address concerns about a declining population and potential listing under the ESA, State and Federal managers reduced the harvest quota by 50% (10% HGL) in 2015 and 2016 (**Table 1**) (SERAC 2017).

Also in 2015, the Board rejected Special Action Request WSA15-13 to close the Federal wolf hunting and trapping seasons for the 2015/16 regulatory year to all users. The Board determined the closure was not warranted for either conservation concerns or continuation of subsistence uses, but noted that ADF&G and the USFS had established a very conservative harvest quota for the year.

In January 2016, the USFWS issued another "not warranted" finding in response to the 2011 ESA petition as the Alexander Archipelago wolf appeared stable and viable across most of its range (USFWS 2016, Porter 2018). Additionally, the USFWS determined that Unit 2 wolves did not meet the criteria for a DPS designation (persisting in a unique ecological setting, marked genetic differences, comprising a significant portion of the range) (USFWS 2016, Porter 2018).

In 2018, the Board rejected WP18-04 to increase the HGL to 30% under Federal regulations. The Council had submitted the proposal because it believed previous quotas were too conservative and did not accurately reflect the Unit 2 wolf population. The Board rejected the proposal due to conservation concerns over unsustainable harvests as well as concerns about the difficulty of State and Federal managers implementing separate quotas, which would also create confusion among users (FSB 2018). However, the Board expressed desire for the USFS and ADF&G to work together to find a sustainable solution to the Unit 2 wolf issue (FSB 2018).

In October 2018, the Board issued a new delegation of authority letter to the in-season managers of Unit 2 wolves. The new letter stated that the in-season managers could close, reopen, or adjust the Federal hunting and trapping season for wolves in Unit 2. Coordination with ADF&G, OSM, and the Council Chair is required.

In 2018, the BOG received three proposals for Unit 2 wolves for the 2018/19 regulatory cycle (effective July 1, 2019). The Council submitted Proposal 42 to increase the HGL to 30%. ADF&G submitted Proposal 43 to change the harvest management strategy from using HGLs to meeting specified population objectives. Proposal 43 also proposed changing the sealing requirement for the State trapping season to 30 days after the close of the season as the new management strategy would not depend on in-season harvest management (ADF&G 2019d). The Craig Fish and Game Advisory Council (Craig AC) submitted Proposal 44 to change the opening date of the wolf trapping season from Dec. 1 to Nov. 15, which would align with the Federal trapping season opening date. The Council and ADF&G had identified the need for population objectives for Unit 2 wolves to clarify and

direct management and that population objectives should be set through a transparent, public process (Porter 2018, SERAC 2017). The Council withdrew Proposal 42 in support of Proposal 43.

In January 2019, the BOG adopted Proposal 43 as amended, which had overwhelming support from five ACs and the public (SERAC 2019, ADF&G 2019d). The BOG established the population objective range for Unit 2 wolves as 150-200 wolves (see Biological Background section) (ADF&G 2019a). The BOG also adopted Proposal 44, extending the State trapping season to align with the Federal season.

Table 1. Management data for Unit 2 wolves using the Harvest Guideline Level (HGL) management strategy (Schumacher 2019, pers. comm., ADF&G and USFS 2019).

Regulatory Year	Population Estimate*	Harvest Guideline level (HGL %)	Harvest Quota	Reported Harvest	Date closed by State Emergency Order (EO)
1996				132	
1997	360	25	90	78	
1998	360	25	90	91	
1999	360	25	90	96	Feb. 29
2000	300	30	90	73	
2001	300	30	90	62	
2002	300	30	90	64	
2003	300	30	90	33	
2004	300	30	90	77	
2005	300	30	90	60	
2006	300	30	90	38	
2007	300	30	90	36	
2008	300	30	90	24	
2009	300	30	90	22	
2010	200	30	60	28	
2011	200	30	60	28	
2012	200	30	60	52	
2013	200	30	60	57	Mar. 19
2014	221	30	25	29	Feb. 22
2015	89	20	9	7	Dec. 20
2016	108	20	11	29	Dec. 21
2017	231	20	46	61	Dec. 16
2018	225	20	45	44	Dec. 18/21**
2019	170	n/a	n/a	--	Jan. 15***

* Population estimates from 1997-2013 were assumed estimates based on harvest levels and a 1994 population estimate. Population estimates from 2014-2018 are from DNA-based spatially explicit capture-recapture studies (see Biological Background section).
** Season closed by EO on Dec. 18, but reopened to Dec. 21 because bad weather prevented trappers from recovering gear.
***Season closing date announced according to the new harvest management strategy.

Current Events

The Council submitted Wildlife Special Action Request WSA19-02 to extend the sealing period for wolf hunting and trapping and to remove language referencing a combined Federal-State harvest quota for wolves in Unit 2 for the 2019/20 regulatory year. The proposed changes mirror the requests of Proposals WP20-16/17 with the exception of changing the hunting harvest limit to "no limit." In August 2019, the Board approved WSA19-02, stating that the new management strategy should help ensure a sustainable population and encourage better harvest reporting. The Board also stated that announcing predetermined season lengths provides predictability to users and renders the in-season sealing requirement unnecessary.

In late October 2019, ADF&G and the USFS announced that 2019/20 State and Federal hunting and trapping seasons for wolves in Unit 2 will close on January 15, 2020, resulting in a two month trapping season. This is in response to a unit-wide population estimate of 170 wolves. Under the new harvest management strategy, when the most current population estimate (170 wolves) is within the objective range (150-200 wolves), the trapping season may be up to two months long (see Biological Background for more information on the new harvest management strategy) (ADF&G and USFS 2019).

Biological Background

Unit 2 wolves are part of the Alexander Archipelago wolf subspecies, which ranges from coastal British Colombia north to Yakutat, Alaska and includes the islands in Southeast Alaska, excluding Unit 4 (USFWS 2015). Alexander Archipelago wolves tend to be smaller with shorter hair than continental wolves and can be genetically differentiated (USFWS 2015, Porter 2018). Using the best available data and modeling, USFWS (2015, 2016) estimated that the 2013 and 2014 Unit 2 wolf population comprised 13% (130-378 wolves) and 6% (50-159 wolves) of the total Alexander Archipelago wolf population (865-2,687 wolves), respectively. Because of the relatively high density of prey available, the islands of Unit 2 have long been assumed to support the highest densities of wolves in the state (Porter 2018). Indeed, USFWS (2015) notes that even the low, 2014 wolf density estimates for Unit 2 (9.9 wolves/1,000 km^2) are not particularly low by most standards for Northern wolf populations (Fuller et al. 2003).

State management objectives for Unit 2 wolves include (Note: State objectives were updated in 2019 after the BOG adopted Proposal 43, and are not currently published in any ADF&G management reports) (Schumacher 2019, pers. comm.):

- Manage harvest to meet a population objective of 150-200 wolves.

From 1997 (when the HGL management strategy was implemented) through 2013, Unit 2 wolf abundance was uncertain, and managers based decisions (e.g. harvest quotas) on assumed population levels, sealing records, and a 1994 population estimate (SERAC 2019, ADF&G 2019b, Porter 2003). Person and Ingle (1995) used a simulation model using radio-collared wolf data collected for a graduate research project to estimate 321 wolves and 199 wolves inhabited Unit 2 in fall 1994 and spring 1995, respectively (Porter 2003). The smaller spring estimate reflects overwinter mortality,

primarily from trapping (Porter 2003). Between 1998 and 2002, Porter (2003) assumed the Unit 2 wolf population had remained relatively abundant because of consistently high harvests, which provide a population index.

Since 2013, ADF&G in cooperation with the USFS, the Hydaburg Cooperative Association, and The Nature Conservancy have employed a DNA-based spatially explicit capture-recapture (SECR) method to estimate Unit 2 wolf abundance (SERAC 2019, ADF&G 2019b). This method has been found to be the most robust and least biased method of estimating wolf populations in forested habitats (Roffler et al. 2016). The study uses hair boards equipped with scent lure to attract wolves and with barbed wire to obtain hair samples that can be sent to a lab for DNA analysis. Samples are collected from mid-October through December and lab results are usually received in late July (SERAC 2019, ADF&G 2015). Thus, harvest management decisions are made with last year's wolf population estimate. While these surveys and population estimates are currently conducted annually, they are expensive and labor intensive. Therefore, ADF&G will likely transition to conducting population estimates every 2-3 years in the future (ADF&G 2019d).

Between 2013 and 2019, Unit 2 wolf population estimates have ranged from 89-231 wolves (**Table 1, Figure 1**) (Schumacher 2019, pers. comm.). While the point estimates for the first two years differ drastically, statistically, no difference exists between the two estimates due to overlapping confidence intervals. As the study progressed, more hair boards were deployed, more wolves were recaptured in subsequent years, and staff became more skilled at handling samples, resulting in tighter 95% confidence intervals. The wolf population estimate increased significantly between 2016 and 2017. The most recent 2019 estimate is 170 wolves, with 95% confidence intervals of 147-202 wolves (ADF&G and USFS 2019). In addition to SECR population estimates, local hunters and trappers have expressed seeing many more wolves in recent years (SERAC 2017, 2018).

Carroll et al. (2014) considered wolf populations <150-200 individuals as small, and USFWS (2015) notes that most minimum viable population estimates for gray wolves range between 100 and 150 wolves. However, despite the comparatively small size and insularity of the Unit 2 wolf population, inbreeding probably is not affecting it (Breed 2007, USFWS 2015).

Natural causes account for only 4% of the annual mortality of the Unit 2 wolf population, while human-caused mortality accounts for the remainder (Person and Russell 2008, Wolf Technical Committee 2017). Person and Russell (2008) studied 55 radio-collared wolves in Unit 2 from 1993-2004, and 39 wolves (71%) were killed by humans, while only 5 (9%) died from natural causes. Similarly, ADF&G collared an additional 12 wolves from 2012-2015, and 8 (67%) were killed by humans, while only 1 (8%) died from natural causes (USFWS 2015). However, these studies took place in roaded portions of Unit 2 where harvest is higher, so human-caused mortality rates may be somewhat inflated (USFWS 2015).

Wolves are remarkably resilient to high levels of harvest and human activities due to their high potential annual productivity and long dispersal abilities (USFWS 2015, Weaver et al. 1996). If sufficient prey is available, wolves can rapidly repopulate areas depleted by hunting and trapping

(USFWS 2015, Ballard et al. 1987). However, due to differences in wolf population characteristics (e.g. sex/age structure), a universal, sustainable human-caused mortality rate does not exist, and the Unit 2 wolf population may be particularly vulnerable to overexploitation due to its insularity and lack of immigration (USFWS 2015, Wolf Technical Committee 2017). Person and Russell (2008) reported that a >38% total annual mortality rate for Unit 2 wolves was likely unsustainable based on past harvest rates and population estimates. The Regional Wildlife Supervisor for Southeast Alaska, ADF&G stated that other wolf research and the scientific literature indicate that a healthy wolf population can sustain 30% annual mortality (SERAC 2017). Additionally, wolf harvest records indicate neither offering a cash bounty nor poisoning wolves during the early 20th century had any lasting effects on wolf abundance or distribution on Southeast Alaska islands (Porter 2018).

Alexander Archipelago wolves start breeding at 22-34 months of age, and litter sizes range from 1-8 pups, averaging 4.1 pups (USFWS 2015, Person et al. 1996, Person and Russell 2009). Person and Russell (2008) reported survival rates for Unit 2 wolves > 4 months of age as 0.54 between 1993 and 2004 (USFWS 2015). Den use occurs from mid-April through early-July after which pups are relocated to rendezvous sites usually <1 km from their den where they remain until October (USFWS 2015, Person and Russell 2009). Pack sizes on Prince of Wales Island (POW) average 7.6 wolves in the fall and 4.0 wolves in the spring, and home range sizes average 535 km^2, which is a quarter of the size estimated for wolves on the northern mainland of southeastern Alaska (ADF&G 2015d as cited in USFWS 2015).

New Harvest Management Strategy

Unit 2 is a good place to implement population objectives because there is very little dispersal into and out of the unit (ADF&G 2019d). The new wolf management strategy consists of four zones (**Figure 2**). Zone 1 sets the minimum wolf population threshold at 100 wolves and seasons would remain closed until the wolf population recovers. Zone 2 is the conservation zone where the wolf population is estimated between 100-149 wolves, and seasons of up to six week provide limited harvest opportunity and a buffer to recover the population before it declines into Zone 1. Zone 3 sets the population objective range at 150-200 wolves. This is the desirable zone, and harvest would occur during seasons of up to eight weeks. When the population is in Zone 3, SECR population estimates would only be conducted every 2-4 years. Zone 4 is the over-objective zone where wolf numbers exceed 200, and seasons of up to 4 months would be geared toward population reduction (ADF&G 2019b). An issue with this new strategy is the one year time lag in obtaining population estimates. For example, if the wolf population was in Zone 1, an additional trapping season would occur prior to managers learning this (ADF&G 2019b, 2019c). However, the HGL management strategy also announced harvest quotas based on population estimates that were at least one year old and, prior to 2014, were assumed estimates (**Figure 1**). State and Federal managers will announce season lengths annually before November 15, which is the opening date for Federal and State trapping seasons (Schumacher 2019, pers. comm.).

Setting these population objectives incorporated biological as well as social concerns as various user groups have strong and differing opinions about wolves in Unit 2 (e.g. subsistence deer hunters view

wolves as competitors, ESA petitioners view wolves as threatened) (SERAC 2017, 2018, Wolf Technical Committee 2017, ADF&G 2019d). They also included traditional knowledge. The Craig Tribal Association testified that the USFS determined 150-200 wolves as a sustainable range after talking with local and traditional knowledge holders on POW (SERAC 2017). Similarly, a working group of the Council also thought the population objective range should be 150-200 wolves, which is the range the BOG adopted (SERAC 2017).

Stressors

Unit 2 wolves experience numerous stressors, including harvest, logging, road development, and climate-related events (USFWS 2015, Porter 2018). In their comprehensive status assessment for the Alexander Archipelago wolf, the USFWS (2015) determined the Unit 2 wolf population to have low resiliency due to high rates of unreported harvest, high rates of timber harvest with detrimental effects on deer, high insularity (little immigration or emigration), and high levels of boat and road access for hunters and trappers.

The presence of wolves in an area is closely linked with prey availability (USFWS 2015). While Unit 2 wolves feed on a variety of species including beavers and salmon, deer are their primary prey (USFWS 2015, Porter 2018). Both the comprehensive conservation assessment (Person et al. 1996) and the species status assessment (USFWS 2015) prepared in response to the 1993 and 2011 ESA listing petitions, respectively, identified maintaining deer populations as a primary conservation measure for Alexander Archipelago wolves (Porter 2018). Wolf abundance may be especially linked to deer abundance and availability in Unit 2 where other ungulate prey species (e.g. moose, elk, caribou) are not present (USFWS 2015).

Deer are primarily limited by habitat rather than by predation (SERAC 2017, USFWS 2015). In Unit 2, deer habitat is adversely affected by industrial-scale logging of old-growth forests, which has occurred in the unit since the 1950s and peaked in the 1980s (USFWS 2015). Clearcut logging has been the primary timber harvesting method and, as of 2015, 23% of forests in Unit 2 were logged (Shanley 2015 as cited in USFWS 2015). Albert and Schoen (2007) modeled deer habitat capability in Unit 2 for two time periods (1954 and 2002), determining it to have lost 38% and 11% of its habitat value in northern and southern POW, respectively (USFWS 2015). USFWS (2015, 2016) predict that past timber harvest in Unit 2 will result in 21-33% declines in the deer population and 8-14% declines in the wolf population over the next 30 years, with future timber harvest exacerbating these declines. However, in 2014 (most recent information available), the Unit 2 deer population appeared to be stable to slowly increasing (Bethune 2015). USFWS (2016) states the rate of future timber harvest is difficult to project.

Declines in understory vegetation correspond with decreased deer carrying capacity (USFWS 2015). Severe (deep snow) winters often result in deer population declines (e.g. Brinkman et al. 2011), and these effects are exacerbated by loss of old-growth forests. Old-growth forests have multi-layered canopies that intercept snow and moderate temperature and wind, providing shelter for and facilitating movements of deer in the winter (USFWS 2015, Porter 2018). They also maintain diverse understories that provide continuous forage for deer (USFWS 2015). Conversely, clearcuts may

temporarily provide deer with winter forage, but this forage can be buried during winters with deep snow (Porter 2018). The initial flush of forbs and shrubs in clearcuts provide deer with lower-quality forage, and regenerating trees shade out the understory vegetation after 20-35 years (Porter 2018, USFWS 2015). As Unit 2 timber harvest peaked in the 1980s, many stands are entering the successional stage that is very poor deer habitat (USFWS 2015).

In addition to altering the habitat of their primary prey species, logging also impacts Unit 2 wolves by constructing roads that provide relatively easy access for hunters and trappers into previously remote areas (Porter 2018, USFWS 2015). Person and Russell (2008) found roads clearly increased risk of death for POW wolves from hunting and trapping and contributed to unsustainable harvest rates. They also determined road density to be an important predictor of harvest up to 0.9 km of road per square kilometer (km/km^2). Above this threshold, increased road density did not correspond to increased harvest rates. Mean road density in Unit 2 is 0.62 km/km^2, ranging from 0-1.57 km/km^2 (Albert 2015 as cited in USFWS 2015). Person and Logan (2012) believe harvest from the densely roaded northcentral and central portions of POW are frequently unsustainable. The USFS aims to shift timber harvest to regenerating stands and away from old-growth stands, which also allows for the use of existing roads as opposed to constructing new ones (USFWS 2015, 2016).

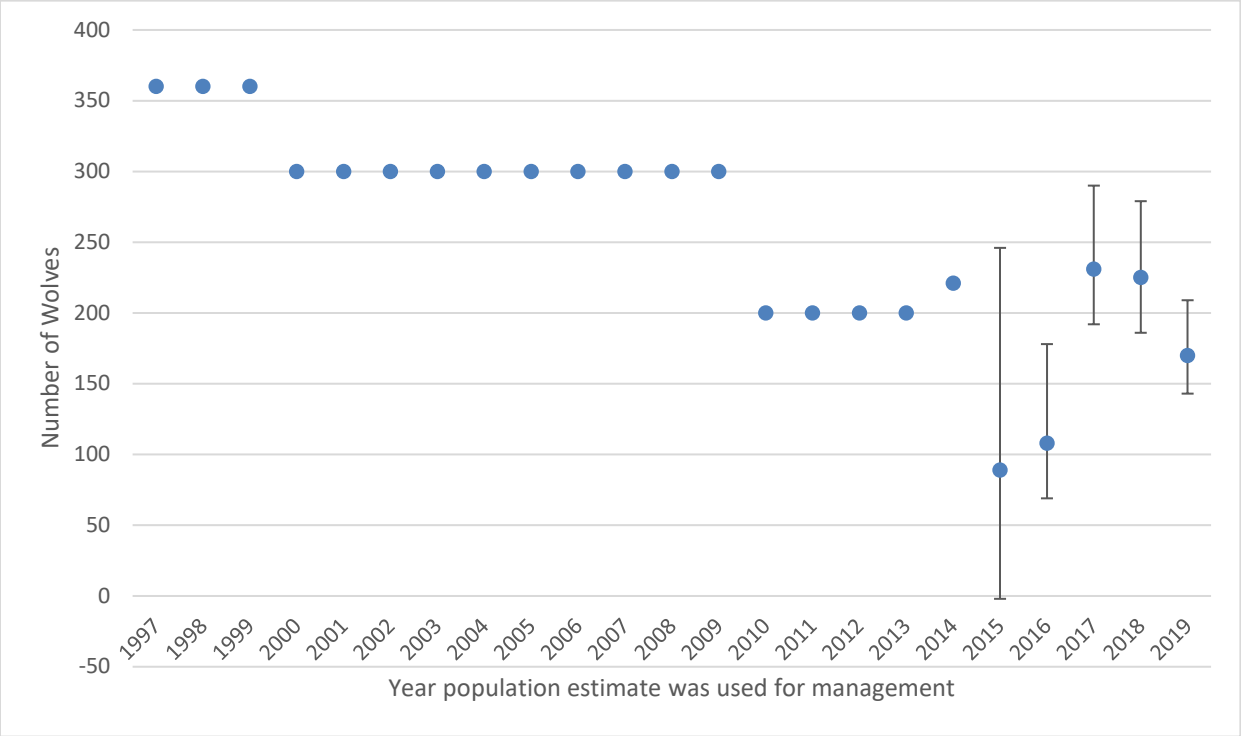


Figure 1. Unit 2 wolf population estimates, 1997-2018. Estimates from 1997-2013 are assumed from sealing records and a 1994 population estimate. Estimates from 2014-2018 are from a DNA mark/recapture study. The error bars represent 95% confidence intervals. Estimates take a year to determine; thus the population estimate for 2014 was used to set 2015 harvest quotas. The population estimates in this graph reflect the one year time lag (e.g. the 2015 population estimate actually reflects wolf numbers during fall 2014, but was used to set harvest quotas for the 2015 season) (Schumacher 2019, pers. comm., ADF&G and USFS 2019).

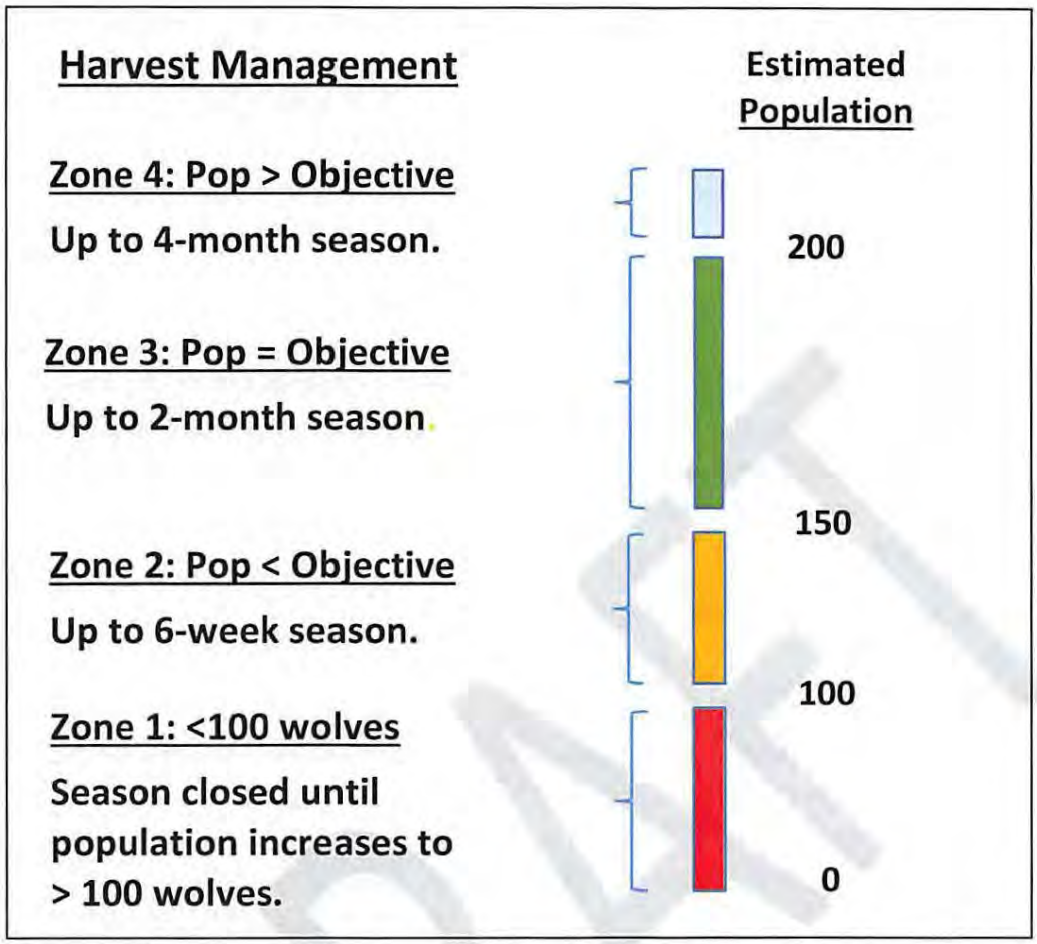


Figure 2. Population thresholds and harvest management strategies for the Unit 2 wolf population. The BOG adopted population objectives of 150-200 wolves in 2019 (figure from ADF&G 2019b).

Cultural Knowledge and Traditional Practices

Wolves were traditionally harvested for furs and hides throughout their range in Southeast Alaska (ADF&G 2008). Historically the fur of this species was used in making ceremonial masks, blankets, robes, and other articles of clothing (ADF&G 2008). The furs and hides were traded between communities and with other regions of the state (De Laguna 1972, Oberg 1973, Petroff 1884).

Wolves also occupy an important symbolic role in both Tlingit and Haida cultures. Tlingit society is divided into two moieties, which include the Raven and Eagle/Wolf (Emmons 1991). Within the moieties, several clans claim wolves as symbols or crests (Swanton 1909). Members of wolf clans ceremonially address wolves as relatives and believe the animals embody their ancestors (ADF&G 2008). These relationships are similar within the Haida culture, although the wolf is claimed by the Raven rather than the Eagle moiety (Blackman 1998).

Traditionally, wolves were harvested in the late fall and early winter because the fur was considered prime during these seasons and there was no deep snow to restrict travel (ADF&G 2008). Trapping usually started in November and continued through December, and was accomplished with snares and

deadfalls set across game trails frequented by wolves (ADF&G 2003, ADF&G 2008, De Laguna 1972, Goldschmidt and Haas n.d. [1946], Goldschmidt and Haas 1998, Oberg 1973). Families built and maintained trapping cabins in remote areas exhibiting high furbearer abundance and placed them in accordance with clan ownership rights (Goldschmidt and Haas 1998). Harvest areas were traditionally owned by clans that were inherited through family lineages (ADF&G 2008). The wolf's mythical and symbolic nature within Tlingit culture resulted in great care and respect being shown to both the living and harvested members of this species (ADF&G 2008). Wolves were not normally eaten, except as a famine food (ADF&G 2008).

Preparation of animal skins was traditionally assigned to women in both Tlingit and Haida cultural groups (Blackman 1998, Emmons 1991). The order of value among available furs within the Tlingit culture was sea otter, marten, beaver, river otter, black fox, mink, wolverine, wolf, and bear (Oberg 1973). Wolves contemporarily retain cultural value, and wolf harvest, sharing, and use have been recently documented in many areas of Southeast Alaska (ADF&G 2008). Wolf fur continues to be used in Native handicrafts such as blankets, ceremonial robes, winter coat ruffs, and art, but are also sold to commercial fur traders (ADF&G 2008).

Though wolves traditionally and contemporarily play important cultural and economic roles within Southeast Alaska, wolves are also now seen as a direct competitor for an important subsistence food source in Unit 2 – deer (Wolf Technical Committee 2017). Wolves also present other considerations for area residents including their role in both consumptive and non-consumptive tourism, as a top predator within the ecological system, and as a potential threat to humans and pets. It is believed that improving forage production within young-growth stands that are near areas preferred for human hunting of deer will help to alleviate some of the human-wolf-deer tensions in Unit 2 (Wolf Technical Committee 2017).

Harvest History

From the 1950s through the mid-1990s, wolf harvest in Unit 2 increased in conjunction with a growing human population and increased road access associated with the logging industry, peaking at 132 wolves in 1996 (**Figure 3**) (Porter 2018). Since 1996, trapper numbers in Unit 2 have generally been declining, possibly due to an aging trapper pool and a human population that is decreasing in response to fewer timber-related jobs (Bethune 2012). Between 1997 and 2018, total trapper numbers in Unit 2 ranged from 4-26 trappers per year, averaging 14.5 trappers per year (Schumacher 2019, pers. comm., Porter 2018). Over the same time period, trappers living in Unit 2 accounted for 60-100% of the annual Unit 2 wolf harvest, averaging 89% (Schumacher 2019, pers. comm., Porter 2018). Most of the non-local resident harvest is by residents of adjacent communities, including Ketchikan, Petersburg, Wrangell, and Sitka (Schumacher 2019, pers. comm.). (Note: As there is no customary and traditional use determination for wolves in Unit 2, all rural residents are Federally qualified subsistence users. Ketchikan and Juneau are the only non-rural communities in Southeast Alaska).

Between 1997 and 2018, average catch per trapper ranged from 1.8-5.5 wolves per trapper, averaging 3.4 wolves per trapper (Schumacher 2019, pers. comm., Porter 2018, Porter 2003). However, in most

years, just 2-3 skilled trappers harvest most of the wolves (Schumacher 2019, pers. comm.). Between 1996 and 1998, ADF&G conducted household harvest surveys in all POW communities (ADF&G 2019e). The larger communities of Klawock and Craig accounted for 80% of the POW wolf harvest, and <.05% of the POW population attempted to harvest wolves (ADF&G 2019e).

Unit 2 wolf harvest is primarily monitored through mandatory sealing of pelts (Porter 2018). Harvest primarily occurs on non-Federal lands, including tide lands (ADF&G 2019d, SERAC 2017, Person and Logan 2012). Most wolves are harvested under a combination hunting/trapping license (Schumacher 2019, pers. comm.). The only wolves known to be taken under a hunting license are harvested from Sept. 1-Nov. 14 during the Federal hunting season, but before State and Federal trapping seasons open (Schumacher 2019, pers. comm.). In Unit 2, wolves can be harvested with a firearm under a trapping license under both State and Federal regulations.

Since 1997 when the HGL was initiated (see Regulatory History), annual reported wolf harvest has ranged from 7-96 wolves, averaging 50 wolves (**Figure 3**) (Schumacher 2019, pers. comm.). The annual harvest quota has been exceeded five times (**Table 1**). Most wolves are harvested using traps and relatively few are shot. Between 1997 and 2018, 21%, 53%, and 25% of harvested wolves were shot, trapped, and snared, respectively (Schumacher 2019, pers. comm., Porter 2018, Bethune 2012).

Most of the wolf harvest in Unit 2 occurs in January and February when pelts are most prime and fur prices are highest (Porter 2018). Since 2015, most of the wolf harvest has occurred in December because seasons have closed early by emergency order (ADF&G 2019c). Little harvest occurs before December (Porter 2018, SERAC 2017). Between 1997 and 2014, 60% of wolf harvest occurred in January and February on average (Schumacher 2019, pers. comm., Porter 2018, Bethune 2012). Over the same time period, 3% of wolves were harvested before December on average. Between 2015 and 2018, 32% of wolves were harvested before December on average due to seasons closing early (Schumacher 2019, pers. comm., Porter 2018, Bethune 2012).

Unreported human-caused mortality includes wounding loss, illegal harvest, and vehicle collisions. As part of an ADF&G research program, Person and Russell (2008) estimated unreported human-caused mortality as 47% of total human-caused mortality based on a study of 55 radio-collared wolves in which 16 of 34 human-caused wolf kills were unreported. Most of the unreported kills were either shot out of season or killed during open seasons and not reported (Person and Russell 2008). Later in the research program, ADF&G reported three of eight radio-collared wolves that died during their study were not reported, suggesting 38% of human-caused wolf kills are unreported (USFWS 2015, Schumacher 2019, pers. comm.). Thus, unreported harvest accounts for a substantial portion of wolf harvest in Unit 2, which likely resulted in unsustainable harvests in some years (**Figure 4**) (USFWS 2015, 2016). USFWS (2016) estimated mean total (reported and unreported) annual harvest as 29%, ranging from 11-53%, and concluded that harvest has impacted the Unit 2 wolf population. However, unreported harvests are implicitly accounted for with the new management strategy as management is based on population estimates and objectives rather than on harvest quotas and reported harvests.

USFWS (2015) notes harvest may explain most of the 2013-2014 population decline if unreported harvest is considered. Relatively easy boat and road access may contribute to high rates of unreported harvest in Unit 2, while the insularity of the population makes it more susceptible to overharvest (USFWS 2015). However, as few wolves in Unit 2 are currently radio-collared, documenting unreported human-caused mortality is difficult and accounting for it when setting harvest quotas was a contentious issue (Porter 2018). Additionally, testimony from Federally qualified subsistence users to the Council indicates high levels of illegal harvest is not occurring (SERAC 2017).

In 1999, the wolf season closed early by emergency order for the first time. Afterward, annual reported harvest declined substantially (Person and Logan 2012, Bethune 2012). Similarly, Porter (2003) notes that the number of successful trappers averaged 17 per year from 1999-2001, which was well below the 10-year average of 27 successful trappers per year. Between 2002 and 2014, the number of successful trappers averaged 12 trappers per year (Porter 2018). The threat of early season closures likely discourages hunters and trappers from reporting their harvests, and harvest data after 1999 may be less accurate than harvest data prior to 1999 (Person and Logan 2012). Prior to the public meeting for WSA19-02, a wolf trapper from POW mentioned he would wait until the 14th day to seal his wolf pelts in an effort to extend the wolf season.

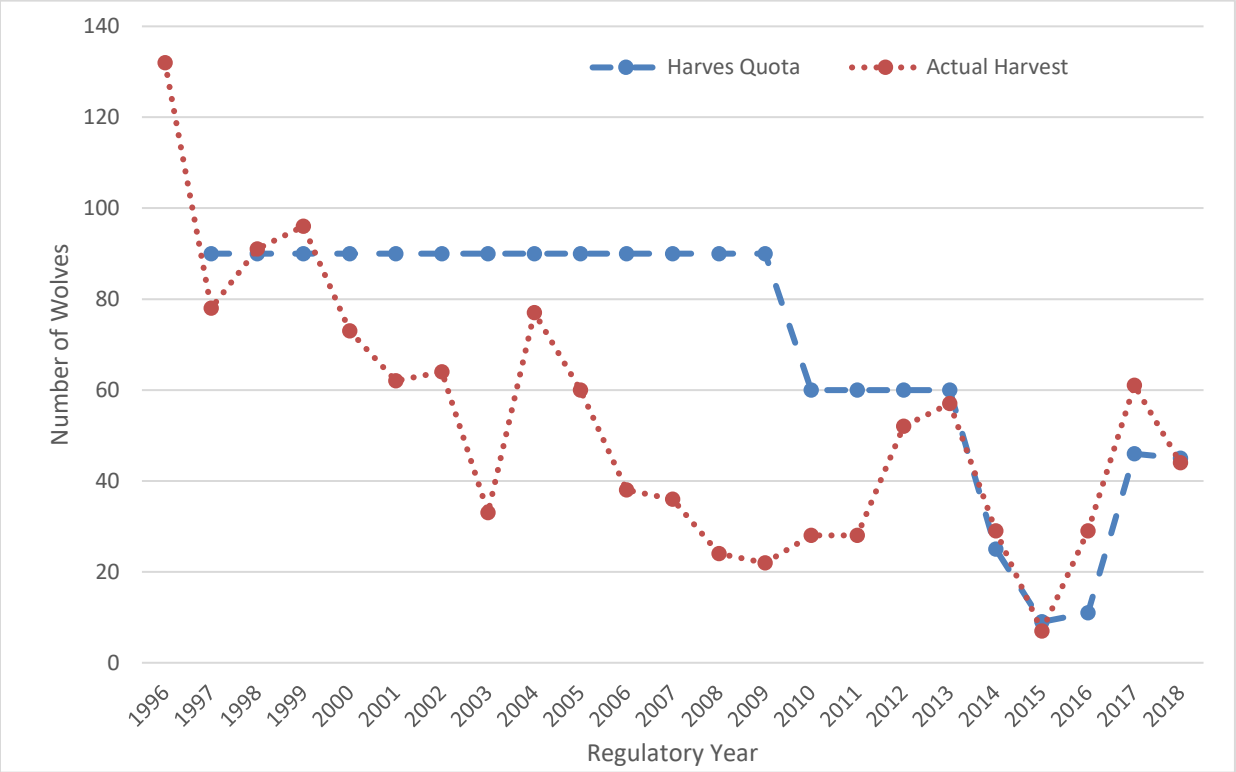


Figure 3. Unit 2 reported wolf harvest and harvest quotas, 1996-2018. Harvest includes reported harvest and other documented human-caused mortality (e.g. vehicle collisions) (Schumacher 2018, pers. comm., Porter 2018).

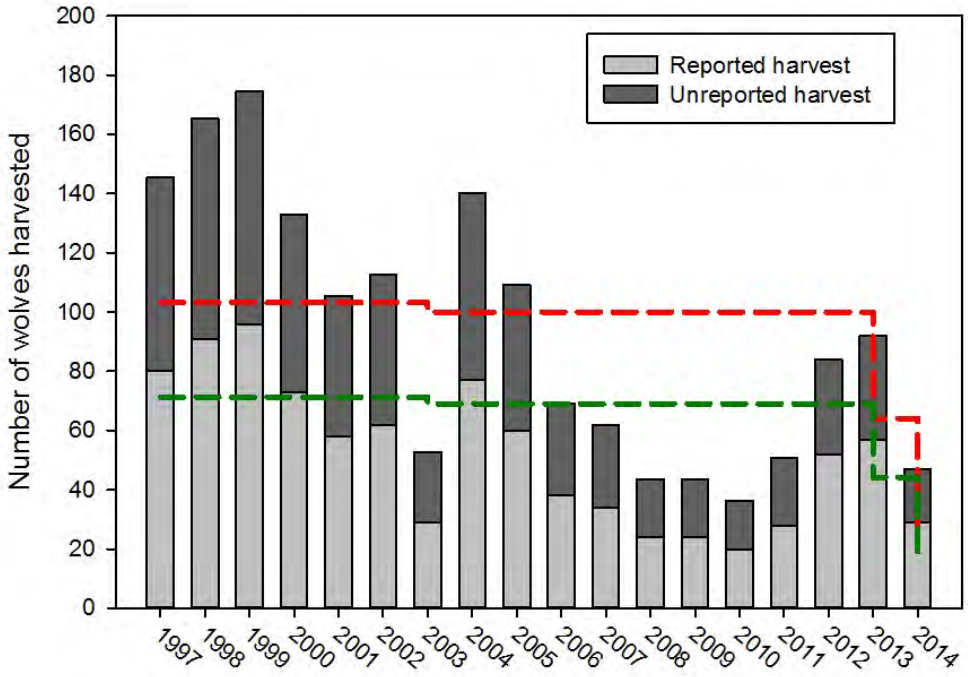


Figure 4. Estimated total number of wolves harvested by regulatory year in Unit 2, 1997-2014. Unreported harvest was estimated using a rate of 0.45 of total harvest from 1997-2011 (Person and Russell 2008) and a proportion of 0.38 of total harvest from 2012-2014 (ADF&G 2015a as cited in USFWS 2015). The green and red dotted line indicates 20% and 30% HGL, respectively (figure from USFWS 2015).

Effects of the Proposal

If the Board adopts Proposals WP20-16/17, the sealing requirement will be extended to 30 days after the end of the season, the combined Federal-State harvest quota will be eliminated, and the hunting harvest will become "no limit." Extending the sealing requirement will align with the new sealing requirement for the State trapping season, but does not align with the State hunting season. Also, subsistence users will be able to seal all of their wolf pelts at once rather than sealing them piece meal throughout the season. Extending the sealing requirement should have no effect on wolf harvest or abundance since the new management strategy depends on population objectives rather than on in-season harvest tracking (ADF&G 2019d).

Changing the hunting harvest limit to "no limit," increases harvest opportunity for Federally qualified subsistence users, but will likely have little effect on harvest and the wolf population. Most trappers in Unit 2 average less than 5 wolves per year, and only 2-3 skilled trappers typically account for most of the Unit 2 wolf harvest (Schumacher 2019, pers. comm., Porter 2018, 2003). Additionally, few wolves in Unit 2 are taken under a hunting license and an unlimited number of wolves can already be harvested with a firearm under a trapping license. Therefore, the increased harvest opportunity would occur Sept. 1-Nov. 14 as the trapping season opens on November 15. While wolf pelts have been reported to prime early in Unit 2 (OSM 2003), the quality of a pelt harvested in September is questionable, although shorter fur is sometimes preferred for skin sewing. While the Southeast

Council did not provide specific justification for why the increased hunting harvest limit was necessary in their proposal, the Council clarified at its Fall 2019 meeting that they think trapping and hunting harvest limits should be the same. Furthermore, as only a small number of people take wolves under a hunting license, there is no conservation concern.

An issue identified with the HGL management strategy was that it focused only on the percentage of wolves to harvest and not on how many wolves should be in the population. Without population objectives, State and Federal managers had to decide when the population was too low or too high, whereas population objectives determined through a public process such as BOG proposals clarifies goals, providing guidance to managers and building buy-in among stakeholders (SERAC 2019, ADF&G 2019b, 2019d). Specifically, establishing population objectives provides managers with a quantitative benchmark to gauge successful management, helps guide habitat management and regulatory planning, and mitigates disagreements between stakeholders over what is a sustainable wolf population (Wolf Technical Committee 2017, ADF&G 2019d).

Additionally, the HGL management strategy discouraged hunters and trappers from reporting harvest to prevent the season from closing early. Early season closures also created hardships for trappers who could not plan for when they needed to pull traps. In 2018, the wolf season closed by emergency order on December 18, but was reopened until December 21 due to bad weather that prevented trappers from pulling their traps. Managing for a population objective and announcing season lengths ahead of time provides predictability, allowing trappers to plan and prepare for the season and, importantly, does not discourage reporting harvests (ADF&G 2019d). The new wolf management strategy further alleviates concerns about illegal or unreported harvests by basing management on population estimates and objectives rather than on harvest quotas (SERAC 2019).

While the new management strategy depends on year-old population estimates to determine season lengths, the HGL management strategy depended on year-old population data to announce harvest quotas (since 2014). Although the SECR population estimates may only be produced every 2-4 years at some point in the future, ADF&G may employ other monitoring techniques to assess the Unit 2 wolf population. These techniques include trail cameras to document wolf reproduction and relative abundance, and measuring the foreleg bones of harvested wolves to monitor age structure and recruitment (ADF&G 2019b).

One of the reasons a species can be listed under the ESA is inadequacy of existing regulatory mechanisms. In response to the 2011 ESA listing petition, USFWS (2016) found wolf harvest regulations in Unit 2 to be inadequate to avoid exceeding sustainable harvests (although their inadequacy would not impact the rangewide population). In 2016 and 2017, actual harvest well exceeded the harvest quota, suggesting that the HGL management strategy does not work (SERAC 2017) and reaffirming USFWS' (2016) assessment of inadequate regulations. Even the relatively short sealing requirement resulted in a two week time lag, making it difficult to monitor harvest and to project when quotas would be met (SERAC 2017, 2018). Establishing population objectives through a public process reduces the likelihood of future litigation (Wolf Technical Committee 2017).

The Southeast Regional Supervisor of the Wildlife Division of ADF&G stated at the fall 2017 Council meeting, "Monitoring harvest using sealing records didn't work, so what's a better idea?" (SERAC 2017, p. 189). Council members stated establishing population goals would constitute "something better" (p. 249) and encouraged State and Federal staff to work toward setting population goals for Unit 2 wolves, "so that we're not bouncing around endlessly on is it 20% [or] is it 30%?" (SERAC 2017, p. 442).

While managing harvest through season length may initially result in more or less wolves harvested than expected, State and Federal managers can fine tune season lengths over time once patterns between season length and harvest are better established (SERAC 2019). Past experiences indicate mixed results when using season length as a means for limiting harvest. After the BOG shortened State trapping and hunting seasons in 1997, wolf harvest declined by 12% (Porter 2003). However, since 1997, wolf harvest has varied considerably in years not closed by emergency order (22-96 wolves per year), although State seasons have not changed. Every season since 2013 has been closed by emergency order, and harvest in these years has also varied considerably (7-61 wolves per year). In 2015, seven wolves were harvested during a five week Federal and three week State season. In 2017, 61 wolves were harvested during a 4.5 week Federal and 2.5 week State season (**Table 1**). This suggests harvest is more a function of abundance rather than season length. Additionally, wolves exhibit high resiliency to human harvest and population declines as evidenced by their population rebound under conservative management since 2014 and high reproductive potential (SERAC 2017, USFWS 2015).

The Federal in-season manager (Craig District Ranger) currently has delegated authority to close, reopen, or adjust the Federal hunting and trapping seasons for wolves in Unit 2. Previously, the Federal in-season manager decided when to close the season based on harvest quotas. If this request is approved, this individual would determine season lengths in cooperation with State managers based on the new harvest management strategy, although maintains the flexibility to close/re-open/adjust Federal seasons at his/her discretion. However, the State will not announce its season length until fall 2019 after the 2018 population estimate is available. While the Federal hunting season opens three months earlier than the State hunting season, the proponent's intent was to maintain the Sept. 1 opening date regardless of the new management strategy to provide subsistence opportunity for wolf harvest while deer hunting.

OSM CONCLUSION

Support Proposal WP20-16 and Proposal WP20-17.

Justification

Effective wolf management in Unit 2 depends upon coordination between State and Federal regulations, in-season managers, and users. Adopting these proposals aligns Federal and State wolf management strategies, facilitating management and reducing user confusion. Eliminating the combined State-Federal harvest quota under Federal regulations clarifies in-season management as the State no longer uses harvest quotas. Extending the sealing requirement decreases the regulatory

burden on Federally qualified subsistence users and aligns Federal hunting and trapping sealing requirements with State trapping requirements, reducing regulatory complexity. Increasing the hunting harvest limit provides additional harvest opportunity to Federally qualified subsistence users and should have little impact on the wolf population as few wolves are harvested before the trapping season opens.

LITERATURE CITED

ADF&G. 2003. Wolf management report of survey and inventory activities 1 July 1999-30 June 2002. C. Healy, *ed.* Juneau, AK.

ADF&G. 2008. Customary and Traditional Use Worksheet, Wolves, Game Management Units 1, 3, 4, and 5, Southeast Alaska. Special Publication No. BOG 2008-09.

ADF&G. 2015. Estimating wolf populations in Southeast Alaska using noninvasive DNA sampling. Federal Aid Final Performance Report. Alaska Department of Fish and Game Wildlife Restoration Grant. AKW-4 Wildlife Restoration FY2015. 14.26,

ADF&G. 2019a. Preliminary action taken. Alaska Board of Game. Southeast Region Meeting. January 11-15, 2019. Petersburg, Alaska. http://www.adfg.alaska.gov/static/applications/web/nocache/regulations/regprocess/gameboard/pdfs/2018-2019/se/prelim_soa.pdf40B0F4D9C9C4D5EF233B2BE4E7517895/prelim_soa.pdf. Accessed April 29, 2019.

ADF&G. 2019b. Draft Unit 2 Wolf harvest management strategy. RC011. Alaska Department of Fish and Game. http://www.adfg.alaska.gov/static/regulations/regprocess/gameboard/pdfs/2018-2019/se/rcs/rc011_ADF&G_Draft_Unit_2_Wolf_management.pdf. Accessed April 30, 2019.

ADF&G. 2019c. Department reports and recommendations. RC4, Tab 6.2. Alaska Department of Fish and Game. http://www.adfg.alaska.gov/static/regulations/regprocess/gameboard/pdfs/2018-2019/se/rc4_tab6.2_ktn_pow_props.pdf. Accessed May 1, 2019.

ADF&G. 2019d. Meeting audio. Alaska Board of Game. Southeast Region Meeting. January 11-15, 2019. Petersburg, Alaska. http://www.adfg.alaska.gov/static/regulations/regprocess/gameboard/swf/2018-2019/20190111_janse/index.html?mediaBasePath=/Meeting%2001-14-19%20BOG%20%28Jan-18-19%209-58-54%20AM%29#. Accessed May 2, 2019.

ADF&G. 2019e. Community Subsistence Information System. Alaska Department of Fish and Game. http://www.adfg.alaska.gov/sb/CSIS/. Accessed May 9, 2019.

ADF&G. 2019f. Memorandum from B. Mulligan, Deputy Commissioner to A. Christianson, Chair, Federal Subsistence Board on Wildlife Special Action Request 19-02. May 23, 2019. Alaska Department of Fish and Game. Juneau, AK.

ADF&G and USFS. 2019. Wolf harvest season announced for GMU 2, new process explained. News Release. Tom Schumacher, ADF&G contact, Regional Supervisor. Paul Robbins, Jr., USFS contact, Public Affairs Officer. Craig, AK.

Albert, D.M., and J.W. Schoen. 2007. A conservation assessment for the coastal forests and mountains ecoregion of southeastern Alaska and the Tongass National Forest. Chapter 2 *in* J.W. Schoen, and E. Dovichin, editors. The Coastal Forests and Mountains Ecoregion of Southeastern Alaska and the Tongass National Forest: A Conservation Assessment and Resource Synthesis. https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/alaska/seak/era/cfm/Documents/2_Chapter_2.pdf. Accessed May 6, 2019.

Bethune, S. 2012. Unit 2 wolf management report. Pages 28-38 [*In*] P. Harper, editor. Wolf management report of survey and inventory activities 1 July 2008-30 June 2011, Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2012-4, Juneau.

Bethune, S. 2015. Unit 2 deer. Chapter 4, pages 4–1 through 4–15 [In] P. Harper and L. A. McCarthy, editors. Deer management report of survey and inventory activities 1 July 2012–30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-3, Juneau.

Ballard, W.B., J.S. Whitman, C.L. Gardner. 1987. Ecology of an exploited wolf population in South-central Alaska. Wildlife Monographs 98. Pp. 3-54. https://www.jstor.org/stable/3830566. Accessed May 6, 2019.

Blackman, M.B. 1998. Haida: Traditional Culture. Pages 240-260 *in* W.C. Sturtevant and W. Suttles, eds. Handbook of North American Indians, Northwest Coast. Smithsonian Institution. Washington, D.C. 777 pp.

Breed, M. 2007. The tale of the dire effects of hunting on wolves in coastal southeast Alaska: loss of genetic diversity, fragmentation, and a regional sink. M.Sc. Thesis. Uppsala University, Norbyvagen, Sweden. 56 pp.

Brinkman, T.J., D.K. Person, F.S. Chapin, W. Smith, K.J. Hundertmark. 2011. Estimating abundance of Sitka black-tailed deer using DNA from fecal pellets. Journal of Wildlife Management 75:232-242. https://www.fs.usda.gov/treesearch/pubs/39610. Accessed May 6, 2019.

Carrol, C.R., J. Fredrickson, and R.C. Lacy. 2014. Developing metapopulation connectivity criteria from genetic and habitat data to recover the endangered Mexican wolf. Conservation Biology 28: 76-86.

De Laguna, F. 1972. Under Mount St. Elias: The history and culture of the Yakutat Tlingit. Smithsonian Contributions to Anthropology Vol. 7. U.S. Government Printing Office. Washington, D.C.

Emmons, G.T. 1991. The Tlingit Indians. Edited with additions by F. de Laguna. The University of Washington Press. Seattle, WA and the American Museum of Natural History, New York, New York.

FSB. 2018. Transcripts of Federal Subsistence Board proceedings. April 12, 2018. Office of Subsistence Management, USFWS. Anchorage, AK.

Fuller, T.K., L.D. Mech, and J.F. Cochrane. 2003. Wolf population dynamics. Pp. 161-191 *in* Mech, L.D. and L. Boitani, editors. Wolves, behavior, ecology, and conservation. University of Chicago Press, Chicago and London.

Goldschmidt, W.R. and T.H. Haas. 1998. *Haa Aani*, Our Land: Tlingit and Haida land rights and use. T.F. Thornton, ed. University of Washington Press, Seattle, WA and Sealaska Heritage Institute, Juneau, AK.

Goldschmidt, W.R. and T.H. Haas. N.d. [1946]. Possessory rights of the natives of southeastern Alaska: a detailed analysis of the early and present territory used and occupied by the natives of southeastern Alaska, except the natives of the village of Kake (partially treated), Hydaburg, and Klawock. A report to the Commissioner of Indian Affairs. Bureau of Indian Affairs. Washington, D.C.

Larsen, D.N. 1994. Units 1A & 2 Wolves. Pp. 1-8. i*n* Hicks, M., editors. Wolf management report of survey-inventory activities 1 July 1999-30 June 2002. Alaska Department of Fish and Game. Juneau, AK.

Oberg, K. 1973. The social economy of the Tlingit Indians. University of Washington Press. Seattle, WA. 144 pp.

OSM. 2003. Staff analysis WP03-10. Proposal database. Office of Subsistence Management, USFWS. Anchorage, AK. https://subsistence.fws.gov/apex/f?p=MENU:101::::. Accessed May 2, 2019.

Person, D.K. and M.A. Ingle. 1995. Ecology of the Alexander Archipelago wolf and responses to habitat change. Unpubl. Prog. Rep. 3. Alaska Department of Fish and Game. Douglas, AK. http://www.adfg.alaska.gov/static/home/library/pdfs/wildlife/research_pdfs/95_wo_hab_eco_person_ingle.pdf. Accessed May 6, 2019.

Person, D.K., M. Kirchhoff, V. Van Ballenberghe, G.C. Iverson, and E. Grossman. 1996. The Alexander Archipelago wolf: A conservation assessment. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, General Technical Report PNW-GTR-384, Portland, Oregon.

Person, D.K., B.D. Logan. 2012. A spatial analysis of wolf harvest and harvest risk on Prince of Wales and associated islands, Southeast Alaska. Final wildlife research report, ADF&G/DWC/WRR-2012-06. Alaska Department of Fish and Game, Juneau, AK. USA.

Person, D.K., A.L. Russell. 2008. Correlates of mortality in an exploited wolf population. Journal of Wildlife Management. 72(7). 1540-1549.

Person, D.K., A.L. Russell. 2009. Reproduction and den site selection by wolves in a disturbed landscape. Northwest Science 83:211-224.

Petroff, I. 1884. Report on the population, industries, and resources of Alaska. Government Printing Office. Washington, D.C. 189 pp.

Porter, B. 2003. Unit 2 wolf management report. Pages 28-38 *in* C. Healy, editor. Wolf management report of survey and inventory activities 1 July 1999-30 June 2002. Alaska Department of Fish and Game. Juneau, Alaska.

Porter, B. 2018. Wolf management report and plan, Game Management Unit 2: Report period 1 July 2010-30 June 2015, and plan period 1 July 2015-30 June 2020. Alaska Department of Fish and Game, Species Management Report and Plan ADF&G/DWC/SMR&P-2018-10, Juneau.

Roffler, G.H., J.N. Waite, R.W. Flynn, K.R. Larson and B.D. Logan. 2016. Wolf population estimation on Prince of Wales Island, southeast Alaska: a comparison of methods. Alaska Department of Fish and Game. Final wildlife research report. ADF&G/DWC/WRR-2016-1, Juneau, AK. 58 pp.

Schumacher, T. 2019. Southeast Regional Supervisor. Personal communication: e-mail. ADF&G, Division of Wildlife Conservation. Douglas, AK.

SERAC. 2017. Transcripts of the Southeast Alaska Regional Advisory Council proceedings. November 1, 2017. Office of Subsistence Management, USFWS. Anchorage, AK.

SERAC. 2018. Transcripts of the Southeast Alaska Regional Advisory Council proceedings. February 13-14, 2018. Office of Subsistence Management, USFWS. Anchorage, AK.

SERAC. 2019. Transcripts of the Southeast Alaska Regional Advisory Council proceedings. March 19, 2019. Office of Subsistence Management, USFWS. Anchorage, AK.

Swanton, J.R. 1909. Tlingit myths and texts. Government Printing Office. Washington, D.C. 460 pp.

Toppenberg, J., G. Scott, R. Noblin, D. Beebe, L. Edwards, J. Hanson. 2015. Petition to List on an Emergency Basis the Alexander Archipelago Wolf (Canis Lupus Ligoni) as Threatened or Endangered Under the Endangered Species Act. Center for Biological Diversity. https://www.biologicaldiversity.org/species/mammals/Alexander_Archipelago_wolf/pdfs/Emergency_ESA_petition_for_AA_wolf__14Sep15.pdf. Accessed April 29, 2019.

USFWS. 1995. ETWP; 12-Month Finding for a Petition to List the Alexander Archipelago Wolf as Threatened. 60 FR 10056 10057. February 23, 1995. https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=6987#status. Accessed July 23, 2019.

USFWS. 2015. Species status assessment for the Alexander Archipelago wolf (*Canis lupus ligoni*). Version 1.0., December 2015. Alaska Region. U.S. Fish and Wildlife Service. Anchorage, Alaska. 162 pp.

USFWS. 2016. 12-Month Finding on a Petition To List the Alexander Archipelago Wolf as an Endangered or Threatened Species; Notice of 12-month petition finding. 81 FR 435 458. January 6, 2016. https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=6987. Accessed July 23, 2019.

Weaver, J.L., P.C. Paquet, and L.F. Ruggiero. 1996. Resilience and conservation of large carnivores in the Rocky Mountains. Conservation Biology 10:964-976.

Wolf Technical Committee. 2017. Interagency wolf habitat management program: Recommendations for Game Management Unit 2. Management Bulletin R10-MB-822. USDA Forest Service, USDI Fish and Wildlife Service, and Alaska Department of Fish and Game.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southeast Alaska Subsistence Regional Advisory Council

Support WP20-16/17. This proposal is the result of many years of discussion between the Alaska Department of Fish and Game, the Council, and subsistence users on Prince of Wales Island (POW). The Council supports this proposal based on information from these sources, with a caveat that the Council wants to see how the management scheme will work and how it will be implemented (re: year lapse in DNA sampling, incorporating traditional ecological knowledge (TEK).) It is hoped in future years, that the State and Federal programs will examine the population estimates from the DNA methods, but then will adjust the estimate up or down based on TEK and reports from local hunters/trappers before setting season lengths. Wolf trapping on POW has been extremely controversial for decades, and this proposal appears to be a good move forward in providing opportunities for harvest and protecting the wolf resource. There is no conservation concern for the species, biological information in the analysis is well supported, and the Council believes this proposal will be beneficial to subsistence users and non-subsistence users as it clarifies the rules for hunting/trapping and does not restrict anyone. The Council thinks the increase in the hunting harvest limit is necessary as it would be unfair to allow someone to trap 20 or more wolves and restrict the allowance for the hunter. Whether hunting or trapping, it should be the same harvest limit. A 'no limit' would not create a conservation concern as it is a small number of people who engage in hunting wolves and the challenge makes it hard for hunters to be successful, making it difficult to hunt too many wolves. Based on information presented in the analysis, the Council believes that the science is finally catching up with TEK in the area.

Northwest Arctic Subsistence Regional Advisory Council

Take No Action on WP20-16/17. The Council voted take no action on WP20-16/17. This proposal was brought to the attention of the Council at the request of the Chair, who expressed interest in learning how other regions are addressing predator management. The Council justified its position on the proposal, noting that WP20-16/17 is strictly limited to Unit 2 and would not affect the Northwest Arctic Region.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-16: This proposal, submitted by the Southeast Alaska Regional Subsistence Advisory Council, would reaffirm that the number of wolves a federally qualified trapper may harvest on federal lands in Unit 2 is not restricted by a bag limit, alter the sealing requirement for Unit 2 wolves from within 14 days of harvest to within 30 days of the end of the season, and eliminate reference to a Unit 2 wolf harvest quota.

Introduction: This proposal seeks to align federal subsistence wolf trapping regulations for Game Management Unit 2 with new state regulations adopted by the Alaska Board of Game in January 2019. At the January 2019 meeting, the Board endorsed ADF&G's new Unit 2 wolf harvest management strategy, which is based on maintaining the fall population within an objective range of 150-200 wolves as estimated by ADF&G. Instead of managing harvest through a quota, the new strategy will maintain the population within the objective range by adjusting season length and announcing that season length, including the closure date, before the start of the trapping season. Consequently, there is no longer a need to set a harvest quota or monitor harvest during the season through a 14-day sealing period.

Impact on Subsistence Users: This proposal will afford federally qualified trappers in Unit 2 a much longer period in which to seal harvested wolves.

Impact on Other Users: If adopted this proposal will have no effect on other users because they are already operating under these regulations.

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Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made a positive customary and traditional use finding for wolves in Unit 2.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for wolves in Unit 2 is 90% of the harvestable portion of the population. The trapping season and bag limit for Unit 2 wolves is:

		Open Season	
Unit/Area	Bag Limit	Resident[a]	Nonresident
2	*No limit*	*Nov 15 – Mar 31*	*Nov 15 – Mar 31*

[a] Subsistence and General Hunts.

Special instructions: Harvested wolves must be sealed within 30 days after the season closes.

Conservation Issues: None.

Enforcement Issues: The alignment of both state and federal regulations would decrease confusion among users and enforcement officers. Also, ADF&G's new Unit 2 wolf harvest management strategy was specifically designed to separate enforcement issues from harvest management.

Recommendation: ADF&G **SUPPORTS** this proposal because it will benefit users by aligning federal regulations with current state regulations and provide a longer period to seal wolves.

Wildlife Proposal WP20-17: This proposal submitted by the Southeast Subsistence Regional Advisory Council would change the number of wolves a federally qualified hunter may harvest on federal lands in Unit 2 from five to unlimited, alter the sealing requirement for Unit 2 wolves from within 14 days of harvest to within 30 days of the end of the season, and eliminate reference to a Unit 2 wolf harvest quota.

Introduction: Except for the change in bag limit, this proposal seeks to align federal subsistence wolf hunting regulations for Game Management Unit 2 with new state regulations adopted by the Alaska Board of Game in January 2019. At the January 2019 meeting, the Board endorsed ADF&G's new Unit 2 wolf harvest management strategy, which is based on maintaining the fall population within an objective range of 150-200 wolves as estimated by ADF&G. Instead of managing harvest through a quota, the new strategy will maintain the population within the objective range by adjusting season length and announcing that season length, including the closure date, before the start of the trapping season. Consequently, there is no longer a need to set a harvest quota or monitor harvest during the season through a 14-day sealing period.

Impact on Subsistence Users: This proposal will afford federally qualified hunters in Unit 2 a longer period in which to seal harvested wolves and eliminate the five-wolf bag limit.

Impact on Other Users: If adopted this proposal will have no effect on other users because they are already operating under these regulations.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made a positive customary and traditional use finding for wolves in Unit 2.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for wolves in Unit 2 is 90% of the harvestable portion of the population. The hunting season and bag limit for Unit 2 wolves is:

Unit/Area	Open Season	Bag Limit	Resident[a]	Nonresident
2	*Dec 1 – Mar 31*	*5 wolves*	*Dec 1 – Mar 31*	*Dec 1 – Mar 31*

[a] Subsistence and General Hunts.

Special instructions: Harvested wolves must be sealed within 30 days after the season closes.

Conservation Issues: There is no conservation concern.

Enforcement Issues: The alignment of both state and federal regulations would decrease confusion amongst users and enforcement officers. Also, ADF&G's new Unit 2 wolf harvest management strategy was specifically designed to separate enforcement issues from harvest management.

Recommendation: ADF&G **SUPPORTS** this proposal because it will benefit users by aligning state and federal sealing requirement and no longer reference an outdated harvest management strategy. If the Board chooses to move this proposal forward ADF&G recommends adopting a bag limit similar to the State's regulations.

WRITTEN PUBLIC COMMENTS

June 25, 2019

TO: Federal Board of Subsisence Management, (Att: Theo Mutskowitz)

FROM: Alaskans FOR Wildlife and any Cooperating Entities

RE: Comments on Subsistence Proposals

Please consider these comments on numbered proposals. Comments are offered from a public perspective that reflects several major considerations which we earnestly wish you and the board to keep clearly in mind as you make decisions on these and all proposals offered, namely,

1) The lands in question are publically owned lands belonging to all US citizens who in theory and in law all have interest in how wildlife on these lands are managed, and
2) Article 8 of our Alaska Constitution clearly sets forth that ALL (emphasis) Alaskans are stakeholders, all essentially owners, with respect to its natural resources and how they are managed .

WP-20 Wolf Trapping lifting harvest restrictions and extending sealing time.

OPPOSE

This proposal leads to spreading unrestricted wolf take everywhere. Given especially the substantial science on the value of apex predators plus the high interest in sustaining wolf populations on American public lands including here in Alaska as essential to maintenance of ecosystem biodiversity, we maintain that enactment of this proposal would result in another chapter in the unscientific overall continued war on wolves. This proposal to lift harvest limits and to extend sealing limits also already excessive in length are not scientifically justified nor justified as a pubic matter given the overall value of wolves to maintenance of biodiversity. It must not pass.

WP20-17 – Removing harvest quotas and sealing requirements for hunting wolves, OPPOSE.
We oppose this proposal for the same reasons offered to oppose the previous proposal, WP20-16.
The values of wolves as apex predator and its place in American culture must have bearing upon this consideration. No science and no national or even Alaskan public cultural norms can possibly support this permissively reckless proposal to expand wolf take without bounds. It must not pass.

WP20-26 Permitting the use of snowmachines to "position" wildlife for harvest. OPPOSE

This proposal would expand this practice apparently from other land management units. In essence "positioning" is another term for what in reality will result in chasing, and harassing wildlife to exhaustion, prohibitions in the regulation notwithstanding, due to impossible enforcement limitations. As an example, when asked to explain existing regulations for snowmachine use in trapping and hunting, an Alaska wildlife trooper explained he does not even understand the regulation.

Expanded snowmachine use, "positioning," will amount to a continued enforcement challenge. Widespread abuse will surely result and will continue to give subsistence the reputation of abuse when it really needs public support: we feel that as we now face mass extinctions of wildlife species; there is new public and growing focus on the crisis. This is an extremely unwise plunge to the bottom and we caution a futuristic consideration.

WP20-08 Proposal to require traps and snares to be marked with name and state identification number.

SUPPORT This proposal is topical, even in urban municipalities of Alaska as conflicts in public use areas resulting in injuries to hikers, pets and other outdoor public land users rise .

Keeping in mind even the use of more remote public lands grows as outdoor users of their lands increase, the potential for conflicts including serious injuries resulting from hidden owner-unidentified traps will increase. Organized trappers have strongly opposed such requirements as proposed here in past requests for change considered by the Alaska Board of Game. We witness the public land users (including of federal lands) would most certainly strongly favor this accountability. We strongly favor this proposal.

In closing, please carefully consider these comments as you go forward with the process over the next year or so. WE thank you for your consideration of these comments.

Sincerely,

Jim Kowalsky,
Chair, Alaskans FOR Wildlife
PO Box 81957
Fairbanks, Alaska 99708

(907) 488-2434

WP20–18a Executive Summary	
General Description	Proposal WP20-18a asks the Federal Subsistence Board to recognize the customary and traditional use of goats in Unit 7 remainder by residents of Cooper Landing. *Submitted by: Michael Adams.*
Proposed Regulation	**Customary and Traditional Use Determination—Goat** *Unit 7 Brown Mountain Hunt Area* — *Residents of Nanwalek and Port Graham* *Unit 7 remainder* — *All rural residents*
OSM Conclusion	**Support** WP20-18a **with modification** to recognize the customary and traditional uses of goats in Unit 7 by residents of additional rural communities. **Customary and Traditional Use Determination – Goat** *Unit 7 Brown Mountain Hunt Area* — *Residents of Nanwalek and Port Graham* *Unit 7 remainder* — ~~*All rural residents*~~ ***Rural residents of Chenega Bay, Cooper Landing, Hope, Nanwalek, Ninilchik, Port Graham, Seldovia, and Tatitlek***
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	**Support as modified by OSM**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-18a

ISSUES

Wildlife Proposal WP20-18a, submitted by Michael Adams of Cooper Landing, asks the Federal Subsistence Board (Board) to recognize the customary and traditional uses of goats in Unit 7 remainder by residents of Cooper Landing. A companion Proposal WP20-18b requests that a season and harvest limit be established for goats in Unit 7.

DISCUSSION

The proponent states that there is presently a lack of meaningful opportunity for local residents to hunt goats under State regulation. According to the proponent, the State hunt has not provided adequate opportunity to local residents due to competition with nonlocal residents and nonresidents of Alaska for local goat permits. The goat hunting quota is often met during the drawing hunt season, preventing or limiting subsequent registration hunts. Additionally, the proponent states that local goat abundance has increased over time and goats can now be seen inhabiting areas historically populated by sheep. The proponent believes that since there was traditionally a hunt for goats in the area, there should be greater opportunity for Cooper Landing residents today.

Upon clarification, the proponent's intent was to exclude the Brown Mountain Hunt Area (identified in State regulations) at the southern end of the Kenai Peninsula in Unit 7. Rural residents of Nanwalek and Port Graham currently have a customary and traditional use determination for goats in this area. The proponent would like all of Unit 7 outside of the Brown Mountain Hunt Area open to a Federal subsistence hunt for goats by residents of Cooper Landing. This area is hereafter referred to as Unit 7 remainder.

Existing Federal Regulation

Customary and Traditional Use Determination—Goat

Unit 7 Brown Mountain Hunt Area	*Residents of Nanwalek and Port Graham*
Unit 7 Remainder	*All rural residents*

Proposed Federal Regulation

Customary and Traditional Use Determination—Goat

Unit 7 Brown Mountain Hunt Area	*Residents of Nanwalek and Port Graham*
Unit 7 Remainder	~~*All rural residents*~~ ***Residents of Cooper Landing***

Relevant Federal Regulation

§100.5 Eligibility for subsistence use.

. . .

(c) Where customary and traditional use determinations for a fish stock or wildlife population within a specific area have not yet been made by the Board (e.g., "no determination"), all Alaskans who are residents of rural areas or communities may harvest for subsistence from that stock or population under the regulations in this part.

Extent of Federal Public Lands

Unit 7 is comprised of approximately 77% Federal public lands, and consists of 52% U.S. Forest Service, 23% National Park Service, and 2% U.S. Fish and Wildlife Service managed lands. National Park Service lands in Unit 7 are within Kenai Fjords National Park and are not open to subsistence uses.

Regulatory History

At the inception of the Federal Subsistence Management Program in Alaska in 1990, the majority of the Kenai Peninsula was in the Kenai Peninsula Nonrural Area (now named the Anchorage-Matsu-Kenai Nonsubsistence Area) established by the State. The State did not allow subsistence uses in nonrural areas. The exception was the southern-most portion around the communities of Port Graham, English Bay, and Seldovia. In 1992, the Board adopted customary and traditional use determinations from State regulations. The Board adopted a customary and traditional use determination for goat in the State's Brown Mountain goat hunt area in Unit 7 for the communities of Port Graham and Nanwalek (**Figure 1**). The State did not recognize customary and traditional uses of goats in the remainder of Unit 7, and all rural residents were eligible to hunt goats during Federal seasons, if they were to be adopted (72 FR 22961; May 29, 1992).

Previous customary and traditional use determinations for wildlife have been made in Unit 7 for residents of Cooper Landing. In 2008, the Board adopted Proposal WP08-22a recognizing the customary and traditional uses of moose by residents of Cooper Landing in Units 7 (as well as 15A and 15B). In 2014, the Board adopted Proposal WP14-08 recognizing the customary and traditional uses of caribou by residents of Cooper Landing in Unit 7.

Previous customary and traditional use determinations for wildlife have been made in Unit 7 for residents of Hope. In 2010, the Board adopted Proposals WP10-32a and WP10-33 recognizing the customary and traditional uses of caribou and moose for Hope (which includes the Census Designated Place Sunrise) in Unit 7.

Residents of the Prince William Sound communities of Chenega Bay and Tatitlek, located in Unit 6, have a customary and traditional use determination for moose in Unit 7. In 1997, the Board adopted

Proposal P97-18b recognizing the customary and traditional use of moose by residents of Chenega Bay and Tatitlek in the Kings Bay area of Unit 7. In 2014, the Board adopted Proposal WP14-10, expanding this determination to all of Unit 7.

No other communities have customary and traditional use determinations for wildlife in Unit 7.

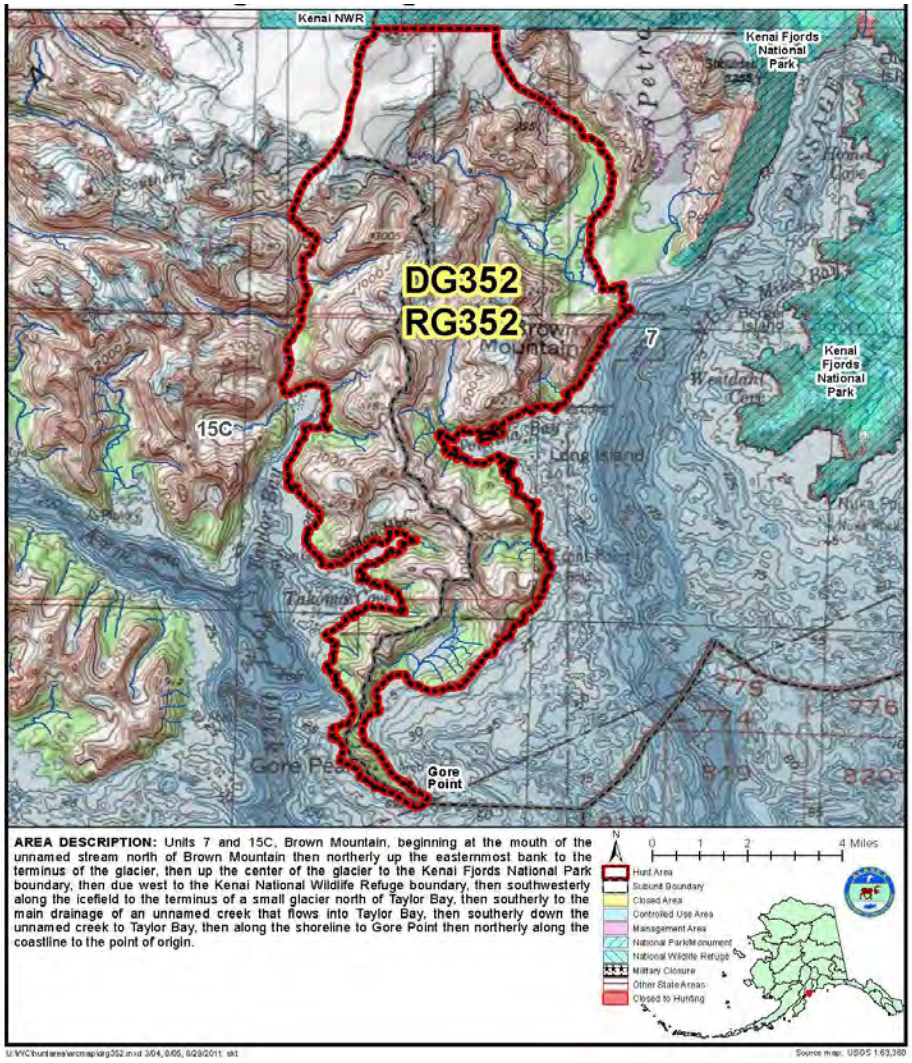

Figure 1. Map of Brown Mountain Hunt Area, where Port Graham and Nanwalek have a customary and traditional use determination for goats.

Background: Current Hunting Opportunity

Unit 7 remainder is situated within the State's Anchorage-Matsu-Kenai Nonsubsistence Area. In the absence of a Federal subsistence season, Federally qualified subsistence users currently rely on a limited number of State permits in order to harvest goats in the unit. Goat hunting in Unit 7 is managed through a drawing permit hunt, which is sometimes followed by a limited registration permit hunt in

certain hunt areas, at the discretion of State managers. Both the drawing permit and registration permit hunts are open to all Alaska residents and nonresidents of Alaska.

The State divides Unit 7 into 18 smaller goat hunt management areas. State managers do not allow any harvest in hunt areas with populations of less than 50 goats; currently, eight of the 18 hunt areas are closed to all hunting (Herreman 2019). For those hunt areas open to harvest, a drawing permit hunt is held August 10 to October 15. Most of the hunting opportunity for goats in Unit 7 remainder is provided through the drawing permits which come with a bag limit of one goat (Herreman 2014).

Information about how many rural residents of Unit 7 applied for drawing permits is not readily available. The cost for applying for a drawing permit for goats is $5 per hunt area; prospective hunters may apply for up to six different hunt numbers per species, and may apply for the same hunt more than once (ADF&G 2019a). For all individuals (including residents and nonresidents of Alaska) who applied to hunt for goat in Unit 7 through the drawing system in the most recent hunt year for which data is available, 2018, the percentage of successful drawings ranged from just 1% in those hunting areas closest to Cooper Landing and Hope, to 6% at the eastern edge of Unit 7, to 12% in hunt areas at the southern tip of the Kenai Peninsula (ADF&G 2019b).

At the end of each drawing permit season, goat hunt areas can be opened to registration permit hunting at the discretion of State managers (Herreman 2014). This hunt is held from November 1 to November 14. Registration permits are limited to a few specific hunt areas and are not available every year. Goat hunt area populations must have a population of at least 100 goats to be open to a registration hunt (Herreman 2019). The most recent available ADF&G data covering 2009 through 2013 indicates that registration permits were issued for four of the 18 hunt areas in Unit 7 during select years in this period. Furthermore, "the number of permits issued in the registration hunt is limited to reduce the chance of overharvest" (Herreman 2014:107). Thirty-two goat registration permits were issued in all of Unit 7 for 2009. In 2010, just 3 registration permits were issued for the unit. In 2011, 15 registration permits were issued for the unit. In 2012 and 2013, no registration permits were issued for the unit (Herreman 2014).

Eight Factors for Determining Customary and Traditional Use

A community or area's customary and traditional use is generally exemplified through the eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) a pattern of use recurring in specific seasons for many years; (3) a pattern of use consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area; (5) 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; (6) a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use in which the harvest is shared or distributed within a definable community of persons; and (8) 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 the community or area.

The Board makes customary and traditional use determinations based on a holistic application of these 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.

If a proposal is received requesting a customary and traditional use determination where none has been made previously for the resource, as is the case for goats in Unit 7 remainder, the analyst evaluates use by all rural residents who may harvest the resource within the geographic boundaries defined by the proponent in the request. Because the Board has not made a customary and traditional use determinations for goats in Unit 7 this analysis begins by evaluating use of goat in Unit 7 by all rural residents of Alaska.

In 2010, the Secretary of the Interior asked the Board to review, with Regional Advisory Council input, the customary and traditional use determination process and present recommendations for regulatory changes. At its fall 2013 meeting, the Southcentral Alaska Subsistence Regional Advisory Council made a recommendation to "change the way such determinations are made by making area-wide customary and traditional use determinations for all species," and supported other Regional Advisory Councils when choosing a process that works best in their regions (SCSRAC 2013:107–110). In June 2016, the Board clarified that the eight-factor analysis applied when considering customary and traditional use determinations is intended to protect subsistence use rather than limit it. The Board stated that the goal of the customary and traditional use determination analysis process is to recognize customary and traditional uses in the most inclusive manner possible.

Table 1 shows that people come from all over Alaska to harvest goats in Unit 7. To the extent that hunters receive mail in nearby larger community, it may under-represent some smaller community harvests and over-represent harvests in larger communities with post offices. Thus information on rural residents are estimates which are used to represent general harvest patterns.

Table 1. The number of goat hunts and goats harvested in Unit 7 between 1997 and 2018 by the hunter's community of residence. **Bold** = rural community. Source: ADF&G 2019c.

Unit of residence	Community of residence	Number of attempted hunts	Number of goats harvested
14	ANCHORAGE	2365	622
14	EAGLE RIVER	488	126
14	WASILLA	452	126
15	SOLDOTNA	451	133

Unit of residence	Community of residence	Number of attempted hunts	Number of goats harvested
7	SEWARD	424	98
15	KENAI	240	57
14	PALMER	217	70
	NONRESIDENT	168	108
14	CHUGIAK	129	31
15	HOMER	124	52
14	ELMENDORF AFB	89	23
20	FAIRBANKS	89	35
15	STERLING	74	22
14	GIRDWOOD	61	15
15	KASILOF	59	15
7	MOOSE PASS	56	18
14	FORT RICHARDSON	42	9
15	ANCHOR POINT	40	9
20	NORTH POLE	30	9
15	NIKISKI	28	9
	RESIDENCY UNKNOWN	27	9
14	BIG LAKE	26	8
7	**COOPER LANDING**	26	6
20	EIELSON AFB	22	6
14	**TALKEETNA**	19	4
	AK RESIDENT, NON-AK CITY	17	9
14	**WILLOW**	16	7
	UNKNOWN RESIDENCY	12	2
20	**DELTA JCT**	12	2
14	PETERS CREEK	9	2
20	FORT WAINWRIGHT	9	1
7	**HOPE**	9	1
15	CLAM GULCH	8	4
6	VALDEZ	5	1
16	TRAPPER CREEK	4	0
13	**CANTWELL**	4	0
20	TWO RIVERS	4	1
6	**CORDOVA**	4	0
15	**NINILCHIK**	4	0
18	**BETHEL**	3	0
13	**GLENNALLEN**	3	0
26	**BARROW**	3	1
14	MEADOW LAKES	3	1

Unit of residence	Community of residence	Number of attempted hunts	Number of goats harvested
20	**HEALY**	3	1
14	SUTTON	3	2
17	**DILLINGHAM**	3	1
22	**NOME**	3	0
14	KNIK	3	0
1	JUNEAU	3	0
2	**THORNE BAY**	2	1
8	**KODIAK**	2	0
9	**KING SALMON**	2	1
13	**GAKONA**	2	1
20	ESTER	2	1
14	RED MOUNTAIN	2	1
1	KETCHIKAN	2	2
14	HOUSTON	2	0
22	**UNALAKLEET**	2	0
20	SALCHA	2	1
9	**KOKHANOK**	2	1
14	JBER	2	1
15	**SELDOVIA**	2	0
20	**DENALI PARK**	1	0
4	**HOONAH**	1	1
12	**TOK**	1	0
6	**WHITTIER**	1	0
16	**ALEXANDER CREEK**	1	1
23	**KOTZEBUE**	1	0
21	**GALENA**	1	1
14	LAZY MOUNTAIN	1	0
19	**ANIAK**	1	0
14	BIRD CREEK	1	0
14	EKLUTNA	1	0
13	**COPPER CENTER**	1	1
26	**UTQIAGVIK**	1	1
20	**EAGLE**	1	0
9	**NAKNEK**	1	0
20	**CHICKALOON**	1	0
9	**COLD BAY**	1	1
3	**WRANGELL**	1	0
9	**ILIAMNA**	1	0
4	**SITKA**	1	1
	Total	5939	1673

Communities for which an attempt to harvest goats in Unit 7 has been documented in the ADF&G harvest reporting system but which are situated to the north of Anchorage and Matanuska-Susitna nonrural areas will be excluded from further analysis. These communities are not in reasonable proximity to Unit 7 remainder, the area under consideration in this analysis. **Table 2** shows rural communities for which an effort to harvest goats in Unit 7 has been documented based on the ADF&G reporting system from 1997 to 2018, and which are located to the south of Anchorage and Matanuska-Susitna nonrural areas and within or adjacent to Unit 7.

The ADF&G reporting system provides information on which communities are goat hunting in Unit 7 under the limited opportunity provided through State permits. However, because most of the opportunity to hunt goats in Unit 7 has been through competitive drawing permits open to all Alaska residents as well as nonresidents, lack of participation in the State-managed hunt should not be taken as an indication of lack of interest in subsistence hunting for goats in the unit.

Table 2. The number of goat hunts in Unit 7 between 1997 and 2018 by the hunter's community of residence for those rural communities within or adjacent to Unit 7. Communities that do not appear in this table had no reported goat hunts in Unit 7 during the time period shown according to the ADF&G reporting system. Source: ADF&G 2019c.

Unit of residence	Community of residence	Number of attempted hunts	Number of goats harvested
6	CORDOVA	4	0
6	WHITTIER	1	0
7	COOPER LANDING	26	6
7	HOPE	9	1
15	NINILCHIK	4	0
15	SELDOVIA	2	0
	Total:	46	7

Subsequent analysis will consider those rural communities to the south of Anchorage and Matanuska-Susitna nonrural areas and within or adjacent to Unit 7 with documented hunting for goats in Unit 7 through the ADF&G reporting system. Cordova's main use area for goat and other resources is focused well within the boundaries of Unit 6 (Simeone 2008). Nor does Cordova have any customary and traditional use determinations for other wildlife in Unit 7. Cordova will not be considered further at this time.

Although Nanwalek and Port Graham do not appear in ADF&G harvest records for goat in Unit 7 (**Table 2)**, these communities will be considered. Nanwalek and Port Graham are located on the Kenai Peninsula and already have a customary and traditional use determination for goat in the Brown Mountain Hunt Area portion of Unit 7 (which has never been matched with an open Federal season). One possible reason that Nanwalek and Port Graham do not appear in ADF&G harvest records for goat in Unit 7 pertains to the geography of the hunting opportunity currently available to them. Under State regulations, registration permits for an early season resident goat hunt in a portion of Unit 15C adjacent to Nanwalek and Port Graham are only available in those communities, making it easier for residents to obtain permits in Unit 15C.

Customary and traditional use of goats by residents of Tatitlek and Chenega Bay in Unit 7 remainder will also be further considered. Although these Unit 6 communities do not appear in ADF&G harvest records for goat in Unit 7 (**Table 2)**, they have a customary and traditional use determination for moose in Unit 7, strong traditions of goat hunting, and a cultural history tying them to the Kenai Peninsula communities of Port Graham and Nanwalek.

Cooper Landing

Cooper Landing is a small, unincorporated community and Census Designated Place (CDP) within Unit 7 and the Kenai Peninsula Borough. The town is located along the Sterling Highway, about 97 road miles from Anchorage and approximately 59 road miles from the City of Kenai. In 2017, its estimated population was 258 (ADLWD 2018).

Dena'ina Athabascans inhabited the northern Kenai Peninsula long before settlers arrived in the historical era. Dena'ina people spent winters in the area hunting and trapping before moving onto the coast in spring (Holmes 1985). Beginning in 1848, Russian gold prospectors and miners with the Russian-American Company moved into the area. For the historical settlers of Cooper Landing, the availability and utilization of wild resources "played an important role in helping residents establish the communit[y]" (Seitz et al. 1994:122). Goats and Dall sheep were among the preferred large game animals hunted on the Kenai Peninsula, which also included moose, bear, and caribou (Barry 1973).

Big game guiding, fox farming, and trapping eventually replaced gold mining as the primary economic activities in the area (Painter 1983). Cooper Landing came to be known for its big game guides (Painter 1983). Trophy hunters, guided by locals, harvested animals including goats and Dall sheep. Because trophy hunters often left meat behind, the guiding industry provided an important source of local food for Cooper Landing guides, their families, and the wider community. Cooper Landing was gradually opened up to more outsiders as the road system connected it to Seward in 1938, Kenai in 1948, and Anchorage in 1951 (Seitz et al. 1994). The road system allowed for easy access into the area by non-local tourists, sport fishers, and others (Mead & Hunt & CRC 2014).

The Board has previously recognized Cooper Landing's customary and traditional uses of caribou and moose in Unit 7 and moose in 15A and 15B. Based on these previous determinations, Cooper Landing has already established a recognized pattern of harvest and use of wild resources in Unit 7 consistent with the eight factors.

In ADF&G's 1990 to 1991 survey, Seitz et al. (1994) found that all the sampled households used wild resources, and almost all (94%) harvested wildlife, fish, and plant resources. Subsistence is practiced by a large portion of the population of Cooper Landing; during the same study period, 89% of the population participated in at least one harvesting activity. On average, 8.3 different wild food resources were used per household, resulting in a per capita harvest of 91.5 pounds (Seitz et al. 1994). Wildlife meat was historically preserved through smoking and canning to provide food through the winter as Cooper Landing did not receive electricity until 1962 (Seitz et al. 1994).

Along with other large land mammals, goat and sheep hunting has been part of the seasonal subsistence cycle for residents of Cooper Landing, occurring between August and November. Between 1990 and 1991 Alaska Department of Fish and Game (ADF&G) conducted a comprehensive subsistence survey and described the harvest and search areas used by Cooper Landing residents: "Goats or sheep were hunted in the mountains around Cooper Landing and the mountains of Turnagain Pass; the mountains east of Tustumena Lake, the head of Kachemak Bay, the southern top of the Kenai Peninsula; and in the mountains east of Resurrection Bay" (Seitz et al. 1994: 42). This description includes areas within Unit 7 remainder. During the subsistence study year, no households harvested goat, but 1% of households surveyed had used goat (Seitz et al. 1994). According to ADF&G goat permit data, between 1997 and 2018 residents of Cooper Landing participated in 26 goat hunts in Unit 7 (ADF&G 2019c; **Table 2**).

Redistribution within the community of Cooper Landing through sharing networks is widespread, with 72% of households sharing wild resources and 81% receiving (Seitz et al. 1994). Goats and sheep are among the resources used, shared, and received. During the 1990 to 1991 study year, 1% of households surveyed had given away and received goat meat (Seitz et al. 1994).

Since the opening of Cooper Landing to guiding and the road system, much of the subsistence seasonal round in Cooper Landing—including timing and access— has been conditioned by regulations oriented towards outside sport hunters (Seitz et al. 1994). Prior to 1976, no permit was required to hunt goats on the Kenai Peninsula (McDonough and Selinger 2008). Unlimited registration permits were issued from 1976 until 1980 when draw permits were first established. Almost anyone who wanted a goat permit could get one from 1980 to 1990 due to the very liberal registration hunts across the Kenai. Goat hunting opportunity became restricted beginning in the 1990s.

There is evidence that goat hunting has become less common for Cooper Landing residents due to lack of opportunity posed by competition for a limited number of permits. For example, during the 1990 to 1991 comprehensive subsistence survey, one Cooper Landing household reported taking one to two goats a year in the 1970s. However, as of the early 1990s, they no longer hunted goats, "citing their inability to obtain a drawing permit" (Seitz et al. 1994: 67).

Increased competition from outside hunters—both in hunting lotteries and in the form of physical crowds—was a recurring theme in ADF&G interviews in Cooper Landing. Non-local hunters are able to easily access the area through the road system. Competition limits actual opportunity for locals but crowded hunting conditions also discourage attempts to use resources that are open to harvest. For example, the same family described in the case study above now prefers to fish on their own property and moose hunt in a separate game management unit rather than deal with competitive fishing and hunting conditions near Cooper Landing (Seitz et al. 1994).

Hope

The Unit 7 community of Hope is unincorporated and comprised of two CDPs (Hope and Sunrise) within the Kenai Peninsula Borough. In 2017, the estimated population of Hope was 211 and the estimated population of Sunrise was 12 (ADLWD 2018). The town of Hope is located on the northern

end of the Kenai Peninsula at the terminus of the Hope Highway. Hope is about 87 miles south of Anchorage and 74 miles north of Seward (Morris Communication Company 2019). Sunrise is located approximately seven miles east of Hope, and is considered a sub-community of the latter. For the remainder of this analysis, "Hope" refers to both CDPs.

Hope is located in traditional Dena'ina Athabascan territory. The Russian American Company began to find gold in the Kenai Peninsula in the 1830s. In 1895 a large gold strike occurred at a mine near Sixmile Creek in the northern Kenai Peninsula, bringing more prospectors and settlers into the area. Hope became connected by road to Seward in 1951 (Buzzell and McMahon 1986). Today, Hope is located within the Chugach National Forest.

Wild resources, including goats, were critical to the establishment and viability of the community of Hope. "One longtime Hope resident remembered that when he was a child in the 1940s, his family ate a great deal of fish, moose, goat, and bear" (Seitz et al. 1994:11). A comprehensive subsistence survey for the study period August 1990 through July 1991 found that 100% of Hope households used wild resources, with 94% of households harvesting. The total per capita harvest of wild foods for Hope was 110.7 pounds (Seitz et al. 1994). Approximately one third of this total harvest came from land mammals. On average, each household used 9 different wild resources. During the 1990 to 1991 study year, 5% of households used goat (Seitz et al. 1994). According to ADF&G goat permit data, residents of Hope participated in 9 goat hunts in Unit 7 between 1997 and 2018 (ADF&G 2019c; **Table 2**).

Hope residents hunted animals in areas near Hope and Cooper Landing, Turnagain Arm, along the road system, in the mountains south and east of Hope, in the Resurrection Valley, and in the Big Indian Creek drainage (Seitz et al. 1994). This description includes areas within Unit 7 remainder. Goats and sheep were historically taken by residents of the community "in mountains near Hope as well as in the mountains around Kenai Lake" (Seitz et al. 1994:42). Goats may be hunted in the area between August and November. However, the actual timing of the goat hunt season has been shaped by regulatory seasons set by the State.

Sharing is a feature of subsistence practice in Hope. A household case study from the 1990 to 1991 comprehensive subsistence survey found that 74% of community households gave away wild resources, and 90% received them from others (Seitz et al. 1994). One hunter included in the survey had a successful goat hunt after winning a permit. A prominent element of his experience was sharing the meat with some of his neighbors, two older Hope households who had harvested their own goats in the past from the Hope area. During the 1990 to 1991 study year, 3.1% of surveyed households received goat meat from other households (Seitz et al. 1994).

During the same 1990 to 1991 survey, longtime residents of Hope reported that they had become less inclined to search for goats because of decline in local abundance of the animals over their lifetimes, which they attribute to poor management, predation, and overhunting. They date the beginning of this local decline to World War II, when service men hunted heavily in the area (Seitz et al. 1994). Access has been further limited by competition with outside hunters, who are able to access the area through the road system. For example, one resident who had lived in the area and relied heavily on wild resources since the 1970s reported applying for sheep, goat, bear, caribou, and bison drawing permits

over the ten years prior to the 1990 to 1991 study year. Despite his attempts, this hunter only received one caribou permit and one goat permit over this time period (Seitz et al. 1994). Because of competition and uncertainty, local hunters prefer to participate in non-lottery hunts, even if they occur in other units.

Due to lack of availability and competition with outside hunters, "many local hunters no longer wish to harvest big game such as moose and goats in the local area" (Seitz et al. 1994: 11). During the 1990 to 1991 comprehensive subsistence survey, some Hope residents were participating in roadkill donation programs as a way to access supplemental game meat.

Because of competition with outside hunters in the area, both Cooper Landing and Hope residents seek opportunities to hunt and fish in other areas. During their comprehensive subsistence survey, Seitz et al. found that "Cooper Landing and Hope both were interested in the idea of local preference in hunting and fishing regulations because of the competition they experience from others who also live along the road system" (1994:122).

Ninilchik

ADF&G subsistence use studies conducted for 1998 on Ninilchik included the Ninilchik and Happy Valley CDPs (Fall et al. 2000). Thus, when reference is made to Ninilchik in this analysis, it includes people living in either CDP. In 2017, the estimated population of Ninilchik CDP was 851 and the estimated population of Happy Valley CDP was 622 (ADLWD 2018). Ninilchik Village Tribe, governed by the Ninilchik Traditional Council (NTC), is the only local government in the immediate Ninilchik area. The community does not have a local municipal government; however Ninilchik is part of the Kenai Peninsula Borough.

The community of Ninilchik (*Niqnalchint*) is within the traditional territory of the Lower or Outer Cook Inlet Dena'ina Athabaskans; the Dena'ina cultural tradition dates back to around at least 1000 A.D. (Reger and Boraas 1996). Non-Native settlement of the Kenai Peninsula began in the 18th century with the fur trade, and Ninilchik was settled by Russians in the early 1800s. Ninilchik residents have used a wide array of fish and wildlife resources since the founding of the community in 1847. The site was chosen so that retirees, who included Alutiit, Russians, and Creoles, from the Russian-American Company would be able to support themselves by harvesting wild resources and gardening (Arndt 1993:2). At the end of the 19th century, commercial fishing brought about new settlements to the southern Kenai Peninsula. The next major non-Native settlement period began during the Gold Rush era at the end of the 19th century. With the construction of roads and local oil development in the 1950s, the population of the Kenai Peninsula increased substantially through in-migration of people born outside Alaska.

In 1998, the most recent year for which comprehensive subsistence survey data are available from ADF&G for Ninilchik, 99% of households used wild resources and 96% of households harvested at least one resource. Per capita harvest was estimated at 164 pounds per person. Large land mammals made up about 40% of Ninilchik's harvest in terms of edible weight, with 63% of households reporting using large land mammals and 33% of households harvesting large land mammals (Fall et al. 2000).

According to ADF&G goat permit data, residents of Ninilchik participated in 4 goat hunts in Unit 7 between 1997 and 2018 (ADF&G 2019c; **Table 2**). During the 1998 household surveys, an estimated 1% of Ninilchik households attempted to harvest goat; however no surveyed households reported harvesting or using goats that year. In 1994 and 1999, the Ninilchik Traditional Council conducted key respondent interviews with Ninilchik tribal members as well as Native residents of Ninilchik who were not tribal members about their harvest and use of resources. The 1994 interviews collected information from as far back as the interview participant remembered to the present. The 1999 interviews focused on the previous 5 years. In 2014, the Council surveyed a random sample of households living in the Ninilchik CDP, using a survey methodology similar to that employed by ADF&G. Based on the results of these surveys, goat use was reported by 20% of surveyed households in 1994 and 1999 (Ninilchik Traditional Council n.d.). No goats were reported harvested in the random sample survey of the Ninilchik CDP in 2014 (Williams 2014).

Seldovia

The community of Seldovia is located on the south shore of Kachemak Bay. Seldovia is not on the road system, and can only be accessed by boat or small plane. In 2017, the estimated combined population of Seldovia village and Seldovia City CDP was 396 (ADLWD 2018). Historically, the Seldovia area was a meeting place for people speaking Sugpiaq, Aleut, and Dena'ina. They traded goods, ideas, and regional traditions. This confluence of cultures gave rise to a tradition of subsistence from the sea and land that continues to this day.

Many people who settled in Seldovia were involved in either the fur trade or fishing during the mid-1800s. Mining, fox farming, logging, and fishing were major industries conducted in Seldovia between the 1700s and early to mid-1900s. At the turn of the 20th century, Seldovia became an important shipping center because of its deep water port. With the more recent collapse of commercial crab fisheries and closure of the last seafood cannery, the economy has diversified to include tourism and logging (Jones and Kostick 2016; Merrill and Opheim 2013).

ADF&G surveyed Seldovia households about their harvest and use of wild resources in 2014. Nearly all households (99%) reported using wild resources and 94% of households harvested at least one resource. Given their coastal location, fish and other marine resources are particularly important to the subsistence way of life of Seldovia residents. Large land mammals contributed about 12% by weight of the resources harvested; 61% of households used large land mammals, and 9% harvested large land mammals (Jones and Kostick 2016).

According to ADF&G goat permit data, residents of Seldovia participated in 2 goat hunts in Unit 7 between 1997 and 2018 (ADF&G 2019c; **Table 2**). During the 2014 subsistence survey study year, 1% of Seldovia households reporting harvesting goat, 5% of households attempted to harvest goats, and 13% of households reported using goat. Goat search areas included the mountains surrounding Seldovia along with southeast of Seldovia Bay (Jones and Kostick 2016). Seldovia's use area for large game extends into Unit 7; for example, subsistence surveys conducted for the year 1998 found that 7.7% of Seldovia's total moose harvest came from Unit 7 (Fall 2000). Harvest surveys conducted

during the early 1990s consistently documented the harvest and use of goats by Seldovia residents (ADF&G 2019d).

Subsistence use area maps based on 2014 subsistence household surveys in Seldovia indicate that this community's use of all wildlife resources, including goats, is concentrated in Unit 15C (Jones and Kostick 2016). However, it should be noted that use maps represent only the activity of those households included in surveys, and cannot be considered exhaustive. Furthermore, the distribution of use areas is delimited by the geography of hunting opportunities available under State management.

Whittier

The present-day community of Whittier is located within the traditional territory of the Chugach Alutiit. Port Wells was a summer camp area used by original inhabitants for subsistence activities including trapping and sealing into the 1960s (Seitz et al. 1994). Whittier was established in Passage Canal as a military base in the 1940s and 1950s. The city of Whittier was incorporated in 1969. Its population declined from a peak of 1,000 residents in the 1950s after the military presence was reduced in the 1960s (Seitz et al. 1994). In 2017 Whittier had an estimated population of 244 (ADLWD 2018).

Ethnographic information on use of wild resources by historical settlers beginning in the 1940s is lacking. ADF&G subsistence surveys for Whittier are only available for the period 1990 to 1991. Household surveys for this study period demonstrated that 94% of Whittier households used wild resources and 77% harvested resources (Seitz et al. 1994). On average, eight different wild resources were used per household (Seitz et al. 1994). Wild resource use in Whittier is oriented towards fish and marine resources; during the study period, land mammals ranked third in percentage of the total wild resource harvest, after salmon and other fish (Seitz et al. 1994). Household subsistence surveys found that 12% of Whittier households attempted to harvest land mammals, but 57% of households in the community used land mammals, indicating extensive sharing. Moose was the most significant species in terms of pounds per capita harvested, followed by deer (Seitz et al. 1994).

According to mapped search areas from ADF&G subsistence surveys, documented use areas for goats and sheep by residents of Whittier extend west from the community into Unit 7, as does the use area for moose. Seitz et al. further describe Whittier's search areas for goats and sheep but does not distinguish between the species in the search area maps or description:

> "Goats or sheep were hunted in isolated areas of the northern and southwestern Prince William Sound; in the mountains of the Kenai Peninsula form the Resurrection Creek south to Cooper Landing and east along Trail Creek and the Seward Highway; also south along the eastern side of the Seward Highway south of the Upper Trial Lake; in the mountains around Eklutna Lake and north of the Knik River, in the Talkeetna and Chugach mountains on either side of the Glenn Highway; and in the Chugach Mountains west of the Richardson Highway in the Copper River Basin" (1994: 43).

There were no reports of attempts to hunt goat by Whittier residents in household surveys for the period 1990 to 1991, and goats were not listed as part of the seasonal round for Whittier (Seitz et al.

1994). As shown in **Table 2**, there was one harvest attempt for goat in Unit 7 by a resident of Whittier during the period 1997 to 2018 according to ADF&G permit data (ADF&G 2019c). Whittier does not have any customary and traditional use determinations in Unit 7.

Chenega Bay and Tatitlek

The present-day communities of Chenega Bay and Tatitlik have strong ties to Alutiiq tradition. The Alutiiq people of Prince William Sound were noted mountain goat hunters. Goat were a regular part of the diet of the Chugach Alutiit, and were hunted between August and January (Stratton 1990). Goat hunting has traditionally been part of the subsistence round in fall, which also includes silver salmon, black bears, deer, and moose, small land mammals, and waterfowl (Stratton and Chisum 1986). Goats harvested in fall were preferred because fat and meat were at their best. In winter, goats moved closer to the water and less climbing was required. After a successful goat hunt, a barbecue, or *mangiq*, was held on the beach. Hunters described cooking goat meat in the goat's stomach, which had been turned inside out (Birket-Smith 1953). Goat skins were historically used for bedding, and Chugach Alutiiq people subsequently adopted Russian practices of using goat wool to make blankets (Stratton 1990). Skins and horns were also traded (Clark 1984).

The communities of Chenega Bay and Tatitlek are located in traditional settlement areas of the Chugach Alutiit. Chenega Bay, located on Evans Island, was resettled in 1983 by residents from the original community of Chenega, located on Chenega Island. The original settlement in Chenega was destroyed by a tsunami in the 1964 earthquake (Fall et al. 1996:11; Davis 1984:199). Survivors were relocated to Cordova and Tatitlek in the interim. The histories of Chenega Bay, Tatitlek, and Cordova have created ties between these three communities. In 2017, the estimated population of Chenega Bay was 69 and the estimated population of Tatitlek was 93 (ADLWD 2018).

The Board has previously recognized the customary and traditional uses of moose in Unit 7 by residents of Chenega Bay and Tatitlek. Based on this previous determination, Chenega Bay and Tatitlek have already established a recognized pattern of harvest and use of wild resources in Unit 7 consistent with the eight factors. This determination was originally limited to moose in the portion of Unit 7 draining into King's Bay (Proposal P97-18b) before being expanded to all of Unit 7. According to Stratton, Chugach Alutiiq hunters first encountered moose in the King's Bay area while hunting for goats in the area (1990).

Chenega Bay residents depend on a wide range of fish and wildlife resources. Species used include a variety of fish, shellfish, migratory birds, bird eggs, small land mammals, furbearers, marine mammals, berries, plants, and seaweed. Chenega Bay has a relatively high average subsistence harvests and a diversity of resources harvested that is consistent with other rural non-road connected communities in Alaska. They depend heavily on subsistence harvests and uses for their cultural, economic, social and nutritional well-being. Chenega Bay experienced one or two years of depressed harvests following the disruptions of the Exxon Valdez oil spill; by 1991, however, Chenega Bay had per capita harvests that were at or near pre-spill levels (Fall et al. 1996).

In the 1980s, ADF&G conducted household subsistence surveys for Chenega Bay, which also included a retrospective survey of resource use by residents of Old Chenega in the early 1960s, prior to its destruction. For that time, 78.6% of households reported harvesting goat, which contributed an estimated 105 lbs to each household's subsistence foods each year (Stratton and Chisum 1986). In subsistence surveys between 1987 and 2014, the percentage of households using goat ranged between 0 and 40% for both Chenega Bay and Tatitlek (ADF&G 2019d).

Residents of Old Chenega speaking in 1985 described hunting for goats, which involved traveling by boat:

> "Goat hunting involved more planning than either deer or bear hunting, and often involved hunting parties. Two or more men went to a pre-selected spot where goat had been sighted usually taking a commercial [fishing] boat. A goat hunt often involved camping for two or more days, and sometimes up to a week, until one or more goats were taken. Goats were sometimes spotted on a cliff from the boat, and under optimal circumstances, they could be shot from the boat. They then fell from the cliff into the water. More often, however, hunters climbed up to the goats' grazing area. Goats were therefore considered the most difficult big game to get" (Stratton and Chisum 1986:40).

Documented goat search areas used by residents of Chenega Bay during the early 1960s and for the period 1984-1985 did not extend beyond Unit 6D (Stratton and Chisum 1986). For Tatitlek, "goat hunting locations in the 1900s…included Long Bay, Port Fidalgo, Galena Bay, Jacks Bay, Summer Bay, Port Wells and the Silver Lake area" (1990). These areas are all located within Unit 6D. However, Stratton (1990) also documents historical goat hunting in the King's Bay area of Unit 7 by the Chugach Alutiit, as described earlier. Stratton's (1990) use area map for all resources for Tatitlek documents resource search areas to the west side of King's Bay, within Unit 7. Furthermore, use of another large land mammal, moose, has previously been recognized by the Board in Unit 7 for both Chenega Bay and Tatitlek (Proposal WP14-10). Residents of Chenega Bay and Tatitlek currently have a customary and traditional use determination for goat limited to Units 6A, 6D, and 6C.

Nanwalek and Port Graham

Nanwalek (previously known as English Bay) is a small community in Unit 15 near the southwestern tip of the Kenai Peninsula on the outer reaches of Kachemak Bay. Nanwalek is an unincorporated village within the Kenai Peninsula Borough. Nanwalek is governed by the Federally-recognized Nanwalek IRA Council. Given its location off of the road system, the community is accessed primarily by boat and plane (Jones and Kostick 2016). In 2017, the estimated population of Nanwalek was 304 (ADLWD 2018).

Traditional Chugach Alutiiq territory includes the southern portion of the Kenai Peninsula, bridging the Alutiiq territories of Prince William Sound with Kodiak Island and the Alaska Peninsula (Clark 1984). Kenai Alutiit once occupied settled villages in Nuka, Yalik, and Aialik Bays, portions of the outer Kenai Peninsula situated in Unit 7 (Van Lanen 2016).

The contemporary location of Nanwalek was used seasonally for hundreds of years. Trading posts were established in the region by Russian traders in the late 1700s and early 1800s. The Alutiit became increasingly dependent on trade goods and many families settled in Nanwalek, which was the last fur post on the Kenai Peninsula. With the collapse of the fur trade, fishing became the dominant economic activity in Nanwalek. But by the 2000s the fishing economy had largely disappeared. Nanwalek residents have always relied on subsistence resources, especially wild marine resources (Jones and Kostick 2016).

The Board has previously recognized Nanwalek's customary and traditional uses of goat in Unit 7 Brown Mountain Hunt Area. Based on this previous determination, Nanwalek has already established a recognized pattern of harvest and use of goat in a portion of Unit 7 consistent with the eight factors. All other customary and traditional use determinations for Nanwalek are located in Unit 15.

According to household subsistence surveys conducted by ADF&G in 2014, 89% of Nanwalek households used wild resources in the study year, with 84% of households harvesting at least one resource. Harvest of all resources was estimated at 253 pounds per person, of which about 85% was salmon and other fish. Large land mammals accounted for only 1% by weight of resources harvested, however, 34% of households reported using large land mammals and 11% of households reported harvesting large land mammals. Goats, black bears, and moose are traditionally hunted by Nanwalek residents, and surveyed households also reported harvesting caribou and deer in 2014 (Jones and Kostick 2016).

According to the ADF&G reporting system, residents of Nanwalek did not participate in goat hunts in Unit 7 between 1997 and 2018 (ADF&G 2019c; **Table 2**). However, because the majority of the hunting opportunity in Unit 7 has been through competitive permits, lack of reported participation in the State-managed hunt should not be taken as an indication of lack of interest in subsistence hunting for goats in Unit 7.

During the 2014 subsistence survey study year, an estimated 13% of Nanwalek households used goat, 9% of households attempted to harvest goats, and 5% of households were successful at harvesting goats. In terms of pounds of edible weight harvested, goats represented more than half of the total harvest of large land mammals by Nanwalek residents in 2014 (Jones and Kostick 2016). Several additional harvest surveys were conducted by ADF&G in Nanwalek between 1987 and 2003. In those years, the estimated percentage of Nanwalek households harvesting goats ranged from 0% to 6% and the percentage of households using goats ranged from 5% to 41% (ADF&G 2019d).

According to Jones and Kostick (2016), goats are an important traditional resource for residents of Nanwalek, and residents usually participate in summer and fall goat hunting when regulations allow for a limited early hunt in Unit 15C under State regulations, which is only available in Nanwalek and Port Graham. Goat hunting occurs in the mountains of the English Bay River watershed and along the shoreline of Koyuktoik Bay, in relatively close proximity to the community. Nanwalek residents often hunt goats opportunistically along shorelines (Jones and Kostick 2016).

Port Graham, also known as *Paluwik*, is located on Kachemak Bay close to the southern tip of the Kenai Peninsula. The permanent community developed around a fish processing plant and dock that operated from 1910 to 1912. However Alutiiq people had lived in the area for centuries. Semi-subterranean dwellings, or barabaras, were located at several sites along the bay, including the location of present day Port Graham (Fall 2006). Port Graham is located off of Alaska's road system and can only be accessed by small plane or boats. The Port Graham Village Council, a Federally recognized tribal government, is the only local government in the community. The community is part of the Kenai Peninsula Borough (ADCCED 2019). Commercial fishing along with a cannery played a key role in the community economy for much of the twentieth century. Economic opportunities in the community are limited, making it challenging for young people to remain (Jones and Kostick 2016). In 2017, the population of Port Graham was estimated at 180 (ADLWD 2018).

The Board has previously recognized Port Graham's customary and traditional uses of goat in Unit 7 Brown Mountain Hunt area as described in the regulatory history. Based on this previous determination, Port Graham has already established a recognized pattern of harvest and use of goat in a portion of Unit 7 consistent with the eight factors.

ADF&G, Division of Subsistence, surveyed Port Graham households about their harvest and use of wild resources in 2014. All households (100%) reported using wild resources and 98% of households harvested at least one resource. Harvest of all resources was estimated at 218 pounds per person. Large land mammals contributed about 5% by weight of the resources harvested, 68% of households reported using large land mammals, and 5% harvested large land mammals. During the 2014 study year, an estimated 7% of Port Graham households used goat and 2% attempted to harvest goats; however no goats were harvested (Jones and Kostick 2016). Several additional harvest surveys were conducted by ADF&G in Port Graham between 1987 and 2003. In those years, the estimated percentage of Port Graham households harvesting goats ranged from 0% to 4% and the percentage of households using goats ranged from 0% to 22% (ADF&G 2019d). According to ADF&G goat permit data, residents of Port Graham did not participate in goat hunts in Unit 7 between 1997 and 2018 (ADF&G 2019c; **Table 1**). However, because the majority of the hunting opportunity in Unit 7 has been through competitive permits, lack of participation in the State-managed hunt should not be taken as an indication of lack of interest in subsistence hunting for goats.

Subsistence use area maps based on 2014 subsistence household surveys in Nanwalek and Port Graham, indicate that these communities' use of all wildlife resources, including goats, is concentrated in Unit 15C (Jones and Kostick 2016). However, it should be noted that use area maps represent only the activity of those households included in surveys, and cannot be considered exhaustive. Furthermore, the distribution of use areas is delimited by the geography of hunting opportunities available under State management. Early season resident goat permits are available locally for hunt areas adjacent to Nanwalek and Port Graham.

Other Alternatives Considered

An alternative, more expansive preliminary conclusion would include Whittier and Cordova in this customary and traditional use determination for goat in Unit 7. However, Cordova's wild resource use area is focused within the boundaries of Unit 6 (Simeone 2008). Although Whittier's reported search area for goats extends into Unit 7, substantial hunting of goat in Unit 7 remainder as part of a customary and traditional practice is not demonstrated in currently available data. While Whittier is physically closer to Unit 7 than Chenega Bay or Tatitlek, the latter communities have specific traditions tying them to the King's Bay drainage area in Unit 7 as a search area for land mammals, including goats.

A second, less inclusive preliminary conclusion would exclude Chenega Bay and Tatitlek from this customary and traditional use determination for goat in Unit 7. In this alternative, those rural communities considered in Units 15 and Unit 7 on the Kenai Peninsula would be included, but communities in Unit 6 and the Prince William Sound area would be excluded. A possible basis for this exclusion is that goat hunting areas for Chenega Bay and Tatitlek are focused in the areas around their respective communities. However, Chenega Bay and Tatitlek have a historical practice of traveling to the King's Bay drainage area within Unit 7 for subsistence hunting, a practice which has previously been recognized by the Board in the case of moose. Ethnographic evidence indicates that goats were also sought out in the King's Bay drainage area.

Finally, the least inclusive alternative preliminary conclusion considered would limit this customary and traditional use determination for goat in Unit 7 to Hope and Cooper Landing only. In this alternative, both rural communities within Unit 7 would be included in the determination, but adjacent rural communities in Unit 15 and Unit 6 with demonstrated customary and traditional use of goat would be excluded. This alternative was considered and rejected because it may contradict the Board's policy of establishing broad and inclusive customary and traditional use determinations when no determination has previously been made for a species in a unit.

Effects of the Proposal

If Proposal WP20-18a is adopted, those eligible to hunt goats under Federal regulations in Unit 7 remainder will be reduced from all rural residents of Alaska to rural residents of Cooper Landing. If the Board adopts a Federal subsistence season, only rural residents of Cooper Landing will be eligible for that hunt.

OSM CONCLUSION

Support Proposal WP20-18a **with modification** to recognize the customary and traditional use of goats in Unit 7 by rural residents of Chenega Bay, Cooper Landing, Hope, Nanwalek, Ninilchik, Port Graham, Seldovia, and Tatitlek.

The modification should read:

Customary and Traditional Use Determination—Goat

Unit 7 Brown Mountain Hunt Area	*Residents of Nanwalek and Port Graham*
Unit 7 remainder	~~*All rural residents*~~ ***Rural residents of Chenega Bay, Cooper Landing, Hope, Nanwalek, Ninilchik, Port Graham, Seldovia, and Tatitlek***

Justification

Practices and traditions of hunting and using goats in Unit 7 remainder by rural residents of Chenega Bay, Cooper Landing, Hope, Nanwalek, Ninilchik, Port Graham, Seldovia, and Tatitlek exemplify the eight factors used by the Federal Subsistence Management Program to describe customary and traditional uses. Some rural communities with documented goat hunting effort in Unit 7 (based on the ADF&G harvest reporting system) were eliminated from consideration because they are situated to the north of the Anchorage and Matanuska-Susitna nonrural areas, and are not in reasonable proximity to the area under consideration. Cordova was excluded because this community's wild resource use area is focused within the boundaries of Unit 6. Whittier was excluded because substantial hunting of goat in Unit 7 remainder as part of a customary and traditional practice could not be demonstrated for this community with available data.

The Board acknowledged that Port Graham and Nanwalek met the eight factors for goat in a portion of Unit 7 when it recognized Port Graham and Nanwalek's customary and traditional uses of goats in Unit 7 Brown Mountain Hunt Area in 1992. This limited customary and traditional use determination, a legacy of State management, does not preclude expansion to all of Unit 7. Indeed, such an expansion would be in keeping with the Board's current policy of giving a customary and traditional use determination for an entire unit when the eight factors are met in a portion of the unit.

Patterns of goat use for all the included communities have been affected by interruptions beyond the control of local residents. The State's subsistence laws have not allowed subsistence fishing, hunting, or trapping on most of the Kenai Peninsula. As a consequence, rural residents must pursue subsistence hunting for goats under State sport seasons and hunting limits until the Board adopts Federal seasons and harvest limits. Rural residents looking for opportunities to hunt for goats have had to compete for drawing permits, and in 2018, the percentage of successful drawings was less than 12% in all open goat hunt areas in Unit 7, and closer to 1% in areas proximal to the communities of Hope and Cooper Landing. The distribution of registration permits is also limited. Seasons close early as quotas are reached. Based on the ADF&G harvest reporting system, since 1997, 96% of goat harvests in Unit 7 have been by nonrural residents or nonresidents of Alaska (**Table 1)**.

LITERATURE CITED

ADCCED. 2019. Alaska community database online: https://dcra-cdo-dcced.opendata.arcgis.com/. Retrieved: June 27, 2019.

ADF&G 2019a. Drawing hunt permits information: frequently asked questions. https://www.adfg.alaska.gov/index.cfm?adfg=huntlicense.drawfaqs#cost. Retrieved: August 12, 2019.

ADF&G. 2019b. 2019-2020 Alaska drawing permit hunt supplement. https://www.adfg.alaska.gov/static/applications/web/nocache/license/huntlicense/pdfs/2019-2020_draw_supplement.pdfDDB3E5422A81D382A439F6878368477C/2019-2020_draw_supplement.pdf. Retrieved: July 16, 2019.

ADF&G. 2019c. WinfoNet. https://winfonet.alaska.gov/. Retrieved: July 18, 2019.

ADF&G. 2019d. Community subsistence information system. Alaska Department of Fish and Game Division of Subsistence online database. Anchorage, AK.

ADLWD. 2018. Alaska population overview, 2017 estimates. http://live.laborstats.alaska.gov/pop/estimates/pub/17popover.pdf. Retrieved: July 18, 2019.

Arndt, K. L. 1993. Released to reside forever in the colonies. Pages 31-46 *in* W. Leman, ed. Agrafena's children. Lulu Press. Ninilchik, AK.

Barry, M. J. 1973. A history of mining on the Kenai Peninsula. Alaska Northwest Publishing Company. Anchorage, AK.

Birket-Smith, K. 1953. The Chugach Eskimo. Nationalmuseets publikationsfond, Copenhagen, Denmark. 261 pp.

Buzzell, R. and D. McMahon. 1986. Cultural resources survey of the Seward Highway, Milepost 50–65.5, Kenai Peninsula, Alaska. Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation, Office of History and Archaeology. Anchorage, AK.

Clark, D. W. 1984. Pacific Eskimo: historical ethnography. Pages 185-203 *in* D. Damas, ed. Handbook of North American Indians. Vol. V: Arctic. Smithsonian Institution, Washington DC.

Davis, N. Y. 1984. Contemporary Pacific Eskimo. Pages 198-203 *in* D. Damas, ed. Handbook of North American Indians. Vol. V: Arctic. Smithsonian Institution, Washington DC.

Fall, J., L. Stratton, P. Coiley, L. Brown, C.J. Utermohle, and G. Jennings. 1996. Subsistence harvests and uses in Chenega Bay and Tatitlek in the year following the Exxon Valdez oil spill. ADF&G, Div. of Subsistence Tech. Paper No. 199. Juneau, AK. 262 pp.

Fall, J. A., V. Vanek, L. Brown, G. Jennings, R.J. Wolfe, and C. Utermohle. 2000. Wild resource harvests and uses by residents of selected communities of the Kenai Peninsula Borough. ADF&G, Div. of Subsistence Tech. Paper No. 253. Juneau, Alaska. 362 pp.

Herreman, J. 2019. Wildlife Biologist. Personal communication with Thomas Evans: email. ADF&G. Homer, AK.

Herreman, J. 2014. Units 7 and 15 mountain goat management report. Pages 106–121 *in* P. Harper, ed. Mountain goat management report of survey and inventory activities 1 July 2011–30 June 2013, Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR 2014-3, Juneau, AK.

Holmes, C. 1985. Progress report, project F-021-2(15)/(A09812), Sterling Highway archaeological mitigation: phase I excavations at four sites on the Kenai Peninsula. Alaska Department of Transportation and Public Facilities, Division of Geological and Geophysical Surveys. Fairbanks, AK.

Jones, B., and M.L. Kostick, eds. 2016. The harvest and use of wild resources in Nikiski, Seldovia, Nanwalek, and Port Graham, Alaska 2014. ADF&G, Div. of Subsistence Tech. Paper No. 420. Anchorage, AK. 439 pp.

McDonough, T,J. and J. Selinger. 2008. Goat management on the Kenai Peninsula Alaska: a new direction. Proceedings of the biennial symposium of the Northern Wild Sheep and Goat Council 16:50-67.

Mead & Hunt and Cultural Resource Consultants, LLC. 2014. Alaska roads historic overview: applied historic context of Alaska's roads.

Merrill, T., and M Opheim. 2013. Assessment of Cook Inlet tribes subsistence consumption. Seldovia Village Tribe.

Morris Communication Company. 2019. The milepost 2019: Alaska travel planner. Morris Communication: Augusta, Georgia.

Ninilchik Traditional Council. n.d. ANILCA Survey Results (1994 vs. 1999). Ninilchik Traditional Council. 56 pp.

Painter, M. 1983. Cooper Landing. Pages 46-50 *in* E. Pedersen, ed. A larger history of the Kenai Peninsula. Adams Press. Chicago, IL.

Reger, D. and A. Boraas. 1996. An overview of the radiocarbon chronology in Cook Inlet prehistory. Pages 155–171 *in* Davis, N.Y., ed. Adventures through time: readings in the anthropology of Cook Inlet, Alaska. Cook Inlet Historical Society, Anchorage, AK.

SCSRAC, 2013. Transcripts of the Southcentral Subsistence Regional Advisory Council proceedings. November 5, 2013. Office of Subsistence Management, USFWS. Anchorage, AK.

Seitz, J., L. Tomrdle, and J.A. Fall. 1994. The use of fish and wildlife in the Upper Kenai Peninsula communities of Hope, Whittier, and Cooper Landing. ADF&G, Div. of Subsistence Tech. Paper No. 219. Juneau, AK.

Simeone, W. E. 2008. Subsistence harvests and uses of black bears and mountain goats in Prince William Sound. ADF&G, Div. of Subsistence Tech. Paper No. 334. Juneau, AK. 59 pp.

Stratton, L.1990. Resource harvest and use in Tatitlek, Alaska. ADF&G Div. of Subsistence, Tech. Paper No. 181. Juneau, AK.

Stratton, L. and E. B. Chisum. 1986. Resource use patterns in Chenega, Western Prince William Sound: Chenega in the 1960s and Chenega Bay 1984–1986. ADF&G, Div. of Subsistence. Tech. Paper No. 139. Anchorage, AK. 161 pp.

Van Lanen, J.M. 2016. Nanwalek. Pages 200-298 *in* B. Jones and M.L. Kostick, eds. The harvest and use of wild resources in Nikiski, Seldovia, Nanwalek, and Port Graham, Alaska, 2014. ADF&G, Div. of Subsistence Tech. Paper No. 420. Anchorage, AK. 439 pp.

Williams, D. 2014. Ninilchik subsistence survey. Ninilchik Traditional Council. 67 pp.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southcentral Alaska Subsistence Regional Advisory Council

Support WP20-18a **as modified by OSM.** The Council felt that the analysis showed a clear customary and traditional use by the communities for goat and other resources as described in the OSM modification.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-18: This proposal, submitted by Michael Adams, would add residents of Cooper Landing to the pool of federally-qualified users eligible to hunt mountain goats in Unit 7, and establish a new federal subsistence registration mountain goat hunting season in Unit 7 for residents of Cooper Landing with a bag limit of 1 goat. The season will be closed when 2 goats are harvested. Any hunter that harvests a billy would be ineligible to receive a permit for 3 years and any hunter that harvests a nanny would be ineligible to receive a permit for 5 years. The harvest of a nanny accompanied by a kid would be prohibited.

Introduction: Mountain goats are unique compared to other ungulate species due to the habitat they utilize and their reproductive capacity. Mountain goats inhabit alpine and coastal habitats that are adjacent to steep cliffs and rocky terrain that can be used as escape terrain from predators. They typically occur in small isolated populations and have little interchange between these groups. Telemetry and genetic studies have shown that mountain goats maintain a strong fidelity to discrete homeranges (White 2006, Shafer et al. 2012). Mountain goats breed in November and December and adult males typically remain segregated from females and young animals during a large portion of the year. The average age of first reproduction of mountain goats is 4.5 years old (Festa-Bianchet and Cote 2008, White et al 2011).

Mountain goats in Unit 7 are currently managed under a limited permit system in small discreet hunt areas. Unit 7 currently contains 19 different hunt areas. Due to low population numbers as determined by minimum counts, 8 of these areas were closed to harvest in 2019. Early season hunts are managed under the state draw system and late season hunts are managed under a registration permit system. The guidelines for calculating permit numbers are based on a system described in McDonough and Selinger (2008).

For a drawing hunt to open, the population must contain more the 50 goats. The second criteria considered is whether the quota was exceeded in previous years. For small populations, if the quota was exceeded in the 2 previous seasons no hunt is held. In larger populations, if the quota was exceeded the number of permits issued is reduced. The third criteria considered is the age of the survey data. If the survey data is greater than 3 years old and the population less than 75 goats, no permits are issued. For areas with greater than 75 goats and data older than 2 years, permit numbers are reduced. The fourth criteria considered is the population trend. If populations are declining, permits are reduced. The fifth criteria considered is access to the area. A greater number of permits are made available for areas with difficult access. The number of animals available for harvest (goat points, nannies equal two) is the final factor that affects the number of permits issued. Goat points are calculated at a rate of 4% of the most recent minimum count for areas with easy access and 5% for areas with difficult access. The criteria outlined above are used as a general guideline to determine the number of permits to be issued for hunt areas. Other factors may enter the final calculation for permit numbers.

Registration hunts are only opened if an area contains more than 100 goats. If the population is not stable or increasing a hunt is not held. If the survey data is greater than 2 years old a hunt is not held. If the previous year's quota was exceeded a hunt is not held. Lastly, if there are less than 4 goat units available in an area after the draw season harvest is accounted for no hunt is held. Registration hunts have been open every year on the Kenai Peninsula since the establishment of this system.

Impact on Subsistence Users: If this hunt was established, it would initially provide additional opportunity to residents of Cooper Landing, but not to currently-qualified residents of Nanwalek and Port Graham, who are limited to the Brown Mountain Hunt Area, where there is currently no federal open season. However, it could reduce opportunity for other subsistence users on the Kenai Peninsula because if goats are harvested in areas with limited population numbers or nannies are harvested it will decrease future hunting opportunity for all subsistence users. Federal public lands in the Kenai Fjords National Park would remain closed to all hunting, including the hunting of wildlife for subsistence purposes, due to the separate regulations of the park.

Impact on Other Users: If the proposed hunt is adopted in the suggested format (all areas of Unit 7), it could disrupt the current state management system especially in areas in Unit 7 that the state believes should not be open for harvest due to conservation concerns. Opening all of Unit 7 could negatively affect other hunters because managers would take a more cautious management approach, including limiting permits issued in Unit 7. If goats were harvested in areas with low numbers or areas permanently closed by the state to goat harvest, it could decrease future hunting opportunities for other users and potentially impact nonconsumptive uses (for example, in the Cooper Landing Closed Area).

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made positive customary and traditional use findings for mountain goats in Units 7 and15C outside the Anchorage-Matsu-Kenai Nonsubsistence Area. However, all of Unit 7 is within this state nonsubsistence area.

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for mountain goats in Units 7 and 15C outside the Anchorage-Matsu-Kenai Nonsubsistence area is 7–10 animals; however, subsistence hunts are authorized only in Unit 15C.

The season and bag limit for Unit 7 is:

		Open Season (DG 331-352 & RG 331-352)	
Unit/Area	Bag Limit	Resident[a]	Nonresident
7	*1 goat*	*Aug.10*–Oct. 15 (*Draw Permit*)	*Aug.10*–Oct. 15 (*Draw Permit*)
	1 goat	*Nov.1*–Nov. 14 (*Registration Permit*)	*Nov.1*–Nov. 14 (*Registration Permit*)

[a] General Hunts Only.

Special instructions: Taking of nannies with kids is prohibited. If a nanny is taken the hunter is prohibited from hunting any goats in units 7 and 15 for 5 regulatory years.

Conservation Issues: Mountain goats are a slowly reproducing species with distinct home ranges. The average age of first reproduction is 4.5 years (Festa-Bianchet and Cote 2008) and studies of Alaska populations show only a 68% parturition rate (White et al. 2013). Due to these factors, small populations of goats are easily extirpated from distinct areas. If reproductive-age nannies are harvested from a small herd it is possible to completely curtail reproduction in that herd. As such, mountain goats should not be managed on a unitwide basis and adding additional harvest on top of current state harvest could negatively impact herds. Hunts must be established to reflect local home ranges and population levels.

Many of the hunt areas in Unit 7 are along the road system with easy access, have high winter recreation, and are valued for viewing purposes. Hunting in some of these easily accessible areas, such as Cecil Rhode Mountain (DG341), has led to the near extirpation of discreet populations in the past (Paul 2008). The current state hunt structure minimizes the potential to overharvest goat populations.

Enforcement Issues: None.

Recommendation: ADF&G is **NEUTRAL** on the eligibility requirements for the federal subsistence program. However, ADF&G is **OPPOSED** to opening a unit wide hunt for mountain goats in Unit 7 due to conservation concerns. ADF&G could support the portion of the proposal that seeks to establish seasons and harvest limits with modification to establish a drawing hunt, instead of a registration hunt, in Unit 7. The proposed bag limit of one goat and the quota of two goats should not be modified, due to conservation concerns. Similarly, the proposed prohibition of taking a nanny with kids should not be modified, nor should the proposed stipulation that if a nanny is taken, the hunter is prohibited from hunting any goats in Unit 7 for 5 regulatory years. The proposed stipulation that if a billy is taken, the hunter is prohibited from hunting any goats in Unit 7 for 3 regulatory years should also not be modified, due to conservation concerns. Modifications should include that permits be allocated within the current state hunt areas and the areas in which tags will be issued each year should be determined in consultation with ADF&G in September/October previous to the permit year.

Citations

Fiesta-Bianchet, M. and S. D. Cote. 2008. Mountain Goats (Ecology, Behavior, and Conservation of an Alpine Ungulate). Island Press, Washington D. C.

McDonough, T. J. and J. Selinger. 2008. Mountain goat management on the Kenai Peninsula Alaska: a new direction. Proceedings of the biennial Symposium of the Northern Wild Sheep and Goat Council 16:50-67.

Paul, T. W. 2009. Game transplants in Alaska. Technical Bulletin No. 4, second edition. Alaska Department of Fish and Game, Wildlife Conservation. Juneau, AK. 150pp.

White, K. S. 2006. Seasonal and Sex-specific variation in terrain use and movement patterns of mountain goats in southeastern Alaska. Biennial Symposium of Northern Wild Sheep and Goat Council 15: 183-193.

White, K. S., G. W. Pendleton, D. Crowley, H J. Griese, K. J. Hundertmark, T. McDonough, L. Nichols, M. Robus, C. A. Smith, J. W. Schoen. 2011 Mountain Goat Survival in Coastal Alaska: Effects of age, sex, and climate. Journal of Wildlife Management 75: 1731-1744.

White, K. S., P. Mooney, K. Bovee 2013. Mountain goat movement patterns and population monitoring on Baranof Island. Wildlife Research Annual Progress Report. Alaska Department of Fish and Game, Division of Wildlife Conservation. Douglas, AK.

WP20–19 Executive Summary	
General Description	Proposal WP20-19 requests revisions to the elder/minor sheep hunt in Unit 11. *Submitted by: Robert Cyr, Glennallen.*
Proposed Regulation	**Unit 11—Sheep** ***Elder Hunt: (Bag limit 1 ram)*** *1 sheep by Federal registration permit* ***(FS1104)*** *only by persons 60 years of age or older. Ewes accompanied by lambs or lambs may not be taken.* — *Aug. 1 – Oct. 20* ***Youth Hunt: (Bag limit 1 ram) 1 sheep by Federal registration*** *~~(ii) A joint~~ permit* ***(FS1103)*** *~~may be issued to a pair of a minor and an elder to hunt sheep during the Aug. 1 – Oct. 20 hunt~~.* ***Ewes accompanied by lambs or lambs may not be taken.*** *The following conditions apply:* — ***Aug. 1-Oct. 20*** *(A) The permittees must be a minor aged 8 to 1~~5~~**7** years old~~and an accompanying adult. 60 years of age or older~~;* *(B) ~~Both the elder and~~ The minor must be Federally qualified subsistence users with a ~~positive~~ customary and traditional use determination for the area they want to hunt;* *(C) The minor must hunt under the direct immediate supervision of the accompanying adult, who is responsible for ensuring that all legal requirements are met,* ***and;*** *(D) Only one animal may be harvested with this permit. ~~The sheep harvested will count against the harvest limits of both the minor and accompanying adult~~.*
OSM Conclusion	**Oppose**
Southcentral Alaska Subsistence Regional	**Oppose**

WP20–19 Executive Summary	
Advisory Council Recommendation	
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation	**Oppose**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**7 Support, 1 Oppose**

STAFF ANALYSIS
WP20-19

ISSUES

Wildlife Proposal WP20-19, submitted by Robert Cyr from Glennallen, requests revisions to the elder/minor sheep hunt in Unit 11.

DISCUSSION

The proponent seeks to change the Unit 11 elder/minor sheep hunt to a stand-alone elder sheep hunt and a stand-alone youth sheep hunt, and to change the allowable age of youth from ages 8-15 to ages 8-17. The proponent seeks to allow youth to hunt with an adult Federally qualified subsistence user who has the strength and stamina to physically participate. The proponent notes that this change would allow Federally qualified subsistence users to take their children and other youth sheep hunting during the best weather before school begins. The proponent notes the importance of passing on tradition and culture to youth, the importance of being able to teach youth when there is less competition, and the belief that establishing a youth hunt would create no conservation concerns.

Existing Federal Regulation

Unit 11—Sheep

1 sheep by Federal registration permit only by persons 60 years of age or older. Ewes accompanied by lambs or lambs may not be taken.	*Aug. 1-Oct. 20*

(ii) A joint permit may be issued to a pair of a minor and an elder to hunt sheep during the Aug. 1 – Oct. 20 hunt. The following conditions apply:

(A) The permittees must be a minor aged 8 to 15 years old and an accompanying adult 60 years of age or older;

(B) Both the elder and the minor must be Federally qualified subsistence users with a positive customary and traditional use determination for the area they want to hunt;

(C) The minor must hunt under the direct immediate supervision of the accompanying adult, who is responsible for ensuring that all legal requirements are met;

(D) Only one animal may be harvested with this permit. The sheep harvested will count against the harvest limits of both the minor and accompanying adult.

Proposed Federal Regulation

Unit 11—Sheep

Elder Hunt: (Bag limit 1 ram) *1 sheep by Federal registration permit* ***(FS1104)*** *only by persons 60 years of age or older. Ewes accompanied by lambs or lambs may not be taken.*	*Aug. 1-Oct. 20*
Youth Hunt: (Bag limit 1 ram) 1 sheep by Federal registration ~~*(ii) A joint*~~ *permit* ***(FS1103)*** ~~*may be issued to a pair of a minor and an elder to hunt sheep during the Aug. 1 – Oct. 20 hunt.*~~ ***Ewes accompanied by lambs or lambs may not be taken.*** *The following conditions apply:*	***Aug. 1-Oct. 20***

(A) The permittees must be a minor aged 8 to 1~~*5*~~***7*** *years old*~~*and an accompanying adult. 60 years of age or older*~~*;*

(B) ~~*Both the elder and*~~ *The minor must be Federally qualified subsistence users with a* ~~*positive*~~ *customary and traditional use determination for the area they want to hunt;*

(C) The minor must hunt under the direct immediate supervision of the accompanying adult, who is responsible for ensuring that all legal requirements are met, ***and****;*

(D) Only one animal may be harvested with this permit. ~~*The sheep harvested will count against the harvest limits of both the minor and accompanying adult.*~~

Existing State Regulation

Unit 11 sheep-

Resident- Youth hunt only- Aug. 1-5, one ram with full-curl horn or larger. General hunt- Aug. 10-Sept. 20, one ram with full-curl horn or larger.

Non-resident- Youth hunt only- Aug. 1-5, one ram with full-curl horn or larger every four years. General hunt- Aug. 10-Sept. 20, one ram with full-curl horn or larger every four years

Definitions:

Youth hunt- a hunt limited to a child aged 10-17 and an accompanying adult that is a licensed hunter 21 years of age or older.

Extent of Federal Public Lands/Waters

Unit 11 is comprised of 81% Federal public land and consists of 78.9% National Park Service (NPS) managed lands and 2.1% USDA, Forest Service (USFS) managed lands.

Customary and Traditional Use Determinations

Rural residents of Unit 12, Chistochina, Chitina, Copper Center, Dot Lake, Gakona, Glennallen, Gulkana, Healy Lake, Kenny Lake, Mentasta Lake, Slana, McCarthy/South Wrangell/South Park, Tazlina, Tonsina, residents along the Nabesna Road milepost 0–46 (Nabesna Road), and residents along the McCarthy Road milepost 0–62 (McCarthy Road) have a customary and traditional use determination for sheep in Unit 11, north of the Sanford River.

Rural residents of Chisana, Chistochina, Chitina, Copper Center, Gakona, Glennallen, Gulkana, Kenny Lake, Mentasta Lake, Slana, McCarthy/South Wrangell/South Park, Tazlina, Tonsina, residents along the Tok Cutoff Road- Milepost 79–110 (Mentasta Pass), residents along the Nabesna Road milepost 0–46 (Nabesna Road), and residents along the McCarthy Road milepost 0–62 (McCarthy Road) have a customary and traditional user determination for sheep in Unit 11, remainder.

Special requirements for NPS lands: Under the guidelines of ANILCA, NPS regulations identify Federally qualified subsistence users in National Parks and Monuments by: 1) identifying resident zone communities which include a significant concentration of people who have customarily and traditionally used subsistence resources on park lands; and 2) identifying and issuing subsistence use permits to individuals residing outside of the resident zone communities who have a personal or family history of subsistence use.

Regulatory History

In 1997, Wildlife Proposal 68 was submitted by Robert Marshall of Tazlina to allow a Federal sheep hunt in Unit 11 from Sep. 21–Oct. 20. The proponent noted that, “Most of my Tribe and myself are up in age where the mountain climbing is too hard and dangerous. During the early season, the sheep are almost to the top of the mountain. Later in October they move to lower areas.” The Southcentral

Alaska Subsistence Regional Advisory Council supported Proposal 68 with a Federal registration permit. This proposal was deferred by the Federal Subsistence Board (Board) until the following regulatory cycle for further analysis and development (FSB 1997).

In 1998, Wildlife Proposal 28 (deferred and amended Proposal 68 from 1997) was considered by the Southcentral and Eastern Interior Alaska Subsistence Regional Advisory Councils. Wildlife Proposal 28 requested to extend the sheep season in Unit 11 from Aug. 10 – Sep. 20 to Sep. 21 – Oct. 20 for persons 60 years of age or older. Based on Council recommendations and Solicitor's Office support, the proposal was adopted by the Board (FSB 1998).

In 2004, Wildlife Proposal WP04-24 was submitted by the Wrangell-St. Elias Subsistence Resource Commission, and requested that designated hunters be allowed for the late season elder sheep hunt in Unit 11. This proposal was opposed by both the Southcentral and Eastern Interior Councils and rejected by the Board (EIRAC 2004, SCRAC 2004, FSB 2004). It was noted that the special season for elders was established in 1998 to allow elders the opportunity to hunt and pass on their knowledge. There was discussion during the Council meetings regarding an opportunity for youth to accompany the elders, but it was realized that the proposal under consideration dealt only with designated hunting provisions and there was a lack of detail about the provisions for allowing youth to accompany elders during the late sheep season.

In 2005, the Cheesh'na Tribal Council submitted Wildlife Proposal WP05-06, which requested adding a provision for a joint elder/minor permit in the late sheep seasons in Units 11 and 12. Based on agreement between the Councils, Interagency Staff Committee and the State, the proposal was adopted by the Board as part of the consensus agenda and established the elder/minor hunt season of Sep. 21 – Oct. 20 (FSB 2005).

In 2012, Wildlife Proposal WP12-32, submitted by the Cheesh'na Tribal Council, requested that the season dates for the elder/minor sheep hunts in Units 11 and 12 be changed from Sep. 21-Oct. 20 to Aug. 1-Aug. 9. Based on Council and Wrangell-St. Elias Subsistence Resource Commission recommendations, the Board adopted season dates of Aug. 1-Oct. 20 while prohibiting the take of ewes accompanied by lambs in Unit 11 (FSB 2012).

Biological Background

Dall sheep are recognized as an integral part of the ecosystem throughout alpine and subalpine areas in Unit 11. Sheep numbers in the Wrangell Mountains prior to the 1950s are unavailable. Surveys done in the late 1950s and 1960s are generally not comparable to recent surveys due to changes in survey methodology. Specific sheep count areas and techniques were established in 1973, when sex and age composition surveys were flown over large portions of the Wrangell and Chugach mountains. Given the size of Unit 11, unit-wide sheep population data are limited. The NPS estimated 26,286 sheep ± 4,473 (95% CI) in 1990, 27,796 ± 6,448 (95% CI) in 1991, and 17,445 ± 3,883 (95% CI) in 1993 within the entire Wrangell-St. Elias National Park and Preserve (WRST) (McDonald et al. 1991; Strickland et al. 1993). In 2010 and 2011, a sheep population estimate of 12,428 (10,780-14,470 95% CI) was determined for WRST (NPS 2013). It should be note that there are many subpopulations of

sheep in Unit 11 (**Figure 1**) and the population trends within the subpopulations are variable. Although there is some overlap between sheep populations, each count area basically represents a discreet population; geographic barriers such as large valleys and rivers naturally limit sheep movement and distribution, resulting in discrete subpopulations (Arthur 2013, Caikoski 2014).

Sheep survey areas are reported by Hatcher (2018) **Figure 1**. These surveys still continue in selected areas. Surveys represent minimum counts (Putera 2019, pers. comm.). For the surveys, Hatcher (2018) reported that, "Adult male sheep are recorded as rams, and young male sheep and ewes are recorded as ewe-like sheep. Lambs are differentiated from adults."

Northern Unit 11- Sheep population information is determined from count areas (CAs) 2, 3W, and 10. CAs 2 and 3W were surveyed in 2013 (**Figure 1**). Counts were conducted in CA 2 only in 2002 and 2013, and the 2013 survey was incomplete. Composition data showed that there were sufficient rams to breed ewes in CA 2 in 2013 (54 rams:100 ewes), but the percent of rams having full curl horns may have declined from the 20% observed in 2002 to 7% observed in 2013. The number of sheep observed in CA 3W in 2013 was 41% lower than the 565 sheep observed in 2007 and 34% lower than the 502

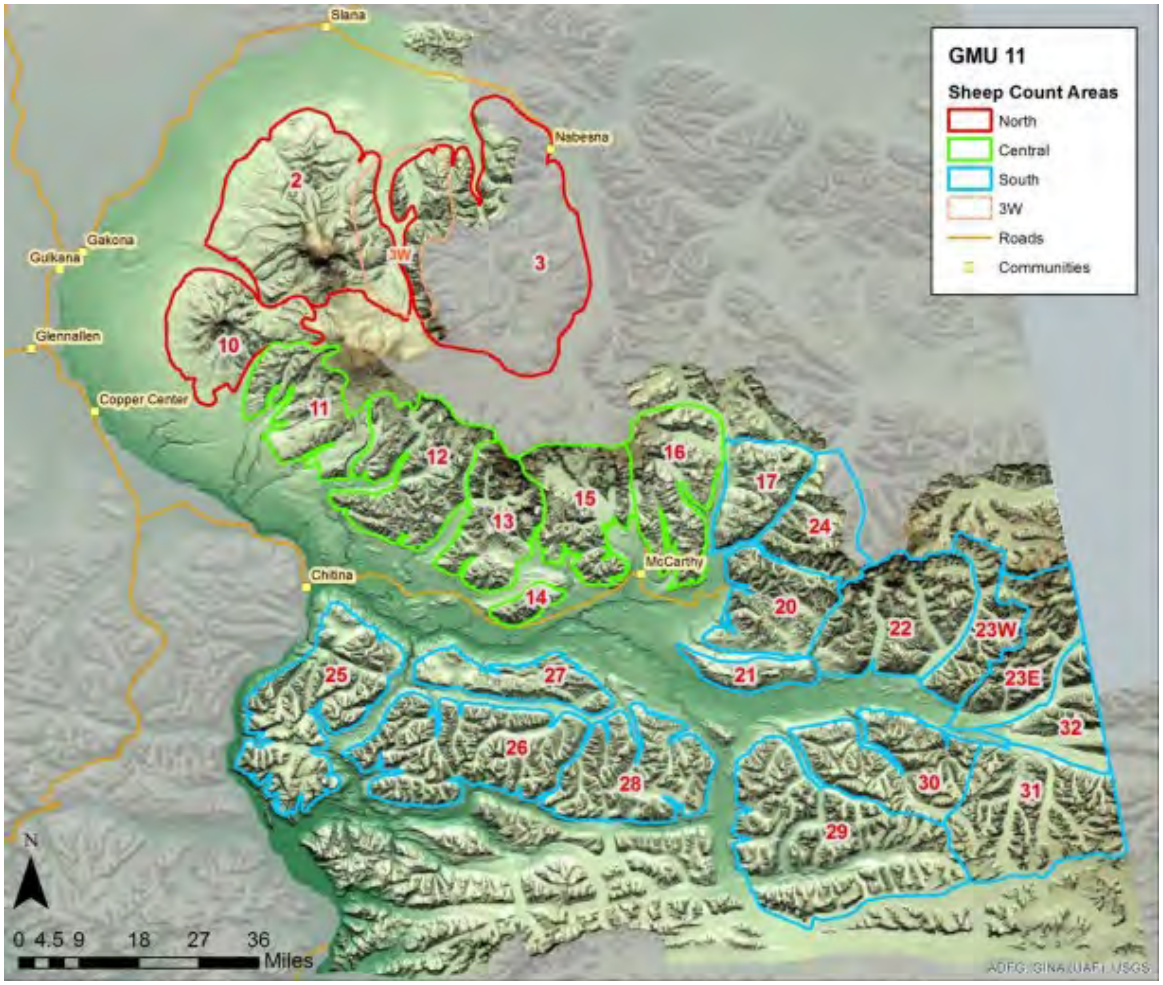

Figure 1. Map showing Unit 11, Dall sheep trend count areas (Hatcher 2018).

sheep observed in 2001. The percent of the population represented by lambs was 8% in 2013, which was below the 20% observed in 2007. CA 3W is popular to hunt among Federally qualified subsistence sheep hunters. While the percent of rams had dropped from 46% in 2001 and 50% in 2007 to 11% in 2013; the ratio of rams:100 ewe-like sheep remained adequate at 46:100. Due to the location of the sheep counted in the previous survey of CA 3W, it is plausible that the declines observed in 2013 compared to previous surveys are reflective of sheep locations during the survey (being just over the ridgetop, for example) rather than actual population trends (**Figure 1**, Hatcher 2018).

Central Unit 11- The central portion of the Wrangell Mountains, is represented in CAs 11 and 12, which are the most frequently surveyed CAs, as well as CAs 13, 14, 15, and 16 (**Figure 1**). CA 11 was surveyed in 2011, 2013, 2015 and 2017. CA 12 was surveyed in 2011, 2013 and 2015, while CAs 13 and 14 were surveyed only in 2013. Sheep observations in CA 11 slowly declined after the late 1980s, when 400–560 sheep were observed, until 2002. Since 2008 (2008, 2009, 2011, 2013, 2015 and 2017), the population has remained fairly stable with an average of 177 sheep being observed (the range was 124-251 (Putera 2019, pers. comm.). Rams:100 ewe-like sheep ranged between 30–44 animals, with an average of 35. During regulatory years RY 2011–2015, an average of 16% of rams were full-curl or greater. Lambs represented an average of 17% of the flock. Survey results from 2017 for CA 11 were 251 total sheep, 37 rams, and 74 lambs (Putera 2019, pers. comm.).

Sheep numbers in adjoining CA 12 began to decline in the late 1990s, falling from a high of 601 sheep observed in 1996 to a low of 113 sheep observed in 2006. The counts appeared to stabilize from 2004 to 2009, when on average 166 sheep were observed annually. During RY 2011–2015, the number of sheep observed in CA 12 averaged 282, with observations ranging from 258 to 322 sheep. On average, lambs represented 17% of the observed flock, which was above the average from previous surveys of 14%. The ratio of rams to 100 ewe-like sheep ranged from 45 to 61, with an average of 51, which is similar to the overall average of 50 rams:100 ewes from all previous surveys. CA 13 was surveyed in 2013 for the first time since 1999. While the total of 124 sheep observed was lower than the 369 observed in 1999, it was not far from the 150 sheep observed during the only earlier survey of the area, in 1984. Of the rams observed, 14% were full-curl or greater (Hatcher 2018).

The number of sheep observed in 2013 in CA 14 (94 sheep) was above the 10-year average from previous surveys (75 sheep; Schwanke 2011). None of the rams observed were full-curl or larger, which was also the case in 2003 and 2005. The total number of rams observed in 2006 (31) was greater than in any previous survey. The ram to ewe-like sheep ratio was 39:100, and lambs made up only 5% of the population (Hatcher 2018).

Southwestern Unit 11- Population information for the southwest portion of the Saint Elias Mountains is collected from CA 17, CA 21, CA 22, CA 23, CA 24, and CA 32 in the upper Chitina River drainage (**Figure 1**). Most recently, CA 22 was surveyed in 2017 and CA 23 was surveyed in 2013. In CA 22 total sheep numbers since the early 1980s have ranged from 197 to 304 (average = 252). Counts have stabilized since 2005 (2005, 2011, 2013 and 2017) with an average of 237 sheep observed (range 234-359; Putera 2019, pers. comm.). An average of 49 rams:100 ewe-like sheep were observed, and an average of 27% of rams observed were full-curl or greater. On average, lambs made up 18% of the

subpopulation. Survey results from 2017 for CA 22 were 359 total sheep, 76 rams and 92 lambs (Putera 2019, pers. comm.). Counts in CA 23 have fluctuated between 244 sheep and 375 sheep since the early 1980s, with an average of 309 sheep observed. During RY 2011–2015, 250 sheep were observed in CA 23 with 56 rams:100 ewe-like sheep, 17% of rams were full-curl or greater, and 9% of the flock made up of lambs (Hatcher 2018).

Based on surveys in Unit 11 from RY 2011 to RY 2015, the sheep populations are currently stable (Hatcher 2018). Since large amounts of sheep habitat in Unit 11 are Federally-protected, which either restrict hunter access or are difficult for hunters to access the habitat, Hatcher (2018) observed that it is unlikely that the hunter harvest will cause the sheep population to decline. She noted that the Unit 11 sheep population is largely driven by uncontrollable factors such as weather, habitat quality, and predation, rather than hunter harvest.

Cultural Knowledge and Traditional Practices

Written documentation of the special relationships between all ages and the teaching of hunting and fishing skills is provided in summaries prepared by the National Park Service (NPS 1995). Examples of these practices are provided in the curriculum guide materials prepared by the Mt. Sanford Tribal Consortium. This curriculum guide provides guidance to teachers in traditional learning and identifies areas where adults can be consulted for traditional knowledge on the local resources and customs (MSTC 2004).

Simeone (2006) provided some ethnographic and historical information on the use of large land mammals in the Copper River Basin. In the Ahtna language, Dall sheep are called *debai,* ewes are *c'edzedzi*, lambs are *ghesdacy*, adult male sheep are *ses yaane'*, and large rams are called *de'aeli* (Kari 1990). In years past, Ahtna living on the Copper River spent the late summer and fall on the slopes of the Wrangell Mountains hunting Dall sheep and Arctic ground squirrels. Before they had rifles, the Ahtna snared sheep on sheep trails in the mountains and dispatched the sheep with a knife or spear. According to Simeone (2006), "Gene Henry's father…said in late summer the family moved from their home at Batzulnetas into the hills and spent most of the winter trapping and living on sheep meat. Gene said that his family killed approximately 30 sheep a year." According to Simeone (2006), "Katie John's father…spent the late summer and fall hunting. She estimated that her family killed 30 sheep in a good year." Ahtna hunters paid particular attention to ritual observations that were thought to be equally essential for hunting success. In a recollection of many Ahtna elders, sheep were, "almost more important than any other resources except salmon" (Simeone 2006).

Alaska Department of Fish and Game (ADF&G), Division of Subsistence conducts household subsistence harvest surveys periodically throughout Alaska. Though this survey data is only available for some communities in some years, it is an additional source for documenting patterns of harvest and use in rural Alaska. Recent surveys conducted in the communities of the Copper River basin and upper Tanana River watershed note that large land mammal harvest is high and comprised between 21% and 88% of the total community harvests by weight (Godduhn & Kostick 2016; Holen, et al. 2012; Holen, et al. 2015; Kukkonen & Zimpleman 2012; La Vine, et al. 2013; La Vine & Zimpleman 2014). While

the majority of the large land mammal harvest was moose and caribou, most communities reported some use or attempted harvest of Dall sheep during the year that were surveyed.

Harvest History

The harvest of Dall sheep in WRST is limited to Federally qualified subsistence users in NPS WRST resident zone communities. Rural residents can also hunt under Federal subsistence regulations and any Alaska resident can hunt under State regulations in the WRST National Preserve. On WRST National Preserve lands, non-residents can hunt sheep under State regulations if accompanied by an Alaska licensed guide or an Alaska resident 19 years of age or older who is within the second degree of kindred.

In the 21 years (1998–2018) since the Unit 11 elder-only subsistence sheep hunt was established, a total of 392 Federal permits were issued; 148 of the permit holders hunted and 17 sheep (16 male and 1 female) were harvested (USFWS 2019).

In the 14 years (2005-2018) since the Unit 11 elder/minor hunt was established, only 14 Federal permits were issued; five permit holders hunted and no sheep were harvested (USFWS 2019).

The State of Alaska reported that an average of 127 people per year engaged in sheep hunts in Unit 11 from RY2011-2015. During the same timeframe, the average annual harvest under State harvest tickets was 43 sheep (Hatcher 2018).

Effects of the Proposal

If adopted, this proposal would maintain the current elder permit (FS1104) for sheep in Unit 11 and replace the current elder/minor permit (FS1103) with a standalone sheep permit for youth.

The Alaska National Interest Lands Conservation Act (ANILCA) provides a subsistence priority for rural Alaska residents that have a customary and traditional use determination for a particular resource. Customary and traditional use determinations are made to identify and protect subsistence uses and are not intended to restrict harvest or allocate resources. In the event subsistence uses need to be restricted due to conservation concerns or to continue subsistence uses, a prioritization among Federally qualified subsistence users is implemented through Section 804 of ANILCA.

Wildlife Proposal WP20-19 would create a preference for a small select group out of the general population of qualified rural residents, and there is no legal basis for doing so under Title VIII of ANILCA. Section 804 of ANILCA states that, "*Whenever it is necessary to restrict the taking of a populations of fish and wildlife on such lands for subsistence use in order to protect the continued viability of such populations, or to continue such uses, such priority shall be implemented through appropriate limitations based on application of the following criteria:(1) customary and direct dependence upon the population as the mainstay of livelihood; (2) local residency; and (3) the availability of alternate resources.*" While the historic Unit 11 elder/minor sheep hunts may be justified based on the educational value and longstanding tradition of passing down knowledge from

generation to generation, there is no legal justification for an age-based hunt, which gives preference and stand-alone permits for youth hunters.

Opportunity for youth hunts might be addressed through Federal Subsistence Management Program cultural/educational permits. A modification of Wildlife Proposal WP20-19 to provide consideration of a cultural/educational permit would be beyond the scope of the originally submitted proposal. As such, there would have to be a separate requests for cultural/educational permits. Cultural/educational permits would give greater flexibility to not only the user, but to Federal land and in-season managers. However, cultural/educational permits are given to an organization, not to individuals. Regulations concerning cultural/educations permits [_.25(g)] state that, "*(1) A qualifying program must have instructors, enrolled students, minimum attendance requirements, and standards for successful completion of the course. Applications must be submitted to the Federal Subsistence Board through the Office of Subsistence Management and should be submitted 60 days prior to the earliest desired date of harvest. Harvest must be reported, and any animals harvested will count against any established Federal harvest quota for the area in which it is harvested. (2) Requests for follow up permits must be submitted to the in-season or local manager and should be submitted 60 days prior to the earliest desired date of harvest."* The cultural/educational permit process has been developed by the Alaska Federal Subsistence Management Program since the Unit 11 elder and elder/minor sheep hunts were originally adopted by the Board in 1998 and 2005 respectively.

OSM CONCLUSION

Oppose Proposal WP20-19.

Justification

Wildlife Proposal WP20-19 would create a preference for a small select group out of the general population of qualified rural residents, and there is no legal basis for doing so under ANILCA. Youth hunts might, however, be addressed through cultural/educational subsistence permits.

LITERATURE CITED

Arthur, S.M. 2013. Demographics and spatial ecology of Dall sheep in the central Brooks Range. ADF&G, Division of Wildlife Conservation. Final research performance report 1 July, 2007-30 June, 2013, Federal Aid in Wildlife Restoration Project 6.15. Juneau, AK.

Caikoski, J.R. 2014. Eastern Unit 24A and Units 25A, 26B and 26C Dall sheep. Chapter 16, pages 16-1 through 16-18 *in* P. Harper and L.A. McCarthy, editors. Dall sheep management report of survey and inventory activities 1 July, 2010-30 June, 2013. ADF&G, Species Management Report ADF&G/DWC/SMR-2014-4. Juneau, AK.

EIRAC. 2004. Transcripts of the Eastern Interior Alaska Subsistence Regional Advisory Council proceedings, February 27, 2004. Office of Subsistence Management. USFWS. Anchorage, AK.

FSB. 1997. Transcripts of the Federal Subsistence Board proceedings, April 7, 1998. Office of Subsistence Management, USFWS. Anchorage, AK.

FSB. 1998. Transcripts of the Federal Subsistence Board proceedings, May 6, 1998. Office of Subsistence Management, USFWS. Anchorage, AK.

FSB. 2004. Transcripts of the Federal Subsistence Board proceedings, May 21, 2004. Office of Subsistence Management, USFWS. Anchorage, AK.

FSB. 2005. Transcripts of the Federal Subsistence Board proceedings, May 5, 2005. Office of Subsistence Management, USFWS. Anchorage, AK.

FSB. 2012. Transcripts of the Federal Subsistence Board proceedings, January 19, 2012. Office of Subsistence Management, USFWS. Anchorage, AK.

Godduhn, Anna R., and M. L. Kostick. 2016. Harvest and Use of Wild Resources in Northway, Alaska, 2014, with special attention to nonsalmon fish. ADF&G, Division of Subsistence. Technical Paper No. 421. Fairbanks, AK.

Hatcher, H. L. 2018. Dall sheep management report and plan, Wrangell and St. Elias Mountains, Game Management Unit 11: Report period 1 July, 2011–30 June, 2016, and plan period 1 July, 2016–30 June, 2021. ADF&G, Species Management Report and Plan ADF&G/DWC/SMR&P-2018-39. Juneau, AK.

Holen, D., S. M. Hazell, and D. S. Koster, editors. 2012. The Harvest and Use of Wild Resources by Communities in the Eastern Interior, Alaska, 2011. ADF&G, Division of Subsistence. Technical Paper No. 372. Anchorage, AK.

Holen, D., S. M. Hazell, and G. Zimpelman, editors. 2015. The Harvest and Use of Wild Resources in Selected Communities of the Copper River Basin and East Glenn Highway, Alaska, 2013. ADF&G, Division of Subsistence. Technical Paper No. 405. Anchorage, AK.

Kari, James. 1990. *Ahtna Athabaskan Dictionary*. Alaska Native Language Center, University of Alaska, Fairbanks, AK.

Kukkonen, M. and G. Zimpelman. 2012. Subsistence Harvests and Uses of Wild Resources in Chistochina, Alaska, 2009. ADF&G, Division of Subsistence, Technical Paper No. 370. Anchorage, AK

La Vine, R., M. Kukkonen, B. Jones, and G. Zimpelman, editors. 2013. Subsistence Harvests and Uses of Wild Resources in Copper Center, Slana/Nabesna Road, Mentasta Lake, and Mentasta Pass , Alaska, 2010. ADF&G, Division of Subsistence. Technical Paper No. 380. Anchorage, AK.

La Vine, R., S. and G. Zimpelman, editors. 2014. Subsistence Harvests and Uses of Wild Resources in Kenny Lake/Willow Creek, Gakona, McCarthy, and Chitina, Alaska, 2012. ADF&G, Division of Subsistence. Technical Paper No. 394. Anchorage, AK.

McDonald, L.L., D. Strickland, D. Taylor, J. Kern, and K. Jenkins. 1991. Estimation of Dall sheep numbers in Wrangell-St. Elias National Park and Preserve-July 1991. Technical Research Work Order prepared for the National Park Service, Alaska Region. Anchorage, AK

Mt. Sanford Tribal Consortium. 2004. Whouy sze kuinalth, "Teaching our many Grandchildren ", A Curriculum Guide. Internet: http://www.ankn. uaf.edu/curriculum/Whouy_Sze_Kuinalth/index.html

NPS. 1995. Customary and traditional use reference for the Copper River Basin Area. Reference prepared by the National Park Service for the Federal Subsistence Board.

NPS. 2013. Monitoring Dall's sheep in the Central Alaska Network. Alaska Region Inventory and Monitoring Program, Resource Brief 2197712, No. 44. Fairbanks, AK.

Putera, J. 2019. Wildlife Biologist. Personal Communications (email, June 14). Wrangell-St. Elias NP&P, Copper Center, AK.

Schwanke, R.A. 2011. Unit 11 Dall sheep management report, Pages 13-29 *in* P. Harper, editor. Dall sheep management report of surveys and inventory activities 1 July 2007-30 June 2010. ADF&G, Project 6.0. Juneau AK.

SCRAC. 1998. Transcripts of the Southcentral Alaska Subsistence Regional Advisory Council proceedings, March 18, 1998. Office of Subsistence Management. FWS. Anchorage, AK.

SCRAC. 2004. Transcripts of the Southcentral Alaska Subsistence Regional Advisory Council proceedings, March 10, 2004. Office of Subsistence Management. FWS. Anchorage, AK.

Simeone, W.E. 2006. Some ethnographic and historical information on the use of large land mammals in the Copper River Basin, Resource Report, NPS/AR/CRR-2006-56, National Park Service, Alaska Region, 50pp.

Strickland, D.L., L.L. McDonald, J. Kern, and K. Jenkins. 1993. Estimation of the number of Dall sheep in the Wrangell-St. Elias National Park and Preserve-July 1992. National Park Service, Alaska Region, Technical Research Work Order. Anchorage, AK.

USFWS. 2019. Federal permit database, Office of Subsistence Management, microcomputer data-base. Retrieved May 21, 2019.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southcentral Alaska Subsistence Regional Advisory Council

Oppose WP20-19. The Council wanted existing regulations to remain on the books and, if the Board rejects this proposal, then the hunts provided under the existing regulation would continue. The Council did not agree with the Solicitor's opinion that this is not permissible under ANILCA, as there is no reason to have a Section 804 to restrict harvest because there is no shortage of animals and because there isn't a limitation on age. In fact, it could be interpreted as the opposite when talking about sustaining a livelihood as this has a lot to do with passing that knowledge from one generation to the other and there is a precedent of this activity happening. The Council was concerned that there may eventually be only 'special hunts', and the Council did not want to run the risk of the current hunts being restricted and opposed this proposal to maintain 'status quo.'

Eastern Interior Subsistence Regional Advisory Council

Oppose WP20-19. The Council stated that it wants to use the OSM Preliminary Conclusion on page 166 of the Council's October 2019 meeting book as the primary justification for the Council's position on the proposal. The Council also shared its concern that opening to a longer season could result in more sheep harvested. The Council believes that a separate youth hunt is unnecessary because there is already an ample opportunity for youth to participate in the regular hunt and for elders to go out with youth to pass knowledge.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-19: This proposal, submitted by Robert Cyr of Glennallen, seeks to change the Unit 11 elder/minor sheep hunt to a stand-alone elder sheep hunt and a stand-alone youth sheep hunt, and to change the allowable age of youth from ages 8–15 to ages 8–17. This also removes the requirement that youth must be accompanied by a federally qualified adult 60 years of age or older. The proponent notes that this change would allow federally qualified subsistence users to effectively take their children, and other youth, sheep hunting during the best weather before school begins and that it is important to be able to pass on hunting traditions in a less competitive environment.

Introduction: Under the existing federal regulations any federally qualified adult may take a federally qualified youth sheep hunting in Unit 11 from August 10–September 20 and youth ages 10–17 may obtain their own harvest ticket to harvest a bag limit separate from the adult. If a youth hunts with an

elder under the federal elder/youth permit during the extended season of August 1–October 20 then the harvest under that permits counts towards the bag limit for both the elder and the youth.

The proposal as written would allow a federally qualified youth hunter age 8–17 and any federally qualified adult to harvest a sheep on the federal youth permit during extended season dates, and the adult (if federally qualified) would still be able to harvest an additional federal subsistence sheep on their own harvest ticket (i.e., the harvested sheep will not count against the bag limit of both the youth and adult. Harvest will likely increase as a result of this proposal, since adults will be able to hunt under federal subsistence regulations for their own sheep from August 10–September 20, and will have the opportunity to take a youth hunting on a different permit for an additional sheep any time between August 1 and October 20. This could result in harvest more consistently falling within the amounts reasonably necessary for subsistence (see below) annually but may also negatively impact the ratio of rams to ewe-like sheep [1]in more heavily hunted areas.

To mitigate this possibility, ADF&G recommends aligning the federal youth sheep hunt with statewide youth sheep hunt dates of August 1–5. The late season dates for the federal elder and subsequent federal elder/youth hunt were included with the intention of allowing an easier hunt for elder hunters later in the season, when sheep have moved down to lower elevations. The proponent states that the new youth hunt would eliminate the need for an easier hunt by allowing younger adults to accompany youth, and states that the hunt would allow these adults to take youth hunting before school begins. Both rationales eliminate the need for later season dates for the new youth hunt.

Additionally, other youth hunts in the state (including the elder/youth hunt that this proposal seeks to modify) specify that the animal taken on the youth permit will count against the bag limit for both the youth and the adult. This specification helps to alleviate what other hunters perceive to be an unfair advantage. Furthermore, aligning youth hunt regulations in a co-management situation alleviates confusion that often results in areas where multiple sets of regulations may be applicable. For this reason, ADF&G recommends that the youth permit harvest count against the bag limit for both the youth and the accompanying adult.

Impact on Subsistence Users: This change would create a preference for a select group of federally qualified rural residents likely leading to an increase in harvest because adults will be able to hunt under federal subsistence regulations for their own sheep from August 10– September 20, and will have the opportunity to take a youth hunting on a different permit for an additional sheep any time between August 1 and October 20. Harvest records for Unit 11 from 2014–2018 demonstrate a recent increase in overall sheep harvest, while the federal subsistence portion of that harvest has remained relatively stable. Over the past five years, 54% of the total harvest of sheep in Unit 11 has been taken by federally qualified subsistence users.

[1] Ewes and young rams are not easily distinguished during surveys, so they are lumped together as “ewe-like sheep.”

Impact on Other Users: If adoption of this proposal results in increased harvest of full curl rams, nonfederally qualified users could experience a decline in harvest success.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made a positive customary and traditional use finding for Dall sheep in Unit 11.

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for sheep in Unit 11 is 60–75 sheep.
The state hunting seasons and bag limit for Dall sheep in Unit 11 are:
Resident: *Youth hunt only - Aug. 1–5, one ram with full-curl horn or larger.*
General hunt- Aug. 10–Sept. 20, one ram with full-curl horn or larger.
Non-resident: *Youth hunt only - Aug. 1–5, one ram with full-curl horn or larger every four years.*
General hunt - Aug. 10–Sept. 20, one ram with full-curl horn or larger every four years

Special instructions: None

Conservation Issues: In general, areas with higher hunting pressure (from either subsistence users or other hunters) tend to exhibit ram to ewe-like ratios near or below the management objective of 40 rams:100 ewe-likes prior to hunting season. An increase in federal harvest may negatively affect the ram to ewe-like ratios in more heavily hunted areas. Inadequate ram to ewe-like ratios after the fall harvest may negatively affect productivity of a given population.

Enforcement Issues: None

Recommendation: ADFG is **NEUTRAL** on allocation of federal sheep hunting opportunity. However, we do recognize the legal interpretation in OSM's analysis of ANILCA and not being able to make allocative decisions among certain groups of federally qualified users. If, for reasons stated above, the FSB decides to go with the proposal ADF&G recommends aligning the federal youth sheep hunt with statewide youth sheep hunt dates of August 1–5 and aligning bag limits with the statewide youth hunt bag limit stipulations, which specify that the bag limit in a youth hunt counts against both the youth and the adult.

WRITTEN PUBLIC COMMENTS

June 5, 2019

Federal Subsistence Board
ATTN: Theo Matuskowitz
Office of Subsistence Management
1011 E. Tudor Road
Anchorage, AK 99503-6199

Dear Mr. Matuskowitz:

Customary and Traditional Committee is hereby pleased to submit comments on 2020-2022 Federal Wildlife Proposals.

We oppose WP20-19 which intends to change Federal Joint Elder/Youth permit hunt (FS1103) regulation on Unit 11 federal public lands. We also oppose changing (FS1204) Unit 12 Joint Elder/Youth Hunt regulation on Unit 12 federal public lands.

An Ahtna Elder proposed this joint elder and youth hunt for sheep in Unit 11 on federal public lands so that Ahtna's customary and traditional use and practice of harvesting, preserving and uses of sheep would be carried on. We, the Ahtna People wish to respect our late Elder from Tazlina Village to continue this sheep hunt in GMU 11 and GMU 12 to pass down C&T knowledge to the younger generation.

We support WP20-50, a housekeeping proposal to clean up description in Unit 12 unencumbered federal lands. Public members will have a precise description of federal lands that is surrounded by State lands. Federal subsistence hunters will have a better understanding where federal public lands are within Game Management Unit 12.

We oppose WP20-51 to allow the community of Slana to have a positive customary and traditional use (C&T) determination for sheep in Unit 12.

The community of Slana should prove in their own words that they have customary and traditional uses of sheep in GMU 12. The Ahtna People had to prove to the state and federal management systems that we have customary and traditional uses of fish and wildlife. We believe that C&T uses by all communities should be in sync with Ahtna customary and traditional uses of fish and wildlife in order to gain positive C&T use of the resources.

We support WCR20-42 to keep Unit 12 Caribou Wildlife Closure to the Non-federal qualified hunters. Only the federally qualified subsistence users should be able to continue to hunt Chisana caribou herd. The population of the Chisana caribou herd cannot sustain a hunt to include Non-federally qualified hunters. Keep the Unit 12 Caribou wildlife closure status quo.

Sincerely,
Gloria Stickwan
for Linda Pete

Linda Pete, Chair

Page 1 of 1

From: Cory Schwanke Date: Fri, Jun 28, 2019 at 3:52 PM Subject: [EXTERNAL] WP20-19 written comment To: <subsistence@fws.gov>

Public comment for WP20-19- youth sheep hunting opportunity

I am writing in support of this proposal. There is currently a federal regulation that allows for an early season youth sheep hunt, but the problem is it is tied to having an elder accompany the youth on the hunt. This hunt structure does not work for many families in the region. Most of us do not have an elder available to go on a mountain hunt, not to mention this hunt combines two daunting components: hunting with a youth and hunting with an elder. It makes sense to severe the tie of having an elder accompany a youth. The state currently has a youth sheep hunt that is not tied to an elder hunt.

This proposal will also allow for more opportunity to teach our kids more about the ways of living off the land. We all want to take our kids hunting/fishing/gathering and show them our lifestyle, but juggling subsistence lifestyles and school can be problematic since school periods overlap with this fall "gathering period". The problem lies with strict attendance policies at school (no more than 15 excusable absences allowed per school year). The opportunity to take our kids sheep hunting up to 10 days sooner will allow them more time to participate in the other hunting and gathering activities before school starts and attendance records are kept.

Thank you for your time,

Corey Schwanke

June 16, 2019

From: Russell and Sherri Scribner

Dear Federal Subsistence Board and Regional Advisory Committees,

I am in favor of WP 20-19 because it makes sense. I believe that adopting this recommendation will realistically provide what the current elder/youth combination regulation intends- to encourage the passing on of hunting traditions from one generation to the next. Under the current regulation, waiting until I'm sixty to take my son and daughter sheep hunting would be a disadvantage. Subsistence backpack hunts starting at river level and carrying 60 pounds of food and camp over mountains is very physically demanding. Adding gear too heavy for youth to carry and 80 pounds of meat and horns on the way back out requires stamina better suited for middle aged mentors. As WP 20-19 proposes, I believe that separating the elder and youth hunt into two distinct hunts is a great idea. My father took me on my first backpacking sheep hunt when I was 11 and thankfully he was strong enough to pack out most of the meat since I only weighed 70 pounds at the time.

Sincerely,

Russell Scribner

From: **Jim Lorence**
Date: Tue, Jun 18, 2019 at 5:25 PM
Subject: [EXTERNAL] comments on proposal WP 20-19
To: subsistence@fws.gov <subsistence@fws.gov>
Dear Federal Subsistence Board and Regional Advisory Committee:

WP 20-19 Proposal Comments

I am in support of this proposal for the following reasons:

1. The current regulation incorporates a special provision (Federal Joint permit FS1103) which would inherently be for the intent of the elder being able to pass down traditional sheep hunting knowledge and experience to a youth. Anyone who has hunted sheep is well aware of the intense physical demands it requires. By requiring an elder to be 60 or older to take a youth just about negates the current special provision. Youth would be far better served in being able to learn and gain traditional skills and knowledge from an experienced middle aged adult that is far more capable of taking a youth safely on a sheep hunt.

2. Separating the current regulation into two parts makes sense in that it still maintains an elder hunt, but also allows for a youth hunt (for the reasons stated in #1).

3. Increasing the youth age range from 8-15 to 8-17 also makes sense in that it allows for the stronger youth to have
this opportunity (the youth aged 16 and 17). Sheep hunting is very challenging and physically strenuous, and opening it to ages 8-17 makes sense.

Thank you. Sincerely,
Jim Lorence

From: **Rebecca Schwanke**
Date: Wed, Jun 26, 2019
Subject: [EXTERNAL] WP 20-19 comments
To: subsistence@fws.gov <subsistence@fws.gov>

Dear Mr. Matuskowitz,

Please accept my written comments on WP 20-19, an amended version of the elder sheep hunt for Unit 11.

I would like to offer my support for this proposal.

I firmly believe in what the proposal author states "Youth hunters are the most critical component of maintaining a strong cultural awareness of our hunting heritage. Local youth begin hunting small game and waterfowl. As they learn effective hunting techniques, respect and skill, they slowly graduate to hunting big game species".

The opportunity for kids to hunt sheep is limited for several reasons. Relatively speaking, there are a limited pool of parents with the knowledge, interest, ability and time to sheep hunt. For those of us already hunting with our young kids, we have learned that it takes extra time, patience and luck for a kid to successfully harvest a big game animal. The rigors of competing with other sheep hunters in relatively accessible federal hunting areas makes taking a kid on a sheep hunt that much more daunting. The result is that few kids get to hunt sheep.

The elder hunt in Unit 11 in Wrangell St. Elias National Park and Preserve is a great concept, offering elders and kids the opportunity to get into the mountains together, but it rarely works out. Only a small number of elders are still able to hunt sheep, and fewer yet are in a position to take a kid. I have participated in Unit 11 elder sheep hunts, and I will likely do this again. I would also like the opportunity to accompany an elder and my own son on a sheep hunt some day, both with the opportunity to harvest a sheep.

This proposal allows elders to continue to utilize the longer hunting season, while also allowing middle aged parents who are often more able, to take their own kids sheep hunting during the same time frame with limited competition.

The main benefit of youth-specific hunts is so these kids have great hunting experiences when they're young. This is the best way to help a kid enjoy hunting. There is no biological reason not to allow kids to have their own permit and their own bag limit. It's hard to explain, but kids get really excited about harvesting their own game.

Sheep hunting can be physically demanding. Some 8 year olds are ready to hunt sheep, some kids not until they're a bit older. This is a decision that parents have to make for their own kids. Youth hunts have the biggest impact if all youth are able to participate, when they are ready.

Allowing kids to sheep hunt prior to school starting and prior to other local sheep, caribou and moose hunts is really helpful so families can do both if need be to harvest enough game for the year. The opportunity to hunt late in the season may not be utilized often, but it will afford families a chance to get their kids sheep following the regular season.

I appreciate your time and efforts. Thank you for the opportunity to comment.

Regards,
Becky Schwanke

8 October 2019

Dear Members of the Southcentral and Interior RAC,

Thank you for the opportunity to offer written testimony on WP20-19, as I cannot be there in person to testify. I would like to offer my support for the amended Elder / Youth Dall sheep proposal. As a local federal sheep hunter, I took my first ram in WRST the year this hunt was originally adopted. The elder and elder/youth hunts have been a great opportunity for Unit 11 hunters, they are widely supported and I would like to see the opportunity remain in regulation.

The proposer, Bob Cyr, is a friend of mine who has dedicated many of the last 15 years to taking each of his 3 kids hunting throughout the Copper River basin. I helped Mr. Cyr write this proposal specifically so we could expand the opportunity for youth and elders to hunt sheep in Wrangell St. Elias, and we believe it is consistent with the original intent of this regulation. It is important that we act to make federal subsistence regulations more inclusive whenever and wherever we can to ensure the continuation of a subsistence lifestyle. ANILCA requires that rural residents have a priority over other users to take wildlife for subsistence uses on Federal public lands and waters, but nowhere in ANILCA does it say that the Federal Subsistence Board cannot offer additional opportunities for youth and elders, above and beyond those **reasonably afforded** to all federally qualified hunters.

You are being asked to address a couple issues with this proposal, first, to **support the concept of elder and youth hunting opportunities** in a way similar to but more inclusive than that offered under State regulations. Current State regulations offer an early 5 day statewide youth sheep hunt across state, private and preserve lands. We don't currently have a parallel or priority opportunity under federal regulations offering this type of hunt for federally qualified youth hunters. Our youth are our future, I think we can all agree to this. Our elders are key to keeping our traditional activities in focus, though they are not always the ones most capable of taking youth out hunting. That's where younger hunters like myself come in. I can sheep hunt with an elder and a youth at the same time, gladly giving up my opportunity to harvest a Dall sheep, while helping pack for both an elder and a youth if they are successful in harvesting sheep. We should not be asking our elders to give up their chance to harvest what may be their last ram just because they have a youth along. This is my opportunity to give up, because I'm young and I can always go next year. As a federal sheep hunter, I support allowing an early season opportunity for both youth and elders to harvest Dall sheep – but look at the hunt and harvest numbers of the current hunt, it is extremely rare to find an elder and youth pair able to sheep hunt together at the same time. Supporting and passing this proposal would continue to allow this opportunity, while being more inclusive, allowing other federally qualified youth to also have an early season hunting opportunity. Not every young family has a relative or family friend that's an elder able to hunt sheep. We all know hunting areas are getting more crowded, even federal areas in our backyard. There is no better experience for a kid than to have a hunt unimpeded by other hunters where they can take their time, making the best decisions they can without the stress of hunting in a crowd. Consistent with ANILCA, Title 8, section 801, this regulation would provide for:

the continuation of the opportunity for subsistence uses by rural residents of Alaska, including both Natives and non-Natives, on public lands… I believe it is essential to Natives and non-Natives' physical, economic, traditional, social and cultural existence.

Secondly, you are being asked to support the concept that the Federal Subsistence Board can **legally offer an additional subsistence opportunity for individual rural residents of a certain age**, that is youth and elders in this case. This I believe is legal and encouraged under ANILCA in order to continue

traditional practices by passing on the hunting heritage to the next generation. I do not see any language in ANILCA that would prohibit these types of hunts.

Under Title 8 Section 801, in order to fulfill the policies and purposes of the Alaska Native Claims Settlement Act and as a matter of equity, it is necessary for the Congress to invoke its constitutional authority in issues such as this to protect and provide the opportunity for continued subsistence uses on public lands by Native and non-Native rural residents. Consistent with ANCSA and ANILCA, this proposal leaves intact the traditionally long sheep season of Aug 10 – Sept 20 for all federally qualified users, while asking only for an **additional subsistence opportunities for elders and youth**.

There is a precedent for this type of additional opportunity in federal regulation in Unit 6 where youth over 10 years of age can have their own big game permit and bag limit, while youth under age 10 are prohibited from having their own permit. This was an arbitrary decision to offer one age group a federal subsistence permit and a bag limit, while withholding it from another age group. There is no express language in ANILCA allowing this priority of one age group over another, but here it is in federal regulation. This type of discrepancy in federal subsistence hunting opportunity afforded to users of a specific age has broad support, just like youth and elder hunting opportunities, because they make sense. Please continue to support this concept, offering our youth and our elders an additional subsistence hunting opportunity.

ANILCA specifically outlines in Section 811, the Secretary shall ensure that rural residents engaged in subsistence uses shall have **reasonable access** to subsistence resources on the public lands. In the case of sheep hunting in Wrangell St. Elias, all local federally qualified hunters already have and will continue to have reasonable access to sheep. This proposal does nothing to restrict this.

I believe it's important to note, the only place in ANILCA that offers guidance on priority amongst federally qualified users is in times of shortage. Section 804 is only implemented when game is limited, offering a rationale set of guidelines to restrict users to ensure limited permits are allocated according to (1) customary and direct dependence upon the populations as the mainstay of livelihood; (2) local residency; and (3) the availability of alternative resources.

Nowhere in Section 804 or elsewhere in ANILCA does it say an additional subsistence harvest opportunity cannot be afforded to youth and/or elders. Nowhere in ANILCA does it say that residency

is the only way that federal subsistence opportunities can be parsed out amongst federally qualified hunters.

Please consider supporting the concept and intent of this proposal as an additional opportunity above and beyond the original elder/youth hunt. We need to do everything we can to get more kids out hunting. If we can get an elder out on their last sheep hunt at the same time, then that's even better.

In all the years the elder hunt has been in place, I have never heard any opposition to it. Please do not even consider taking steps to eliminate the elder/youth hunt due to a poor interpretation of ANILCA, of when and where federal subsistence opportunities can be afforded. I believe the original elder/youth hunt as well as the additional proposed youth hunt are consistent with the intent of ANILCA. Additionally, adopting this proposal will be critical to reinstate a federal priority over State regulation.

If any member of the public has a strong concern with this additional hunting opportunity, let them challenge the regulation on their own. Please do not do it for them.

Thank you, Rebecca Schwanke, PO Box 612, 109.2 Richardson Highway, Glennallen, AK 99588

Hello SRC, RAC and Federal Board members, 10/8/2019

My Name is Corey Schwanke and below is my original written public comment for WP20-19- youth sheep hunting opportunity. In bold are my modifications based on OSM staffs' comments on the proposal.

I am writing in support of this proposal.

There is currently a federal regulation that allows for an early season youth sheep hunt, but the problem is it is tied to having an elder accompany the youth on the hunt. This hunt structure does not work for many families in the region. Most of us do not have an elder available to go on a mountain hunt, not to mention this hunt combines two daunting components: hunting with a youth and hunting with an elder. It makes sense to severe the tie of having an elder accompany a youth. The state currently has a youth sheep hunt that is not tied to an elder hunt.

This proposal will also allow for more opportunity to teach our kids more about the ways of living off the land. We all want to take our kids hunting/fishing/gathering and show them our lifestyle, but juggling subsistence lifestyles and school can be problematic since school periods overlap with this fall "gathering period". The problem lies with strict attendance policies at school (no more than 15 excusable absences allowed per school year). The opportunity to take our kids sheep hunting up to 10

days sooner will allow them more time to participate in the other hunting and gathering activities before school starts and attendance records are kept.

Proposal WP20-19 was a simple proposal to make the federal government compliant with ANILCA in providing rural priority for subsistence activities. Currently, state regulation provides more opportunity for most youth to hunt sheep in Unit 11 (i.e., the vast majority of youth do not have an elder willing to take them sheep hunting). This proposal addresses that issue by allowing any federally qualified adult to take a federally qualified youth sheep hunting from Aug 1-9 (the state allows a youth hunt from 1-5 August). I do not think it is in conflict with ANILCA, in fact it makes the Federal government compliant with ANILCA. It is not intended to disallow elders from taking youth hunting, that is still allowed as how the proposal is written. No youth have harvested sheep in Unit 11 under the current elder/youth hunt structure, so the intent of the original proposal was never met. This proposal will provide more reasonable opportunity for adults to take kids sheep hunting and pass on traditional knowledge. Kids are our future.

Thank you for your time,

Corey Schwanke

PO Box 612

Glennallen, AK 99588”

Wrangell-St. Elias National
Park Subsistence Resource
Commission
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October I 0, 2019

Anthony Christianson,
Chair Federal
Subsistence Board
U.S. Fish and Wildlife
Service Office of Subsistence
Management IO I 1 E. Tudor
Road, MS- I 21 Anchorage,
AK 99503

Subject: Federal Subsistence Management Program Wildlife Proposals for 2020-

2022 Dear Mr. Christianson:

The Wrangell-St. Elias National Park Subsistence Resource Commission (SRC) met in Copper Center, Alaska, on October 7 and 8, 2019. The commission is a federal advisory committee that represents subsistence users of federal lands within Wrangell-St. Elias National Park and Preserve. At this meeting, the SRC reviewed the federal subsistence wildlife proposals for the Wrangell-St. Elias area being considered for the 2020-2022 regulatory cycle and would like to provide the following comments:

WP20-08 Require marking of traps and snares statewide. The Wrangell-St. Elias National Park Subsistence Resource Commission opposes WP20-08. Requiring the marking of traps and snares puts an unnecessary burden on subsistence users, would make Federal regulations more restrictive than State regulations, and will not necessarily prevent illegal activity. If someone is trapping illegally he or she is not going to mark his or her traps. Additionally, ravens are attracted to bright, shiny objects, so that requiring the marking of traps could lead to accidental bycatch.

WP20-10 Revise customary and traditional use determination for black bear in Units 1-3 & 5. The Wrangell-St. Elias National Park Subsistence Resource Commission supports WP20-10. The proposed change will benefit subsistence users by making the regulations more unifonn for communities in the region. Less complex regulations will be easier for subsistence users to follow.

WP20-11 Revise customary and traditional use determination for brown bear in Units 1 & 3-5. The Wrangell-St. Elias National Park Subsistence Resource Commission supports WP20-11.

The proposed change will benefit subsistence users by making the regulations more unifonn for communities in the region. Less complex regulations will be easier for subsistence users to follow.

WP20-13 Establish customary and traditional use determination for elk in Unit 3. The Wrangell-St. Elias National Park Subsistence Resource Commission defers to the Southeast Regional Advisory Council on this proposal.

\VPl0-14 Revise customary and traditional use determination for goat in Units 1, 4 & 5. The Wrangell-St. Elias National Park Subsistence Resource Commission supports WP20-l 4. The proposed change will benefit subsistence users by making the regulations more uniform for communities in the region. Less complex regulations will be easier for subsistence users to follow.

WPl0-15 Revise customary and traditional use determination for moose in Units 1 & 3. The Wrangell-St. Elias National Park Subsistence Resource Commission supports WP20-l 5. The proposed change will benefit subsistence users by making the regulations more unifonn for communities in the region. Less complex regulations will be easier for subsistence users to follow.

WPl0-19 Revise the elder/minor hunt sheep hunt in Unit 11. The Wrangell-St. Elias National Park Subsistence Resource Commission supports WP20-19 with modification to keep the existing elder sheep hunt and the existing elder/minor sheep hunt, and also establish a stand-alone youth hunt for sheep. For both the youth hunt and the elder/minor hunt, the age range for the youth would be 8 to 17 years. Establishing a stand-alone youth hunt will allow youth to go hunting with middle aged hunters who have the ability to participate in sheep hunts with kids. The Commission is concerned about the Office of Subsistence Management's preliminary conclusion. Nowhere in the Alaska National Interest Lands Conservation Act does it say that the Federal Subsistence Board cannot offer additional opportunities, above and beyond those reasonably afforded to all federally qualified hunters. Currently, under the existing regulations, there is less opportunity for youth under Federal regulations than there is under State of Alaska regulations. Without a Federal youth hunt for sheep, Federal regulations would be more restrictive than State regulations.

WP20-50 Revise hunt area, seasons, and harvest limits for moose in Unit 12 remainder. The Wrangell-St. Elias National Park Subsistence Resource Commission took no action on WP20-
50. The proposal primarily concerns lands managed by the Bureau of Land Management, and the Commission decided to defer to the Regional Advisory Councils.

WP20-51 Revise customary and traditional use determination for sheep in Unit 12. The Wrangell-St. Elias National Park Subsistence Resource Commission supports WP20-5 l. Residents of Siana have demonstrated use of sheep in Unit 12, which is in their area.

Thank you for the opportunity to comment. Sincerely,

Daniel E.
Stevens
Chair

cc: NPS Alaska Regional Director
Superintendent, Wrangell-St. Elias National Park and Preserve
Southeast, Southcentral and Eastern Interior Subsistence Regional Advisory Councils

Chair: Daniel Stevens; Members: Mike Christenson, Sam Demmert, Sue Entsminger, Don Horrell, Suzanne McCarthy, Kaleb Rowland , and Gloria Stickwan

WP20–20 Executive Summary	
General Description	Proposal WP20-20 requests that hunting and trapping in Unit 7 be prohibited within one mile of roads and trails, and that traps be marked with brightly colored tape. *Submitted by: Robert Gieringer.*
Proposed Regulation	*§100.26(n)(7)(iii) Unit-specific regulations:* ***(B) Hunting and trapping within one mile of roads and trails is prohibited.*** ***(C) Traps must be marked with brightly colored tape in plain view on a nearby tree or overhanging branch.***
OSM Conclusion	**Oppose**
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	**Oppose**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-20

ISSUES

Wildlife Proposal WP20-20, submitted by Robert Gieringer, requests that hunting and trapping in Unit 7 be prohibited within one mile of roads and trails, and that traps be marked with brightly colored tape.

DISCUSSION

The proponent states that serious injuries to pets have occurred near popular trails, and that trail use is increasing due to an expanding population. The proponent specifically refers to the Cooper Landing area, including Bean Creek and Snug Harbor roads and the Sterling Highway.

Note: The proponent clarified that he intended WP20-20 to apply to all of Unit 7.

Existing Federal Regulation

None

Proposed Federal Regulation

§100.26(n)(7)(iii) Unit-specific regulations:

(B) Hunting and trapping within one mile of roads and trails is prohibited.

(C) Traps must be marked with brightly colored tape in plain view on a nearby tree or overhanging branch.

Existing State Regulation

5 AAC 92.510. Areas closed to hunting

(8) Unit 7:

(A) the Portage Glacier Closed Area in Unit 7, which consists of Portage Creek drainages between the Anchorage-Seward Railroad and Placer Creek in Bear Valley, Portage Lake, the mouth of Byron Creek, Glacier Creek and Byron Glacier, is closed to hunting; however, migratory birds and small game may be hunted with shotguns, bow and arrow, or falconry from September 1 through April 30;

(B) the Seward Closed Area in Unit 7, which consists of the south side drainage of the Resurrection River downstream from the Kenai Fjords National Park's eastern boundary, and Resurrection Bay drainages between the mouth of the Resurrection River and the mouth of Lowell Creek, are closed to the taking of big game, except black bear;

(C) the Cooper Landing Closed Area, which consists of that portion of Unit 7 bounded by Juneau Creek, beginning at its confluence with the Kenai River, then upstream to the confluence of Juneau Creek and Falls Creek, then easterly along Falls Creek and the north fork of Falls Creek and over the connecting saddle to Devils Creek, then southeasterly along Devils Creek to its confluence with Quartz Creek, then southwesterly along Quartz Creek to the Sterling Highway, then westerly along the Sterling Highway to the Kenai River, and then westerly along the Kenai River to the point of beginning at the mouth of Juneau Creek, is closed to the taking of Dall sheep and mountain goat;

(D) repealed 7/1/2011;

(E) the Russian River Closed Area, which consists of the area within 150 yards from each side of, and including, the Russian River, from the outlet of Lower Russian Lake downstream to the confluence of the Russian River and Kenai River are closed to hunting during June and July;

Note: State regulations do not contain any trapping restrictions for Unit 7, but they do contain trapping restrictions in some management areas. The restrictions listed below are not exhaustive of all areas closed to trapping under State regulations, but serve as examples.

5 AAC 92.550. Areas closed to trapping

The following areas are closed to trapping of furbearers as indicated:

(1) Unit 1(C) (Juneau area):

(A) a strip within one-quarter mile of the mainland coast between the end of Thane Road and the end of Glacier Highway at Echo Cove;

(B) Auke Lake and the area within one-quarter mile of Auke Lake;

(C) that area of the Mendenhall Valley bounded on the south by the Glacier Highway, on the west by the Mendenhall Loop Road and Montana Creek Road and Spur Road to Mendenhall Lake, on the north by Mendenhall Lake, and on the east by the Mendenhall Loop Road and Forest Service Glacier Spur Road to the Forest Service Visitor Center;

(D) a strip within one-quarter mile of the Douglas Island coast along the entire length of the Douglas Highway and a strip within one-quarter mile of the Eaglecrest Road;

(E) that area within the United States Forest Service Mendenhall Glacier Recreation Area;

(F) a strip within one-quarter mile of the following trails as designated on United States Geological Survey maps: Herbert Glacier Trail, Windfall Lake Trail, Peterson Lake Trail, Spaulding Meadows Trail (including the loop trail), Nugget Creek Trail, Outer Point Trail, Dan Moller Trail, Perseverance Trail, Granite Creek Trail, Mt. Roberts Trail and the Nelson Water Supply

Trail, Sheep Creek Trail, Point Bishop Trail, Amalga Trail, Auke Nu/John Muir Trail, Eagle Glacier Trail, Point Bridget Trail, Treadwell Ditch Trail, and Salmon Creek Trail; however, traps with an inside jaw spread of five inches or less which are set at least five feet above the ground and snow are allowed if set more than 50 yards from the trail;

(C) that portion of Chugach State Park outside of the Eagle River, Anchorage, and Eklutna management areas is open to trapping under Unit 14(C) seasons and bag limits, except that trapping of wolf, wolverine, land otter, and beaver is not allowed; killer style steel traps with an inside jaw spread seven inches or greater are prohibited; a person using traps or snares in the area must register with the Department of Natural Resources Chugach State Park area office and provide a trapper identification; all traps and snares in the area must be marked with the selected identification; the use of traps or snares is prohibited within

(i) 50 yards of developed trails;

(ii) one-quarter mile of trailheads, campground, and permanent dwellings

Extent of Federal Public Lands/Waters

Unit 7 is comprised of 77% Federal public lands and consists of 52% USDA Forest Service (USFS) managed lands, 23% National Park Service (NPS) managed lands, and 2% U.S. Fish and Wildlife Service (USFWS) managed lands.

Customary and Traditional Use Determinations

All rural residents have a customary and traditional use determination for black bear, beaver, coyote, fox, hare, lynx, wolf, wolverine, spruce grouse, and ptarmigan in Unit 7.

Residents of Cooper Landing and Hope have a customary and traditional use determination for caribou in Unit 7.

Residents of Chenega Bay, Cooper Landing, Hope, and Tatitlek have a customary and traditional use determination for moose in Unit 7.

The Federal Subsistence Board (Board) has not made a customary and traditional use determination for any furbearers in Unit 7. Therefore, all Federally qualified subsistence users may trap furbearers in Unit 7.

Regulatory History

In 2014, the Board considered Proposal WP14-01, requesting statewide Federal provisions requiring trapper identification tags on all traps and snares, the establishment of a maximum allowable time limit for checking traps, and establishment of a harvest/trapping report form to collect data on non-target species captured in traps and snares. The proposal analysis indicated statewide application would be

unmanageable, would require substantial law enforcement and public education efforts, and could cause subsistence users to avoid the regulation by trapping under State regulations. The proposal was unanimously opposed by all ten Federal Subsistence Regional Advisory Councils, ADF&G, and the public as reflected in written public comments. The Board rejected the proposal as part of its consensus agenda.

In 2015, the Alaska Board of Game (BOG) considered Proposal 180 to prohibit trapping within 250 feet of most public roads and trails in the Cooper Landing Area. The BOG opposed the proposal, stating trappers and local residents need to work together to find a solution or compromise upon which all users can agree. BOG members also noted concerns about the enforceability of the proposal and loss of trapping opportunity by requiring trappers to travel 250 feet off trail and back to set and check traps (ADF&G 2015).

In 2016, the BOG considered Proposal 80, to restrict trapping in cities with populations >1,000 people at its Statewide regulations meeting. Specifically, Proposal 80 proposed prohibiting trapping within ¼ mile of publicly maintained roads, 200 feet of publicly maintained trails, and one mile of permanent dwellings, schools, businesses, and campgrounds. The Alaska Departments of Fish and Game (ADF&G) stated that proposals restricting trapping should be addressed at regional rather than statewide BOG meetings, so affected local communities can comment. ADF&G also referred to State regulations that limit trapping in certain management areas (see State regulations above). The BOG opposed the proposal due to opposition by 26 Fish and Game Advisory Committees and concern for unintended consequences (e.g. inability to trap nuisance beavers or potentially rabid foxes near villages). The BOG also commented that these types of restrictions could be better handled through city or borough ordinances (ADF&G 2016).

User Conflicts

Historically, user conflicts between local residents and trappers have occurred in the Cooper Landing areas, primarily over pets getting caught in traps (ADF&G 2015). ADF&G stated that while there is a lot of talk about dogs getting caught in traps, the number of dogs actually caught in traps and reported to ADF&G is low (ADF&G 2015). In 2014, ADF&G staff attended public meetings with local residents and trappers to identify compromises such as voluntary trap set-backs from trails and roads. However, none were agreed upon (ADF&G 2015). A local newspaper characterized the discrepancies between local trappers and pet owners as “a breakdown in communications” (McChesney 2015).

The Alaska Trappers Association (ATA) posted several signs in highly trafficked areas of Cooper Landing in February 2015, warning trappers to avoid conflict by not trapping near trails and turnouts and cautioning pet-owners to be responsible and to keep their pets on a leash (McChesney 2015).

Current Events

Wildlife Proposal WP20-08, submitted by the East Prince of Wales Fish and Game Advisory Committee, requests implementing a statewide requirement that traps and snares be marked with either the trapper's name or State identification number.

Effects of the Proposal

If the Board adopts Proposal WP20-20, all hunting and trapping on Federal public lands in Unit 7 would be prohibited within one mile of any road or trail, and traps would have to be marked with brightly colored tape in plain view on a nearby tree or overhanging branch. As Kenai Fjords National Park is closed to subsistence hunting and trapping, and Kenai National Wildlife Refuge (NWR) only comprises 2% of Unit 7, the lands primarily affected by this proposal are within Chugach National Forest.

Many of the trails and roads in Unit 7 are bordered by non-Federal lands, where only State regulations apply. Therefore, adoption of this proposal would result in substantial user confusion over where these restrictions would be applicable. Requiring these restrictions on only roads and trails bordered by Federal lands would also not achieve the proponent's intent of preventing injury to pets and reducing user conflicts, as hunting and trapping could still occur close to roads and trails bordered by State managed lands. For example, Snug Harbor Road in Cooper Landing, which the proponent specifically mentions, is bordered by non-Federal lands, so these regulations would not apply to that road.

Additionally, this proposal would substantially burden Federally qualified subsistence users who would have to set traps in much less accessible areas, reducing trapping opportunity. However, all users (Federally qualified and non-Federally qualified) could still hunt and trap within one mile of all roads and trails under State regulations. Furthermore, adopting this proposal would result in Federal regulations being more restrictive than State regulations, which violates the rural subsistence priority mandated by the Alaska National Interest Lands Conservation Act (ANILCA).

One mile is also a long distance to offset traps from roads and trails. In 2015, BOG members expressed concern about trappers having to travel 250 feet from trails during their discussion of Proposal 180 (see Regulatory History). The maximum distance from roads and trails in other management areas where trapping is prohibited is 0.25 miles.

Marking traps with brightly colored tape may have the unintended consequence of drawing people's attention to the area, causing them to investigate and resulting in more people encountering traps. If traps are baited or scented, dogs will likely locate the traps regardless of any markings. Marking underwater sets could be problematic if no overhanging vegetation is present, although these sets pose minimal risks to pets. Units 1-5 in Southeast Alaska had a regulation requiring traps to have an identification tag, which was intended to mitigate conflicts between dog owners/recreationists and trappers. If any incidents occurred such as pets or deer getting caught in traps or traps being set out of season, the trapper could be identified and potentially cited. However, these regulations were repealed by the Board and the BOG, as they did not prevent illegal trapping activity or pets and non-target wildlife from being caught in traps.

Conflicts between recreationists and trappers mostly occur along road systems near urban areas. The Chair of the BOG stated that young, inexperienced trappers are primarily responsible for unethical trap setting. He stated many new trappers drive south from Anchorage and their first stop is Cooper Landing, where they set traps along gravel roads and pull-outs, which are also frequented by many other people and their pets. He suggested these user conflicts could be addressed through trapper education and by promoting ethical trapping (ADF&G 2016). Two of the guidelines in the Alaska trapper code of ethics are: 1. Check traps regularly, and 2. Promote trapping methods that will reduce the possibility of catching non-target animals (ADF&G 2019). Additionally, an Alaska Trappers Association ethics video stresses the importance of proper trap placement to avoid busy roads, trapping pets, and potentially offending passers-by with the sight of a trapped animal (ATA 2019).

Hunting and trapping restrictions for specific areas may be more effectively addressed through means other than the Board (e.g. BOG, city ordinance, National Forest regulation). While the State does not have any trapping restrictions specific to Unit 7, it does restrict trapping in some management areas (5 AAC 92.550). Management areas in Unit 1C (e.g. Auke Lake, trails, Douglas Highway) prohibit trapping within one-quarter mile. Chugach State Park, outside of Anchorage, prohibits trapping within 50 yards of developed trails. If particular areas around Cooper Landing warrant similar restrictions, a proposal would need to be submitted to the BOG. However, based on the BOG's action on Proposal 180 in 2015, consensus between trappers and local residents on a regulatory solution or compromise may be prudent. (Note: While a proposal adopted by the BOG would apply to all users hunting under State regulations, Federally qualified subsistence users would still be able to trap within one mile of roads and trails on Federal public lands under Federal regulations.)

Alternatively, the town of Cooper Landing could issue a city ordinance that restricts trapping to address specific, local conflicts. In May 2019, the Anchorage Assembly passed an ordinance that bans trapping within 50 yards of all developed trails and within one-quarter mile of trailheads and buildings in the Anchorage Municipality. The Forest Supervisor of the Chugach National Forest also has the authority to close/restrict uses of Forest Service lands (36 CFR §261.50). Working with the Forest Supervisor may be another way to address local user conflicts in specific areas. The USFS currently prohibits pets to be off leash in developed recreation sites in all national forests (36 CFR §261.16(j)). The Kenai NWR prohibits trapping near trailheads, campgrounds, and roads to minimize user conflicts while still providing meaningful trapping opportunity in the undeveloped areas of the refuge (Eskelin 2019, pers. comm.). (Note: Kenai NWR is primarily located in Unit 15, which is adjacent to Unit 7.)

OSM CONCLUSION

Oppose Proposal WP20-20.

Justification

Adoption of Proposal WP20-20 would decrease hunting and trapping opportunity for Federally qualified subsistence users, because users would have to spend much more time accessing trapping/hunting areas and marking traps. Marking traps with brightly colored tape could result in

attracting more people to the trap. The mixture of Federal and non-Federal lands bordering roads and trails would create user confusion over where hunting and trapping could occur, and preclude achieving the proponent's intent of reducing user conflicts. Additionally, Federal regulations would become more restrictive than State regulations, violating the rural subsistence priority mandated by ANILCA. Finally, all users would still be able to hunt and trap without any restrictions under State regulations, further decreasing this proposal's efficacy.

LITERATURE CITED

ADF&G. 2015. Meeting audio. Alaska Board of Game Southcentral Region meeting, March 13-18, 2015. Alaska Department of Fish and Game. Alaska Board of Game meeting information. http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=03-13-2015&meeting=anchorage. Accessed May 28, 2019.

ADF&G. 2016. Meeting audio. Alaska Board of Game Statewide Regulations, Cycles A&B meeting, March 18-28, 2016. Alaska Department of Fish and Game. Alaska Board of Game meeting information. http://www.adfg.alaska.gov/index.cfm?adfg=gameboard.meetinginfo&date=03-18-2016&meeting=fairbanks. Accessed May 24, 2019.

ADF&G. 2019. Code of Ethics. A Trapper's Responsibility. Alaska Deparment of Fish and Game. Juneau, AK. https://www.adfg.alaska.gov/index.cfm?adfg=trapping.code. Accessed May 24, 2019.

ATA. 2019. ATA Trapper Ethics. Alaska Trappers Association. https://www.alaskatrappers.org/ethics.html. Accessed May 28, 2019.

Eskelin, T. 2019. Wildlife Biologist. Personal communication: e-mail. Kenai National Wildlife Refuge. USFWS. Soldotna, AK.

McChesney, R. 2015. Trapping, recreation collide in Cooper Landing. Peninsula Clarion. March 14, 2015. https://www.peninsulaclarion.com/news/trapping-recreation-collide-in-cooper-landing/. Accessed May 28, 2019.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southcentral Alaska Subsistence Regional Advisory Council

Oppose WP20-20. The Council felt that this proposal would make regulations more complex, would be difficult to enforce, and users trapping under State regulations do not have such restrictions. Although the Council appreciates an attempt to de-conflict pet owners and trappers, it felt this proposal was over the top. It specifically noted that smaller buffers are more consistent with what is normally done and effective, marked traps would be more susceptible to disturbance by people, and that it wouldn't stop illegal trapping.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-20: This proposal, submitted by Robert Gieringer, would require traps in Unit 7 to be placed at least 1 mile away from roads and trails and all trap sets be marked with brightly colored tape.

Introduction: The concept of marking traps and having setbacks in portions of Unit 7 has been discussed and considered by the Alaska Board of Game (BOG) numerous times. Currently there are no state regulations that cover setbacks for all roads and trails or marking of traps in Unit 7. If this proposal is adopted federal regulations would be different than state regulations and would likely cause confusion for trappers. Also, trappers could legally avoid these regulations when trapping under state regulations and the same issue the author identifies would still occur. Unit 7 is within a State of Alaska nonsubsistence area.

Impact on Subsistence Users: Federally qualified subsistence users would potentially have less land to trap and there would be the additional requirement to mark trap sets.

Impact on Other Users: If adopted this regulation would not have any impact on other users.

Opportunity Provided by State:
State customary and traditional use findings: Unit 7 is within the Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area

Amounts Reasonably Necessary for Subsistence (ANS): Because Unit 7 is within a nonsubsistence area, no ANS can be established.

Conservation Issues: None

Enforcement Issues: Enforcement officers would have to differentiate between trapper activities under state or federal regulations if this proposal is adopted.

Recommendation: ADF&G is **NEUTRAL** on this proposal.

WP20–22a Executive Summary	
General Description	Proposal WP20-22a asks the Federal Subsistence Board to recognize the customary and traditional use of caribou in Units 15B and 15C by residents of Ninilchik. *Submitted by: Ninilchik Traditional Council.*
Proposed Regulation	**Customary and Traditional Use Determination—Caribou** *Unit 15A* *All rural residents* *Unit 15B and C* ~~*All rural residents*~~ ***Residents of Ninilchik***
OSM Conclusion	**Support** WP20-22a **with modification** to recognize the customary and traditional uses of caribou in Unit 15 by residents of additional communities. **Customary and Traditional Use Determination – Caribou** *Unit 15A* *All rural residents* *Unit 15B and C* ~~*All rural residents*~~ ***Rural residents of Cooper Landing, Hope, Nanwalek, Ninilchik, Port Graham, and Seldovia***
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	**Support as modified by OSM**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-22A

ISSUES

Wildlife Proposal WP20-22a, submitted by the Ninilchik Traditional Council, requests a customary and traditional use determination for caribou in Units 15B and 15C. A related proposal, WP20-22b, addresses hunting seasons and harvest limits for caribou in Unit 15.

DISCUSSION

The proponent states these changes are needed to provide subsistence opportunity to harvest caribou in Unit 15, referencing a significant decline in subsistence opportunity as measured by the use of caribou by Ninilchik residents between 1994 and the present. The proponent further states that the requested changes would provide opportunity for rural residents of Ninilchik to engage in subsistence caribou hunting and provide a meaningful subsistence preference. Upon clarification with the proponent, this request was not intended to be exclusive to Ninilchik.

Existing Federal Regulation

Customary and Traditional Use Determination—Caribou	
Unit 15	*All rural residents*

Proposed Federal Regulation

Customary and Traditional Use Determination—Caribou	
Unit 15A	*All rural residents*
Unit 15B and C	~~*All rural residents*~~ ***Residents of Ninilchik***

Relevant Federal Regulation

§100.5 Eligibility for subsistence use.

. . .

(c) Where customary and traditional use determinations for a fish stock or wildlife population within a specific area have not yet been made by the Board (e.g., "no determination"), all Alaskans who are residents of rural areas or communities may harvest for subsistence from that stock or population under the regulations in this part.

Extent of Federal Public Lands/Waters

Unit 15B is comprised of approximately 76% Federal public lands and consists of 71% U.S. Fish and Wildlife Service, 4% Bureau of Land Management, and 1% USDA Forest Service managed lands.

Unit 15C is comprised of approximately 28% Federal public lands and consist of 27% U.S. Fish and Wildlife Service and 1% National Park Service managed lands. U.S. Fish and Wildlife Service managed lands are within the Kenai National Wildlife Refuge. National Park Service managed lands in Unit 15 are within Kenai Fjords National Park and are closed to subsistence.

Regulatory History

At the inception of the Federal Subsistence Management Program in Alaska in 1990, the majority of the Kenai Peninsula was in the Kenai Peninsula Nonrural Area (now named the Anchorage-Matsu-Kenai Nonsubsistence Area) established by the State. The exception was the southern-most portion around the communities of Port Graham, English Bay, and Seldovia. The State did not allow subsistence uses in nonrural areas. In 1992, the Board adopted customary and traditional use determinations from State regulations. The State did not recognize customary and traditional uses of caribou in Unit 15, and all rural residents were eligible to hunt caribou during Federal seasons, if they were to be adopted (72 Fed. Reg. 22961; May 29, 1992).

In 2001, the Board considered Proposal WP01-49 to establish a customary and traditional use determination for caribou in Unit 15 by rural residents of Unit 15; however, the proposal was deferred, pending a decision about the Kenai Peninsula rural determinations. The Board made its final rural determinations on the Kenai Peninsula in 2001 (67 FR 30561, May 7, 2002) and has considered proposals to adopt or modify customary and traditional use determinations as these proposals have been received during regulatory cycles.

Background

An endemic, woodland population of caribou was abundant on the Kenai Peninsula until large forest fires destroyed habitat in the late 1880s. By 1912 these caribou were extirpated due to a combination of habitat loss and overharvest (Palmer 1938, Davis and Franzmann 1979), and were replaced simultaneously by moose, which had previously been rarely encountered by residents of the region (Spencer and Hakala 1964). The caribou herds on the peninsula today were established from transplants from the Nelchina Caribou Herd in 1965-1966 and 1985-1986 (Paul 2009). There are currently four caribou herds on the Kenai Peninsula: the Kenai Mountain Herd, Kenai Lowlands, Killey River, and the Fox River Caribou Herds.

The Kenai Mountain herd occurs primarily in Unit 7. There has been no open hunting season in Units 15A and 15B targeting the Kenai Lowlands herd. There has been a limited drawing or registration permit system since 1994 in Unit 15B for the Killey River herd. A limited number of drawing permits were issued from 1995 to 2003 in Unit 15C for the Fox River herd. No permits were issued from 2004 to 2010, and about 10 drawing permits have been issued annually since 2011 for the Fox River herd

(Herreman 2015). Currently, hunters can apply for a drawing permit only for a season from August 10 to September 20.

Eight Factors for Determining Customary and Traditional Use

A community or area's customary and traditional use is generally exemplified through the eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) a pattern of use recurring in specific seasons for many years; (3) a pattern of use consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area; (5) 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; (6) a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use in which the harvest is shared or distributed within a definable community of persons; and (8) 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 the community or area.

The Board makes customary and traditional use determinations based on a holistic application of these 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.

The Board has not established a customary and traditional use determination for caribou in Unit 15. If a proposal is received requesting a customary and traditional use determination where none has been made previously for the resource, the analyst evaluates use by all rural residents who may harvest the resource within the geographic boundaries defined by the proponent in the request. Because the Board has not made customary and traditional use determinations for caribou in Unit 15 this analysis begins by evaluating use of caribou in Unit 15 by all rural residents of Alaska.

In the absence of a Federal season, Federally qualified subsistence users rely on the limited number of State drawing permits in order to harvest caribou in Unit 15. Almost all caribou hunting in Unit 15 occurs on Federal public lands. From 1995 to 2018, rural residents of Unit 15 reported taking a total of 10 caribou, which was about 3% of the total harvest of caribou in Unit 15 **(Table 1**). It should be noted that the number of rural residents is based on mailing addresses in the State harvest database, which may not be the same as the communities in which they live. To the extent that hunters receive

mail in nearby larger communities, harvest from smaller communities may be under-represented, while harvest from larger communities with post office may be over-represented. Thus, information on rural residents are estimates, which are used to represent general harvest patterns. In contrast to the harvest by nonrural residents, residents from nonrural areas in Unit 15 reported taking a majority of caribou (59%) in the unit, followed by Alaska residents outside of Unit 15 (27%), and nonresidents of Alaska (10%) (**Table 1**).

Table 1. Resident status of successful hunters that harvested caribou from the Killey River and the Fox River caribou herds in Unit 15, 1995-2018 (Kenai Peninsula Caribou Management Plan 2003; Herreman 2015, WinfoNet 2019).

Caribou Herd	Rural Resident in Unit 15 reported caribou harvested	Nonrural Resident in Unit 15 reported caribou harvested	Alaska Resident not in Unit 15 reported caribou harvested	Nonresident reported caribou harvested
Killey River	8 (3%)	179 (59%)	83 (27%)	32 (11%)
Fox River	2 (4%)	27 (60%)	12 (27%)	4 (9%)
Total	10 (3%)	206 (59%)	95 (27%)	36 (10%)

According to the ADF&G reporting system, accessed through the OSM database, of the seven rural communities on the Kenai Peninsula that have customary and traditional use determinations for a variety of resources locally, residents of Cooper Landing, Ninilchik, and Seldovia were issued permits to hunt caribou in Unit 15 between 1992 and 2010 (**Table 2**). According to the same data, residents of Copper Landing and Ninilchik both hunted and harvested caribou during the same period. Additionally, in subsistence household surveys, residents of Ninilchik, Nanwalek, Port Graham, and Seldovia reported modest levels of attempted harvest, harvest, use, and sharing of caribou in some study years falling between 1982 and 2014 (Fall et al. 2006; ADF&G 2019). A resident of Halibut Cove, a rural community in Unit 15 for which there are no community-specific customary and traditional use determinations, reported harvesting one caribou in Unit 15 (**Table 2**).

Based on proximity, this analysis addresses the proponent, Ninilchik, along with other rural communities in Unit 15 and the adjacent Unit 7 for which there are determinations for other species on the Kenai Peninsula. Those communities are Nanwalek, Port Graham, and Seldovia from Unit 15, and Cooper Landing and Hope from Unit 7.

Ninilchik

For the purposes of this analysis, the community of Ninilchik is comprised of two census-designated places (CDPs): Ninilchik and Happy Valley. ADF&G subsistence use studies conducted for 1998 on Ninilchik included the Ninilchik and Happy Valley CDPs (Fall et al. 2000). Thus, when reference is made to Ninilchik in this analysis, it includes people living in the Ninilchik CDP as well as the Happy

Table 2. The number of caribou hunts and successful harvest in Unit 15 between 1992 and 2010 by the hunter's community of residence. (Bold = rural community; Source: USFWS 2019).

Unit of residence	Community of residence	Number of permits issued	Number of attempted hunts	Number of successful hunts
	NON-RESIDENT	92	56	28
	DELTA JUNCTION	1	1	0
1	KETCHIKAN	3	1	1
1	WARD COVE	4	0	0
1	JUNEAU	4	0	0
4	SITKA	2	0	0
6	**CORDOVA**	9	6	0
7	SEWARD	35	11	5
7	MOOSE PASS	8	5	1
7	**COOPER LANDING**	25	6	3
8	**KODIAK**	17	6	2
9	**NAKNEK**	1	1	0
13	**TAZLINA**	1	1	1
13	**GLENNALLEN**	2	2	0
14	KNIK	2	0	0
14	PALMER	33	15	5
14	SUTTON	3	0	0
14	WILLOW	1	0	0
14	WASILLA	58	25	4
14	BIG LAKE	6	2	1
14	TALKEETNA	2	1	1
14	CHUGIAK	16	7	2
14	GIRDWOOD	16	8	2
14	ANCHORAGE	287	113	43
14	EAGLE RIVER	38	15	4
14	PETERS CREEK	3	1	1
14	ELMENDORF AFB	1	1	0
14	FORT RICHARDSON	9	5	0
15	KENAI	155	67	28
15	NIKISKI	11	7	2
15	SOLDOTNA	367	188	79
15	STERLING	106	64	20
15	KASILOF	144	74	44
15	HOMER	83	37	19
15	**SELDOVIA**	3	0	0
15	**NINILCHIK**	16	6	3
15	CLAM GULCH	21	9	2
15	FRITZ CREEK	6	4	2
15	ANCHOR POINT	34	24	15
15	**HALIBUT COVE**	1	1	1
20	FAIRBANKS	11	4	0
20	NORTH POLE	1	1	0
Total:		1,638	775	319

Valley CDP. In the 2010 U.S. Census, Ninilchik CDP had 883 year-round, permanent residents and Happy Valley had 593 year-round permanent residents (U.S. Census 2010); thus the total population for the two CDPs from the last census is 1,476 people. Ninilchik Village Tribe, governed by the Ninilchik Traditional Council (NTC), is the only local government in the immediate Ninilchik area. The community does not have a local municipal government; however Ninilchik is part of the Kenai Peninsula Borough.

The community of Ninilchik (Niqnalchint) is within the traditional territory of the Lower or Outer Cook Inlet Dena'ina Athabaskans; the Dena'ina cultural tradition dates back to around at least 1000 A.D (Reger and Boraas 1996). Early examples of material culture from the region contain tanned caribou clothing attributed to the Tanaina (Dena'ina); caribou was also the preferred material for sinew in bows, and caribou antler was used to make arrow tips (Siebert et al. 1980). Non-Native settlement of the Kenai Peninsula began in the 18th century with the fur trade, and Ninilchik was settled by Russians in the early 1800s. Ninilchik residents have used a wide array of fish and wildlife resources since the founding of the community in 1847. The site was chosen so that retirees, who included Alutiit, Russians, and Creoles, from the Russian-American Company would be able to support themselves by harvesting wild resources and gardening (Arndt 1993:2). At the end of the 19th century, commercial fishing brought about new settlements to the southern Kenai Peninsula. The next major non-Native settlement period began during the Gold Rush era at the end of the 19th century. With the construction of roads and local oil development in the 1950s, the population of the Kenai Peninsula increased substantially through in-migration of people born outside Alaska.

It is important to understand the history of the Ninilchik subsistence economy in the context of the Russian colonial period. The success of the Russian-American Company depended entirely on the subsistence way of life of the indigenous inhabitants of Alaska (Fedorova 1975:10). The primary goal of the company was the harvest of fur, mainly sea otter. The specialized sea otter hunting techniques and capabilities of the Unangan of the Aleutian Islands and the Alutiiq people, primarily of Kodiak, were exploited for the success of the Company. Beyond furs, however, the subsistence harvest was the primary food supply that sustained Company enterprises (Fedorova 1973). Importing supplies overland through Siberia and by sea was expensive, slow, and often unsuccessful. In addition to harvesting sea otters, the Native inhabitants of Alaska were required to provide the bulk of the food for the Russian colonists in addition to their own. The Russians attempted to supply the colonies with food through agriculture and cattle husbandry. These attempts provided some food but never the amounts the colony needed (Fedorova 1973, 1975).

The Russian settlers adapted to the subsistence diet of Alaska. According to one Russian officer in a report on the state of the colonial settlements:

> The location and abundance of the pasturage would let them have any number of cattle, were it not for the difficulty of preparing winter fodder . . . . The ration of the Russian settler on Kodiak included mushrooms and berries . . . . Game and bear meat were of great help for the settlers . . . . The Kodiak promyshlenniks [Russian fur

> traders] kill many thousands of bears but they do not die out . . . . The most important food is fish (Fedorova 1973: 239).

Ninilchik is a coastal community, and fish are a large part of the local diet, as are moose, but plants, birds and other large land mammals, including brown bear, are part of the diversified subsistence repertoire.

The Board has previously recognized Ninilchik's customary and traditional uses of black bear, brown bear, and moose throughout Unit 15 and for all fish in the Kasilof River and Kenai River drainages located in Unit 15. Based on these previous determinations, Ninilchik has already established a recognized pattern of harvest and use of wild resources in Unit 15 consistent with the eight factors. This analysis will focus on identifying use of caribou consistent with opportunity and use of other large land mammals (moose, goat, black bear, and sheep) consistent with proximity. In 1998, the last year for which comprehensive subsistence data are available from ADF&G, 99% of Ninilchik households (including the Happy Valley CDP) used wild resources and 96% of households harvested at least one resource. Per capita harvest was estimated at 164 pounds per person. Large land mammals made up about 40% of the harvest in terms of edible weight with 63% of households reporting using large land mammals, and 33% of households harvesting large land mammals. Caribou were harvested by an estimated 8% of households in Ninilchik and used by 19% of households in 1998. The caribou were harvested in Units 9, 12, 13, 19, 23, and 25 (Fall et al. 2000).

In 1994 and 1999, the Ninilchik Traditional Council conducted key respondent interviews with Ninilchik tribal members as well as Alaska Native residents of Ninilchik who were not tribal members about their harvest and use of resources. The 1994 interviews collected information from as far back as the interview participant remembered to the present. The 1999 interviews focused on the previous five years. In 2014, the Council surveyed a random sample of households living in the Ninilchik CDP, using a survey methodology similar to that employed by ADF&G. Based on the results of these surveys, caribou use by tribal members and other Native residents of Ninilchik declined from 48% of households interviewed in 1994, to 10% in 1999, to 2% on the 2014 survey. The single caribou reported harvested on the 2014 survey was harvested in Unit 15 (Ninilchik Traditional Council n.d., Williams 2014).

Nanwalek

Nanwalek (previously known as English Bay) is a small village near the southwestern tip of the Kenai Peninsula on the outer reaches of Kachemak Bay. The word Nanwalek means a place with a lagoon. It is an unincorporated community located within the Kenai Peninsula Borough. The Federally-recognized Nanwalek IRA Council is the only local government in the community. Given its location off of the road system, the community is accessed primarily by boat and plane (Jones and Kostik 2016). According to the 2010 US Census, 254 people live in Nanwalek (U.S. Census 2010).

The contemporary location of Nanwalek was used seasonally for hundreds of years. Trading posts were established in the region by Russian traders in the late 1700s and early 1800s. As fur supplies diminished, the Suqpiat became increasingly dependent on trade goods and many families settled in

Nanwalek, which was the last fur post on the Kenai Peninsula. As schools and Russian Orthodox chapels were established in communities such as Nanwalek, additional families moved permanently to these communities. With the collapse of the fur trade, fishing became dominant economic activity in Nanwalek. But by the 2000s the fishing economy (commercial fishing and cannery work) had largely disappeared. Nanwalek residents have always relied on subsistence resources, especially wild marine resources (Jones and Kostik 2016).

The Board has previously recognized Nanwalek's customary and traditional uses of black bear in Unit 15C and of moose in Units 15A, 15B, and 15C. Based on these previous determinations, Nanwalek has already established a recognized pattern of harvest and use of wild resources in Unit 15 consistent with the eight factors. According to surveys conducted by ADF&G, Division of Subsistence, 89% of Nanwalek households used wild resources in 2014 and 84% of households harvested at least one resource. Per capita harvest of all resources was estimated at 253 pounds per person, of which about 85% was salmon and other fish. Large land mammals accounted for only 1% by weight of resources harvested; however, 34% of households reported using large land mammals and 11% of households reported harvesting large land mammals. Mountain goats, black bears, and moose are traditional large land mammals hunted by Nanwalek residents, and surveyed households also reported harvesting caribou and deer in 2014. For the 2014 study year, 2% of Nanwalek households reporting harvesting caribou and 7% reported using caribou. The caribou were harvested in Unit 13 (Jones and Kostick 2016). For the 1993 study year, large land mammals accounted for 3% by weight of resources harvested, 18% of Nanwalek households report using caribou, and 9% percent reported giving away caribou, but no households harvested or attempted to harvest caribou that year (ADF&G 2019).

Port Graham

Port Graham, also known as Paluwik, is located on Kachemak Bay close to the southern tip of the Kenai Peninsula. The permanent community developed around a fish processing plant and dock that operated in from 1910 to 1912, however Sugpiaq people had lived in the area for centuries. Semi-subterranean dwellings, or barabaras, were located at several sites along the bay, including the location of present day Port Graham (Fall 2006). Port Graham is located off of Alaska's road system and can only be accessed by small plane or boats. According to the 2010 U.S. Census, 177 people in 79 households live in Port Graham. The Port Graham Village Council, a Federally recognized Tribal government, is the only local government in the community; however the community is part of the Kenai Peninsula Borough (Alaska Department of Commerce, Community, and Economic Development 2019). Commercial fishing along with a cannery played a key role in the community economy for much of the twentieth century. Economic opportunities in the community are limited, making it challenging for young people to remain or move back to the community once they have left for education or work (Jones and Kostick 2016).

The Board has previously recognized Port Graham's customary and traditional uses of moose throughout Unit 15. Based on these previous determinations, Port Graham has already established a recognized pattern of harvest and use of wild resources in Unit 15 consistent with most of the eight factors. This analysis will focus on identifying use of caribou consistent with opportunity and other

large land mammals consistent with proximity. The Alaska Department of Fish and Game, Division of Subsistence, surveyed Seldovia households about their harvest and use of wild resources in 2014, and 1991-1993. In 2014, nearly all households (99%) reported using wild resources, and 94% of households harvested at least one resource. Given their coastal location, fish and other marine resources are particularly important to the subsistence way of life of Port Graham residents. Large land mammals contributed about 12% by weight of the resources harvested; 61% of households used large land mammals, and 9% harvested large land mammals. Moose is the only large land mammal that appeared on the top 10 list of resources used by Seldovia households in 2014. For 2014, 1% of households reported harvesting caribou and 18% used caribou. The harvest and search area for caribou in 2014 was in the Delta Junction area (Unit 20) (Jones and Kostick 2016). From 1991 to 1993, 2% of Seldovia households harvested caribou each year, and from 12 to 20% of households used caribou (ADF&G 2019).

Seldovia

The community of Seldovia is located on the south shore of Kachemak Bay. Seldovia is not on the Alaska road system, and can only be accessed by boat or small plane. In the 2010 U.S. Census, Seldovia City had 255 residents and the Seldovia Village CDP had 165 residents, for a total of 420 people. The name “Seldovia” is derived from "Zaliv Seldevoy," a Russian word meaning "herring bay.” Historically, the Seldovia area was a meeting and trading place for the Kodiak Sugpiat, the Aleuts from the Aleutians, the Chugach people from Prince William Sound, and the Dena’ina Kenaitze people of the Cook Inlet. They traveled over land and across the sea to make their home in Kachemak Bay. Speaking Sugpiaq, Aleut, and Dena’ina, they traded goods, ideas, and regional traditions. This confluence of cultures gave rise to a tradition of subsistence from the sea and land that continues to this day. Many people who settled in Seldovia were involved in either the fur trade or fishing during the mid-1800s. Mining, fox farming, logging, and fishing were major industries conducted in Seldovia between the 1700s and early to mid-1900s. At the turn of the 20th century, Seldovia became an important shipping center because of its deep water port. Over time it has been an important point of supply for fox farms and also for the commercial fishing industry. With the more recent collapse of commercial crab fisheries and closure of the last seafood cannery, the economy has diversified to include tourism and logging. The local economy is most active in the summer when a variety of businesses serving tourists are in operation (Jones and Kostick 2016; Merrill and Opheim 2013).

The Board has previously recognized Seldovia’s customary and traditional uses of moose throughout Unit 15. Based on these previous determinations, Seldovia has already established a recognized pattern of harvest and use of wild resources in Unit 15 consistent with most of the eight factors. This analysis will focus on identifying use of sheep consistent with opportunity and other large land mammals consistent with proximity. The Alaska Department of Fish and Game, Division of Subsistence, surveyed Seldovia households about their harvest and use of wild resources in 2014. Nearly all households (99%) reported using wild resources and 94% of households harvested at least one resource. Given their coastal location, fish and other marine resources are particularly important to the subsistence way of life of Seldovia residents. Large land mammals contributed about 12% by weight of the resources harvested, 61% of households used large land mammals, and 9% harvested large land

mammals. Moose is the only large land mammal that appears on the top 10 list of resources used by Seldovia households in 2014, however approximately 18% households reported using caribou (Jones and Kostick 2016). For the 1993 study year, 20% of households reported using caribou and 3 caribou were reported (ADF&G 2019).

Halibut Cove

Halibut Cove is also situated in Unit 15. Cove is situated on the south shore of Kachemak Bay and is surrounded by Kachemak Bay State Park. According to the most recent U.S. Census, 76 people live in Halibut Cove (U.S. Census 2010). It is an unincorporated community located within the Kenai Peninsula Borough. Like other communities on the southern Kenai Peninsula, it is off the Alaska Road system and can only be accessed by boat or float plane. Between 1911 and 1928, Halibut Cove had 42 herring salteries and a population of more than 1,000, according to one account. From 1928 to 1975 the population stayed at around 40 residents, mostly fishermen. Today many artists reside in the community, and it is a popular tourist destination in the summer (ADCCED 2019; Reynolds 2013).

According to the ADF&G reporting system, accessed through the OSM database (USFWS 2019; **Table 2**), one caribou was harvested in Unit 15 by a resident of Halibut Cove between 1992 and 2010. Halibut Cove has not been included in any available ADF&G comprehensive subsistence household surveys,. The Board has not specifically recognized any customary and traditional uses of fish or wildlife by residents of Halibut Cove in any unit. This community will not be considered further because substantial subsistence hunting of caribou in Unit 15 as part of a customary and traditional practice could not be demonstrated for this community with available data.

Cooper Landing

Cooper Landing is a small, unincorporated community and Census Designated Place (CDP) within the Kenai Peninsula Borough. In 2017, its estimated population was 258 (ADLWD 2018). The town is located along the Sterling Highway, about 97 road miles from Anchorage and approximately 59 road miles from the City of Kenai. Cooper Landing is on the banks of Kenai Lake and Kenai River (Painter 2002). Dena'ina Athabascans inhabited the northern Kenai Peninsula long before settlers arrived in the historical era. Dena'ina people spent winters in the area hunting and trapping before moving onto the coast in spring (Holmes 1985). Beginning in 1848, Russian gold prospectors and miners with the Russian-American Company moved into the area. Joseph Cooper, for whom the community is named, later came seeking mining opportunities (Barry 1973; Himes-Cornell et al. 2013). Big game guiding, fox farming, and trapping eventually replaced gold mining as the primary economic activities in the area (Painter 1983). Beginning in the 1930s, Cooper Landing came to be known for its big game guides (Painter 1983). Cooper Landing was gradually opened up to more outsiders as the road system connected it to Seward in 1938, Kenai in 1948, and Anchorage in 1951 (Seitz et al. 1994). Cooper Landing did not receive electricity until 1962. The community has modernized overtime but remains small, with the official government body being the volunteer-based Community Club. As in the past, guiding non-local hunters continues to provide an important source of wild foods for locals in addition to subsistence hunting.

The Board has previously recognized Cooper Landing's customary and traditional uses of moose in Units 15A and 15B, and caribou and moose in Unit 7. Based on these previous determinations, Cooper Landing has already established a recognized pattern of harvest and use of caribou and other wild resources on the Kenai Peninsula consistent with most of the eight factors.

Between 1990 and 1991 ADF&G conducted a comprehensive subsistence surveys in Cooper Landing and found that all the sampled households used wild resources, and almost all (93.5%) harvested wildlife, fish, and plant resources. Subsistence is practiced by a large portion of the population of Cooper Landing; during the same study period, 88.8% of the population participated in at least one harvesting activity. On average, 8.3 different wild food resources were used per household, resulting in a per capita harvest of 91.5 pounds. 1990 and 1991, 10% of Cooper Landing households used caribou, 7% attempted to harvest caribou, and 4.9% gave away caribou (Seitz et al. 1994). The per capita harvest of caribou was 3.5 pounds (Seitz et al. 1994).

During subsistence surveys, residents described their use areas: "caribou hunting areas were located along rivers, roads, and lakes of the central and northern Kenai Peninsula" (Seitz et al. 1994: 42). Mapped use areas for Cooper Landing show that the community's search area for caribou is concentrated in Unit 7. However, it should be noted that use maps represent only the activity of those households included in surveys, and cannot be considered exhaustive. Maps of search areas for other resources demonstrate a wide pattern of resource use by residents of Cooper Landing across the Kenai Peninsula. Cooper Landing residents search for birds, moose, and black bear in Unit 7 and all three subunits of Unit 15 (Seitz et al. 1994). Large land mammals, including caribou, are hunted in August and September alongside birds (Seitz et al. 1994). Because Cooper Landing's search area for birds extends from Unit 7 into all three subunits of 15, it is reasonable to assume that caribou would also be taken opportunistically across their range on the Peninsula.

Redistribution within the community of Cooper Landing through sharing networks is widespread, with 71.7% of households sharing wild resources and 80.9% receiving (Seitz et al. 1994). During the study period 1990 to 1991, subsistence household surveys showed that 7% of households received caribou, and 4% gave it away.

Hope

Hope is comprised of two CDPs, Hope and Sunrise within the Kenai Peninsula Borough. In 2017, the estimated population of Hope CDP was 211 and the estimated population of Sunrise CDP was 12 (ADLWD 2018). The town of Hope is located on the northern end of the Kenai Peninsula at the terminus of the Hope Highway. Hope is about 87 miles south of Anchorage and 74 miles north of Seward (Morris Communication Company 2019). Sunrise is located approximately seven miles east of Hope. Sunrise is considered a sub-community of Hope; for the remainder of this analysis, "Hope" refers to both CDPs. Hope is located in traditional Dena'ina Athabascan territory. The Russian American Company began to find gold in the Kenai Peninsula in the 1830s. In 1895 a large gold strike occurred at a mine near Sixmile Creek in the northern Kenai Peninsula, bringing more prospectors and

settlers into the area. Hope became connected by road to Seward in 1951 (Buzzell and McMahon 1986). Today, Hope is located within the Chugach National Forest.

The Board has previously recognized Hope's customary and traditional uses of caribou and moose in Unit 7 and all fish in the Cook Inlet Area. Based on these previous determinations, Hope has already established a recognized pattern of harvest and use of caribou and other wild resources on the Kenai Peninsula consistent with the eight factors.

Wild resources were critical to the establishment and viability of the community of Hope. A comprehensive subsistence survey for the study period August 1990 through July 1991 found that 100% of Hope households use wild resources, with 94% of households harvesting. The total per capita harvest of wild foods for Hope was 110.7 pounds (Seitz et al. 1994). Approximately one third of this total harvest came from land mammals.

For Hope, caribou ranked second to moose among big wildlife species in frequency of use and harvest quantities. During the 1990 to 1991 study year, 20% of households used caribou, 9% hunted caribou, and 7% harvested caribou. A total of eight animals were taken, for a harvest of eight pounds per person. Hope households reported receiving (13%) and giving away caribou (7%) (Seitz et al. 1994).

Hope residents hunted wildlife in areas near Hope and Cooper Landing, Turnagain Arm, along the road system, in the mountains south and east of Hope, in the Resurrection Valley, and in the Big Indian Creek drainage. According to Seitz et al., "Caribou hunting was confined to the highlands around the Resurrection and Palmer Creek drainages" (1994:42). Mapped use areas for Hope show that the community's search area for caribou is concentrated in Unit 7. It should be noted that use area maps represent only the activity of those households included in surveys, and cannot be considered exhaustive. Furthermore, the distribution of use areas is delimited by the geography of hunting opportunities available under State management.

During comprehensive subsistence surveys, Seitz et al. found that "Cooper Landing and Hope both were interested in the idea of local preference in hunting and fishing regulations because of the competition they experience from others who also live along the road system" (1994:122). A household case study from the same ADF&G report profiled a hunter who had only received one permit for over the previous ten years, despite applying for multiple permits during this period (Seitz et al. 1994). Because of competition with outside hunters, both Cooper Landing and Hope residents seek opportunities to hunt and fish in other areas.

Other Alternatives Considered

One less inclusive alternative preliminary conclusion would limit this customary and traditional use determination for caribou in Unit 15 to rural communities within Unit 15: Ninilchik, Nanwalek, Port Graham, and Seldovia. In this alternative, Hope and Cooper Landing, adjacent rural communities in Unit 7 with recognized or demonstrated customary and traditional use of caribou on the Kenai Peninsula, would be excluded. This alternative was considered and rejected because it may contradict

the Board's policy of establishing broad and inclusive customary and traditional use determinations when no determination has previously been made for a species in a unit.

Effects of the Proposal

If Proposal WP20-22a is adopted, eligibility to harvest caribou under Federal regulations in Units 15B and 15C will be reduced from all rural residents to rural residents of Ninilchik. If the Board adopts a Federal subsistence season, only rural residents of Ninilchik will be eligible for that that hunt. This will have no effect on people's ability to hunt caribou under State regulations.

OSM CONCLUSION

Support Proposal WP20-22a with **modification** to recognize the customary and traditional use of caribou in Units 15B and 15C by rural residents of Cooper Landing, Hope, Nanwalek, Ninilchik, Port Graham, and Seldovia.

The modification should read:

Customary and Traditional Use Determination—Caribou

Unit 15A	*All rural residents*
Unit 15B and C	~~*All rural residents*~~ ***Rural residents of Cooper Landing, Hope, Nanwalek, Ninilchik, Port Graham, and Seldovia***

Justification

Residents of the communities of Cooper Landing, Hope, Nanwalek, Ninilchik, Port Graham, and Seldovia have demonstrated customary and traditional uses of caribou in Units 15B and 15C. Use patterns for caribou by communities located in Units 15B and 15C have been shaped by interruptions beyond residents' control, including local extirpation of caribou until the 1960s, designation of the Kenai Peninsula as a State nonsubsistence area, and limits on caribou hunting under State management. However, the customary and traditional uses of caribou by rural residents of these communities should be recognized, based on their proximity to the resource and demonstrated effort to harvest, use, and share caribou in multiple years since at least 1982 as documented in comprehensive subsistence surveys, and demonstrated patterns of use for other subsistence resources consistent with the eight factors. Halibut Cove was excluded because substantial hunting of caribou in Unit 15 as part of a customary and traditional practice could not be demonstrated for this community with available data.

LITERATURE CITED

ADCCED. 2019. Alaska Department of Commerce, Community, and Economic Development: Alaska Community Database Online: Halibut Cove and Nanwalek. https://dcra-cdo-dcced.opendata.arcgis.com/. Retrieved 6/27/2019.

ADF&G. 2019. Community Subsistence Information System. Alaska Department of Fish and Game Division of Subsistence online database. Anchorage.

Arndt, Katherine L. 1993. Released to Reside Forever in the Colonies. Pages 31-46 *in* Agrafena's Children. Wayne Leman, ed. Lulu Press. Ninilchik, AK.

Davis, J. L. and A.W. Franzmann. 1979. Fire-moose-caribou-interrelationships: a review and assessment. Proceedings of the North American Moose Conference and Workshop. 15:80-118.

De Laguna, F. 1934. The archaeology of Cook Inlet, Alaska. University of Pennsylvania Museum. Philadelphia, Pennsylvania.

Fall, J. A., V. Vanek, L. Brown, G. Jennings, R.J. Wolfe, and C. Utermohle. 2000. Wild resource harvests and uses by residents of selected communities of the Kenai Peninsula Borough. ADF&G, Div. of Subsistence, Technical Paper No. 253. Juneau, AK. 362 pp.

Fall, J. A., R.T. Stanek, B. Davis, L. Williams, and R. Walker. 2004. Cook Inlet customary and traditional subsistence fisheries assessment. ADF&G, Div. of Subsistence, Technical Paper No. 285. Juneau, AK. 245 pp.

Fall, J.A., editor. 2006. Update of the status of subsistence uses in the Exxon Valdez oil spill area communities. ADF&G, Div. of Subsistence, Technical Paper No. 312. Anchorage, AK. 738 pp.

Fedorova, S.G. 1973. The Russian population in Alaska and California, late 18th century – 1867. R.A. Pierce and A.S. Donnelly, eds. The Limestone Press. Kingston, Ontario

FSB. 1994. Transcript of Federal Subsistence Board proceedings. April 12, 1994. Office of Subsistence Management, FWS. Anchorage. AK.

FSB. 1996. Transcript of Federal Subsistence Board proceedings. May 3, 1996. Volume V. Office of Subsistence Management, FWS. Anchorage. AK.

Herreman, J. K. 2015. Units 7 and 15 caribou. Chapter 1, Pages 1-1 through 1-14 in P. Harper and L. A. McCarthy, editors. Caribou management report of survey and inventory activities 1 July 2012–30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-4, Juneau.

Jones, B., and M.L. Kostick, editors. 2016. The harvest and use of wild resources in Nikiski, Seldovia, Nanwalek, And Port Graham, Alaska 2014. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 420. Anchorage, AK. 439 pp.

Krauss, M.E. 1982. Native peoples and languages of Alaska. Alaska Native Language Center, Center for Northern Educational Research, University of Alaska. Fairbanks, AK.

Merrill, T., and M Opheim. 2013. Assessment of Cook Inlet Tribes Subsistence Consumption. Seldovia Village Tribe.

Ninilchik Traditional Council. n.d. ANILCA Survey Results (1994 vs. 1999). Ninilchik Traditional Council. 56 pp.

Paul, Thomas W. 2009. Game transplants in Alaska. Technical Bulletin No. 4, second edition. ADF&G, Juneau, AK. 250 pp.

Palmer, L.J. 1938. Management of moose herd on the Kenai Peninsula. Research project Report March, April and May 1938. Unpublished manuscript. Kenai National Wildlife Refuge file, Soldotna, AK 40 pp.

Porter, R. 1893. Report on population and resources of Alaska at the eleventh census: 1890. DOI, U.S. Government Printing Office. Washington D.C.

Reed, C. 1985. The role of wild resource use in communities of the central Kenai Peninsula and Kachemak Bay, Alaska. ADF&G, Div. of Subsistence Tech. Paper No. 106. Juneau, AK. 201 pages.

Reynolds, Christopher. 2013. Alaska's Halibut Cove on Ismailof Island is a quietly beautiful artists' colony. Los Angeles Times on-line. https://www.latimes.com/travel/la-xpm-2013-sep-15-la-tr-alaska-20130915-story.html 1/. Accessed 6/12/2019.

Siebert, E.V., Krauss, D., and J.W. Vanstone. 1980. Northern Athapaskan Collections of the First Half of the Nineteenth Century. Arctic Anthropology 17(1):49-76.

Spencer, D.L. and J.B. Hakala. 1964. Moose and fire on the Kenai. Proceedings of Tall Timbers Fire Ecology Conference. 3:11-33.

Tikhmenev, P.A., R.A. Pierce, and A.S. Donnelly. 1978. A history of the Russian-American Company. University of Washington Press. Seattle, Washington.

U.S. Census Bureau. 2010. https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml. Retrieved: 6/24/2019.

USFWS (U.S. Fish and Wildlife Service). 2019. OSM database. Office of Subsistence Management. USFWS, Anchorage, AK.

WinfoNet. 2019. Wildlife Information Network (WinfoNet). Alaska Department of Fish and Game. Anchorage, AK. https://winfonet.alaska.gov/.

Williams, D. 2014. Ninilchik Subsistence Survey. Ninilchik Traditional Council. 67 pp.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southcentral Alaska Subsistence Regional Advisory Council

The Council stated that the analysis makes it clear that the residents of the listed communities in the OSM modification have a clear history of traditional use of caribou in the area, the proposal make sense since the population has increased, and the listed communities should have the ability to utilize the resource now.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-22a_b: This proposal, submitted by the Ninilchik Traditional Council (NTC), would establish a federal caribou season in Units 15B and 15C with season dates of August 10 – October 10.

Introduction: Caribou were absent from the Kenai Peninsula between the early 1900s until their reintroduction in 1965-66 and 1985-86. All reintroduced caribou originated from the Nelchina Caribou Herd. Currently, three separate caribou herds utilize portions of Units 15B and 15C. A portion of the Kenai Lowlands Herd (KLH) spend time in the western lowlands of 15B, the Killey River Herd (KRH) spends most of their time in the alpine or mountainous portions of western 15B and the Fox River Herd (FRH) occupies a small area in the northeastern portion of Unit 15C. There are no hunting opportunities for the KLH and there are limited drawing permits available for both the KRH and FRH. The author of the proposal mentions the significant decline in subsistence opportunity that is demonstrated in terms of use and identifies a decline in the percentage of residents who use caribou from 1994 to more recent times. The decline mentioned is most likely due to changes in opportunity to harvest caribou in areas outside of Units 7 and 15 since caribou harvest in these Units (7 and 15) have been relatively low and restricted to limited drawing permit hunts since 1994.

This proposal also asks for season dates of August 10 – October 10. The current state season dates are August 10 – September 20. The reason the state season ends September 20 is because after that time bull caribou begin to enter the "rut" and during that time period bull caribou are often considered unpalatable by some hunters.

Impact on Subsistence Users: If passed, this proposal would provide additional opportunities for federally qualified users.

Impact on Other Users: If passed this proposal would likely result in substantially fewer opportunities to harvest caribou under state regulations.

Opportunity Provided by State:

State customary and traditional use findings: The three Kenai Peninsula caribou herds are in the state nonsubsistence area; therefore, the Alaska Board of Game can make no customary and traditional use findings for caribou in Unit 15. There are no caribou available outside the state nonsubsistence area (which is that portion of Unit 15C near Seldovia, Port Graham, and Nanwalek, and Kalgin Island in Unit 15B).

Amounts Reasonably Necessary for Subsistence (ANS):

Because there cannot be customary and traditional use findings inside a state nonsubsistence area, there is no ANS for caribou in Unit 15. The season and bag limit for Unit 15 is:

		Open Season (Permit/Hunt #)	
Unit/Area	Bag Limit	Resident[a]	Nonresident
15B within the Kenai National Wildlife Refuge Wilderness Area	*One caribou*	*August 10 – September 20 (Drawing Permit)*	*August 10 – September 20 (Drawing Permit)*
15C north of the Fox River and east of Windy Lake	*One caribou*	*August 10 – September 20 (Drawing Permit)*	*August 10 – September 20 (Drawing Permit)*

[a] General hunts only.

Special instructions: *None*.

Conservation Issues: There is no conservation concern. While these caribou populations are small, there are harvest opportunities available. The use of drawing permits does not imply a conservation concern. The use of drawing permits provides opportunity consistent with the population size.

Enforcement Issues: If the season dates align with the current state season dates: none. Otherwise, different regulations will create confusion.

Recommendation: While the ADF&G is **NEUTRAL** on eligibility requirements for the federal subsistence program, the department is **OPPOSED** to adding a federal subsistence hunt for caribou in Units 15B and 15C.

ADF&G recommends that the USFWS Office of Subsistence Management analysis of customary and traditional uses be revised so it systematically examines each of the 8 criteria used to determine a C&T finding. Furthermore, on page 9 of the C&T analysis, a decline in caribou use by Tribal members and other Native residents of Ninilchik is cited; however the data from the cited studies (1994, 1999 and 2014) cannot be compared due to the variation in research methods and sample selection between studies.

If a federal season is adopted, ADF&G recommends the modifications that the hunt should be limited to the boundaries of the Killey River and Fox River herds since these are the only animals available for harvest under state regulations and the season dates should align with the current state season dates of August 10 – September 20.

WP20–23a Executive Summary	
General Description	Proposal WP20-23a asks the Federal Subsistence Board to recognize the customary and traditional use of goats in Unit 15 by residents of Ninilchik. *Submitted by: Ninilchik Traditional Council.*
Proposed Regulation	**Customary and Traditional Use Determination—Goat** *Unit 15* ~~*All rural residents*~~ ***Residents of Ninilchik***
OSM Conclusion	**Support** WP20-23a with **modification** to recognize the customary and traditional uses of goats in Unit 15 by residents of additional communities. **Customary and Traditional Use Determination – Goat** *Unit 15* ~~*All rural residents*~~ ***Rural residents of Cooper Landing, Hope, Nanwalek, Ninilchik, Port Graham, and Seldovia***
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	**Support as modified by OSM**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-23A

ISSUES

Wildlife Proposal WP20-23a, submitted by the Ninilchik Traditional Council, requests a customary and traditional use determination for goat in Unit 15 for residents of Ninilchik. A companion proposal, WP20-23b, addresses hunting seasons and harvest limits for goat in Unit 15.

DISCUSSION

The proponent states these changes are needed to provide subsistence opportunity to harvest goat in Unit 15. The proponent further states that the requested changes would provide opportunity for rural residents of Ninilchik to engage in subsistence goat hunting and provide a meaningful subsistence preference. Upon clarification with the proponent, this request was not intended to be exclusive; however, the proponent's request is specific to Ninilchik.

Existing Federal Regulation

Customary and Traditional Use Determination—Goat

Unit 15	*All rural residents*

Proposed Federal Regulation

Customary and Traditional Use Determination—Goat

Unit 15	~~*All rural residents*~~ ***Residents of Ninilchik***

Relevant Federal Regulation

§100.5 Eligibility for subsistence use.

. . .

(c) Where customary and traditional use determinations for a fish stock or wildlife population within a specific area have not yet been made by the Board (e.g., "no determination"), all Alaskans who are residents of rural areas or communities may harvest for subsistence from that stock or population under the regulations in this part.

Extent of Federal Public Lands/Waters

Unit 15 is comprised of approximately 47% Federal public lands and consist of 46% U.S. Fish and Wildlife Service managed lands, 1% Bureau of Land Management managed lands, 0.4% USDA Forest Service managed lands, and 0.1% National Park Service managed lands. National Park Service managed lands in Unit 15 are within Kenai Fjords National Park and are closed to all hunting.

Regulatory History

At the inception of the Federal Subsistence Management Program in Alaska in 1990, the majority of the Kenai Peninsula was in the Kenai Peninsula Nonrural Area (now named the Anchorage-Matsu-Kenai Nonsubsistence Area) established by the State. The exception was the southern-most portion around the communities of Port Graham, English Bay, and Seldovia. The State did not allow subsistence uses in nonrural areas. In 1992, the Board adopted customary and traditional use determinations from State regulations. The State did not recognize customary and traditional uses of goats in Unit 15, and all rural residents were eligible to hunt goats during Federal seasons, if they were to be adopted (72 Fed. Reg. 22961; May 29, 1992).

In 1996 Proposal P96-22 was submitted by the Kenai Peninsula Outdoor Coalition, requesting that the customary and traditional use determination for goats in Unit 15C be revised to include only residents of Port Graham and English Bay, and exclude residents of Seldovia. The Board rejected Proposal P96-22 because of the demonstrated long-term pattern of use of goats by residents from Seldovia (OSM 1996). No proposals for customary and traditional use determination for goats in Unit 15 have been submitted since 1996.

Residents of Nanwalek and Port Graham have a customary and traditional use determination for goats specific to Unit 7 Brown Mountain Hunt Area.

Background: Current Hunting Opportunity

In the absence of a Federal subsistence season for goats in Unit 15, Federally qualified subsistence users hunt under State regulations. Prior to 1976, no permit was required to hunt goats on the Kenai Peninsula (McDonough and Selinger 2008). Unlimited registration permits were issued from 1976 until 1980 when draw permits were first established. Goat hunting opportunity became more restricted beginning in the 1990s.

Since approximately 1990, the Alaska Department of Fish and Game (ADF&G) has managed goat hunting on the Kenai Peninsula through a combination of drawing and registration hunts. Unit 15 is divided into 15 goat hunt and management areas (one hunt area, 352—Brown Mountain Hunt Area—is divided between Units 15 and 7). State managers do not allow any harvest in hunt areas with populations of less than 50 goats (Herreman 2019). Currently, three of the 15 hunt areas are closed to all goat hunting (Herreman 2019). In hunt areas 352 to 363, a drawing permit hunt with a bag limit of one goat is held August 10 to October 15. This lottery hunt is open to both residents and nonresidents of Alaska.

Information about how many residents of each rural community apply for goat drawing permits in Unit 15 is not readily available. The cost for applying for a drawing permit for goats is $5 per hunt area; prospective hunters may apply for up to six different hunt numbers per species, and may apply for the same hunt more than once (ADF&G 2019a). For all individuals who applied to hunt for goats in Unit 15 through the drawing system in the most recent hunt year, 2018, the percentage of successful drawings ranged from 2% to 11% (ADF&G 2019a).

At the end of each drawing permit season, goat hunt areas can be opened to registration permit hunting at the discretion of State managers (Herreman 2014). However, "the number of permits issued in the registration hunt is limited to reduce the chance of overharvest" (Herreman 2014: 107). Hunt areas must have a population of at least 100 goats to be opened to a registration hunt (Herreman 2019). Registration permits are limited to a few specific hunt areas and are not available every year; harvest of females during the drawing season can prevent managers from being able to provide a registration season. When the late season registration hunt is held in a given management area, it will occur between November 1 and November 14.

Under State regulations, registration permits for an early season goat hunt in a portion of Unit 15C adjacent to Nanwalek and Port Graham are only available locally, making it easier for residents to obtain the permits (although all residents of Alaska and nonresidents of Alaska may apply). Similarly, registration permits for an early season goat hunt in a portion of Unit 15C adjacent to Seldovia are only available locally, making it easier for residents to obtain the permits (although all residents of Alaska may apply). These hunt areas are also opened to a second registration hunt November 1 to November 14, for which permits are more widely available in urban areas and online.

The most recent available ADF&G data covering 2009 to 2013 indicates that goat registration permits were issued for only four of the 15 hunt areas in Unit 15 during this period. Hunt areas 364 and 365, those portions of Unit 15 adjacent to Nanwalek, Seldovia, and Port Graham (discussed above) are the only hunt areas where registration permits were issued every year during this period, averaging 11 and 38 permits, respectively (Herreman 2014).

Eight Factors for Determining Customary and Traditional Use

A community or area's customary and traditional use is generally exemplified through the eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) a pattern of use recurring in specific seasons for many years; (3) a pattern of use consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area; (5) 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; (6) a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use in which the harvest is shared or distributed within a definable community of persons; and (8) 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 the community or area.

The Board makes customary and traditional use determinations based on a holistic application of these 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.

If a proposal is received requesting a customary and traditional use determination where none has been made previously for the resource, as is the case for goats in Unit 15, the analyst evaluates use by all rural residents who may harvest the resource within the geographic boundaries defined by the proponent in the request. Because the Board has not made a customary and traditional use determinations for goats in Unit 15, this analysis begins by evaluating use of goat in Unit 15 by all rural residents of Alaska. This analysis will focus on identifying use of goats consistent with opportunity, proximity, and use of other wildlife species, including those that fill a similar role in subsistence practice. **Table 1** shows the number of goat hunts in Unit 15 between 2009 and 2018 by the hunter's community of residence.

Table 1. The number of goat hunts in Unit 15 between 2009 and 2018 by hunter's community of residence. This table shows a broad pattern for hunters' resident communities; ability to hunt goat in Unit 15 is influenced by success in State drawing permits. Note that residents of very small communities receive their mail in larger nearby communities; therefore, the smallest communities are not represented as distinct entities in this data. **Bold** = rural community. Source: Alaska Department of Fish and Game (ADF&G 2019).

Unit of residence	Community of residence	Number of attempted hunts	Number of successful hunts
15	HOMER	84	44
14	ANCHORAGE	63	23
15	SOLDOTNA	34	16
	NONRESIDENT	33	27
15	**SELDOVIA**	30	8
15	KENAI	21	9
20	FAIRBANKS	17	6
15	KASILOF	11	4
15	**PORT GRAHAM**	10	1
	UNKNOWN RESIDENCY	9	3
14	WASILLA	8	3
14	EAGLE RIVER	8	2
15	ANCHOR POINT	6	3

Unit of residence	Community of residence	Number of attempted hunts	Number of successful hunts
20	NORTH POLE	5	2
14	PALMER	3	0
15	STERLING	3	1
15	NIKISKI	3	1
14	JBER	2	0
6	VALDEZ	2	0
14	CHUGIAK	2	1
15	**NANWALEK**	2	0
7	SEWARD	2	0
15	**NINILCHIK**	2	0
9	**PORT ALSWORTH**	1	1
14	GIRDWOOD	1	1
20	ESTER	1	0
	Grand Total	**363**	**156**

The ADF&G reporting system provides information on which communities are goat hunting in Unit 15 under the limited opportunity provided through State permits. Rural communities represented in the goat hunting data for Unit 15 include Nanwalek, Ninilchik, Port Graham, Port Alsworth, and Seldovia (**Table 1**). Nanwalek, Seldovia, and Port Graham are able to participate in early registration goat hunts for which permits are only available locally. However, because much of the remaining opportunity to hunt goats in Unit 15 has been through competitive drawing permits open to all residents of Alaska, lack of participation in the State-managed hunt by residents of other proximal communities should not be taken as an indication of lack of interest in subsistence hunting for goats in the unit by those communities. Although Hope and Cooper Landing do not appear in the ADF&G reporting system for goat hunts in Unit 15 between 2009 and 2015, they will also be considered. Both communities are located on the Kenai Peninsula, and, like Ninilchik, practice subsistence within a State management system oriented towards sport hunting. As will be shown in analysis specific to Hope and Cooper Landing, both these communities have documented search areas for goat within Unit 15. Furthermore, Cooper Landing already has a customary and traditional use determination for another land mammal, moose, in Unit 15.

Port Alsworth is not in reasonable proximity to Unit 15, the area under consideration for a customary and traditional use determination; this community will not be considered further. The communities to be considered further for a customary and traditional use determination for goat in Unit 15 include: Cooper Landing, Hope, Nanwalek, Ninilchik, Port Graham, and Seldovia.

Ninilchik

ADF&G subsistence use studies conducted for 1998 on Ninilchik included the Ninilchik and Happy Valley Census Designated Places (CDPs) (Fall et al. 2000). Thus, when reference is made to Ninilchik in this analysis, it includes people living in both CDPs. In 2017, the estimated population of Ninilchik

CDP was 851 (ADLWD 2018) and the estimated population of Happy Valley CDP was 622. Ninilchik Village Tribe, governed by the Ninilchik Traditional Council (NTC), is the only local government in the immediate Ninilchik area. The community does not have a local municipal government; however, Ninilchik is part of the Kenai Peninsula Borough.

The community of Ninilchik (*Niqnalchint*) is within the traditional territory of Lower or Outer Cook Inlet Dena'ina Athabaskans; the Dena'ina cultural tradition dates back to around at least 1000 A.D (Reger and Boraas 1996). Non-Native settlement of the Kenai Peninsula began in the 18th century with the fur trade, and Ninilchik was settled by Russians in the early 1800s. The site was chosen so that retirees, who included Alutiit, Russians, and Creoles, from the Russian-American Company would be able to support themselves by harvesting wild resources and gardening (Arndt 1993:2). At the end of the 19th century, commercial fishing brought about new settlements to the southern Kenai Peninsula. The next major non-Native settlement period began during the Gold Rush era at the end of the 19th century. With the construction of roads and local oil development in the 1950s, the population of the Kenai Peninsula increased substantially through in-migration of people born outside Alaska.

The Board has previously recognized Ninilchik's customary and traditional uses of black bear, brown bear, and moose throughout Unit 15 and for all fish in the Kasilof River and Kenai River drainages located in Unit 15. Based on these previous determinations, Ninilchik has already established a recognized pattern of harvest and use of wild resources in Unit 15 consistent with the eight factors. In 1998, the last year for which comprehensive subsistence data are available from ADF&G, 99% of Ninilchik households (including the Happy Valley CDP) used wild resources and 96% of households harvested at least one resource. Per capita harvest was estimated at 164 pounds per person. Large land mammals made up about 40% of Ninilchik's harvest in terms of edible weight, with 63% of households reporting using large land mammals and 33% of households harvesting large land mammals (Fall et al. 2000).

During the 1998 household surveys, an estimated 1% of Ninilchik households attempted to harvest goat in Unit 15C (Fall et al. 2000); however, no surveyed households reported harvesting or using goats that year. In 1994 and 1999, the Ninilchik Traditional Council conducted key respondent interviews with Ninilchik tribal members as well as Native residents of Ninilchik who were not tribal members about their harvest and use of resources. The 1994 interviews collected information from as far back as the interview participant remembered to the present. The 1999 interviews focused on the previous 5 years. In 2014, the Council surveyed a random sample of households living in the Ninilchik CDP, using a survey methodology similar to that employed by ADF&G. Based on the results of these surveys, goat use was reported by 20% of surveyed households in 1994 and 1999, and no goats were reported harvested in the random sample survey of the Ninilchik CDP in 2014 (Ninilchik Traditional Council n.d., Williams 2014).

Nanwalek

Nanwalek (previously known as English Bay) is a small village near the southwestern tip of the Kenai Peninsula on the outer reaches of Kachemak Bay. The word Nanwalek means a place with a lagoon. It is an unincorporated community located within the Kenai Peninsula Borough. Nanwalek is governed

by the Federally-recognized Nanwalek IRA Council. Given its location off of the road system, the community is accessed primarily by boat and plane (Jones and Kostick 2016). In 2017, the estimated population of Nanwalek was 304 (ADLWD 2018).

The contemporary location of Nanwalek was used seasonally for hundreds of years. Trading posts were established in the region by Russian traders in the late 1700s and early 1800s. As fur supplies diminished, the Alutiiq people, the majority population of the area, became increasingly dependent on trade goods and many families settled in Nanwalek, which was the last fur post on the Kenai Peninsula. As schools and Russian Orthodox chapels were established in communities such as Nanwalek, additional families moved permanently to these communities. With the collapse of the fur trade, fishing became dominant economic activity in Nanwalek. But by the 2000s the fishing economy (commercial fishing and cannery work) had largely disappeared. Nanwalek residents have always relied on subsistence resources, especially wild marine resources (Jones and Kostick 2016).

The Board has previously recognized Nanwalek's customary and traditional uses of black bears in Unit 15C and of moose in Units 15A, 15B, and 15C. Based on these previous determinations, Nanwalek has already established a recognized pattern of harvest and use of wild resources in Unit 15 consistent with the eight factors. According to household subsistence surveys conducted by ADF&G, Division of Subsistence, in 2014, 89% of Nanwalek households used wild resources in the study year, with 84% of households harvesting at least one resource. Harvest of all resources was estimated at 253 pounds per person, of which about 85% was salmon and other fish. Large land mammals accounted for only 1% by weight of resources harvested, however, 34% of households reported using large land mammals and 11% of households reported harvesting large land mammals. Goats, black bears, and moose are traditionally hunted by Nanwalek residents, and surveyed households also reported harvesting caribou and deer in 2014 (Jones and Kostick 2016).

During the 2014 subsistence survey study year, an estimated 13% of Nanwalek households used goat, 9% of households attempted to harvest goat, and 5% of households were successful at harvesting goats. In terms of pounds of edible weight harvested, goats represented more than half of the total harvest of large land mammals by Nanwalek residents in 2014 (Jones and Kostick 2016). Several additional harvest surveys were conducted by ADF&G in Nanwalek between 1987 and 2003. In those years, the estimated percentage of Nanwalek households harvesting goats ranged from 0% to 6% and the percentage of households using goats ranged from 5% to 41% (ADF&G 2019).

According to Jones and Kostick (2016), goats are an important traditional resource for residents of Nanwalek, and residents usually participate in summer and fall goat hunting when regulations allow for a limited hunt in Unit 15C under State regulations that is only available in Nanwalek and Port Graham. Mountain goat hunting occurs in the mountains of the English Bay River watershed and along the shoreline of Koyuktoik Bay, in relatively close proximity to the community. Nanwalek residents often hunt goats opportunistically along shorelines (Jones and Kostick 2016).

Port Graham

Port Graham, also known as *Paluwik*, is located on Kachemak Bay close to the southern tip of the Kenai Peninsula. The permanent community developed around a fish processing plant and dock that operated in from 1910 to 1912, however Alutiiq people had lived in the area for centuries. Semi-subterranean dwellings, or barabaras, were located at several sites along the bay, including the location of present day Port Graham (Fall 2006). Port Graham is located off of Alaska's road system and can only be accessed by small plane or boats. In 2017, the population of Port Graham was estimated at 180 (ADLWD 2018). The Port Graham Village Council, a Federally recognized tribal government, is the only local government in the community; however, the community is part of the Kenai Peninsula Borough (ADCCED 2019). Commercial fishing along with a cannery played a key role in the community economy for much of the twentieth century. Economic opportunities in the community are limited, making it challenging for young people to remain or move back to the community once they have left for education or work (Jones and Kostick 2016).

The Board has previously recognized Port Graham's customary and traditional uses of black bears in Unit 15C and moose in Units 15A, 15B, and 15C. Based on these previous determinations, Port Graham has already established a recognized pattern of harvest and use of wild resources in Unit 15 consistent with the eight factors. ADF&G, Division of Subsistence, surveyed Port Graham households about their harvest and use of wild resources in 2014. All households (100%) reported using wild resources and 98% of households harvested at least one resource. Harvest of all resources was estimated at 218 pounds per person. Large land mammals contributed about 5% by weight of the resources harvested, 68% of households reported using large land mammals, and 5% harvested large land mammals.

During the 2014 subsistence survey study year, an estimated 7% of Port Graham households used goat and 2% attempted to harvest goats; however, no goats were harvested (Jones and Kostick 2016). Several additional harvest surveys were conducted by ADF&G in Port Graham between 1987 and 2003. In those years, the estimated percentage of Port Graham households harvesting goats ranged from 0% to 4% and the percentage of households using goats ranged from 0% to 22% (ADF&G 2019).

Seldovia

The community of Seldovia is located on the south shore of Kachemak Bay. Seldovia is not on the Alaska road system, and can only be accessed by boat or small plane. In 2017, the estimated combined population of Seldovia village and Seldovia City CDP, the two different areas defining Seldovia, was 396 (ADLWD 2018). The name "Seldovia" is derived from "Zaliv Seldevoy," a Russian word meaning "herring bay." Historically, the Seldovia area was a meeting and trading place for the Kodiak Alutiiq, the Aleuts from the Aleutians, the Chugach people from Prince William Sound, and the Dena'ina Kenaitze people of the Cook Inlet. They traveled over land and across the sea to make their home in Kachemak Bay. Speaking Alutiiq, Aleut, and Dena'ina, they traded goods, ideas, and regional traditions. This confluence of cultures gave rise to a tradition of subsistence from the sea and land that continues to this day.

Many people who settled in Seldovia were involved in either the fur trade or fishing during the mid-1800s. Mining, fox farming, logging, and fishing were major industries conducted in Seldovia between the 1700s and early to mid-1900s. At the turn of the 20th century, Seldovia became an important shipping center because of its deep water port. Over time it has been an important point of supply for fox farms and also for the commercial fishing industry. With the more recent collapse of commercial crab fisheries and closure of the last seafood cannery, the economy has diversified to include tourism and logging. The local economy is most active in the summer when a variety of businesses serving tourists are in operation (Jones and Kostick 2016; Merrill and Opheim 2013).

The Board has previously recognized Seldovia's customary and traditional uses of moose throughout Unit 15. Based on these previous determinations, Seldovia has already established a recognized pattern of harvest and use of wild resources in Unit 15 consistent with the eight factors. ADF&G, Division of Subsistence, surveyed Seldovia households about their harvest and use of wild resources in 2014. Nearly all households (99%) reported using wild resources and 94% of households harvested at least one resource. Given their coastal location, fish and other marine resources are particularly important to the subsistence way of life of Seldovia residents. Large land mammals contributed about 12% by weight of the resources harvested, 61% of households used large land mammals, and 9% harvested large land mammals (Jones and Kostick 2016).

During the 2014 subsistence survey study year, 1% of Seldovia households reporting harvesting goats, 5% of households attempted to harvest goats, and 13% of households reported using goat. Goat search areas included the mountains surrounding Seldovia along with southeast of Seldovia Bay extending east towards the Gulf of Alaska (Jones and Kostick 2016). Harvest surveys conducted during the early 1990s consistently documented the harvest and use of goats by Seldovia residents (ADF&G 2019).

Cooper Landing

Cooper Landing is a small, unincorporated community and Census Designated Place (CDP) within the Kenai Peninsula Borough. In 2017, its estimated population was 258 (ADLWD 2018). The town is located along the Sterling Highway, about 97 road miles from Anchorage and approximately 59 road miles from the City of Kenai. Cooper Landing is on the banks of Kenai Lake and Kenai River (Painter 2002). Dena'ina Athabascans inhabited the northern Kenai Peninsula long before settlers arrived in the historical era. Dena'ina people spent winters in the area hunting and trapping before moving onto the coast in spring (Holmes 1985).

Beginning in 1848, Russian gold prospectors and miners with the Russian-American Company moved into the area. Joseph Cooper, for whom the community is named, later came seeking mining opportunities (Barry 1973; Himes-Cornell et al. 2013). Big game guiding, fox farming, and trapping eventually replaced gold mining as the primary economic activities in the area (Painter 1983). Beginning in the 1930s, Cooper Landing came to be known for its big game guides (Painter 1983). Cooper Landing was gradually opened up to more outsiders as the road system connected it to Seward in 1938, Kenai in 1948, and Anchorage in 1951 (Seitz et al. 1994). Cooper Landing did not receive electricity until 1962. The community has modernized overtime but remains small, with the official

government body being the volunteer-based Community Club. As in the past, guiding non-local hunters continues to provide an important source of wild foods for locals in addition to subsistence hunting.

The Board has previously recognized Cooper Landing's customary and traditional uses of moose in Units 15A and 15B. Based on these previous determinations, Cooper Landing has already established a recognized pattern of harvest and use of wild resources in portions of Unit 15 consistent with the eight factors.

For the historical settlers who moved into the Cooper Landing area, the availability and utilization of wild resources "played an important role in helping residents establish the communities" (Seitz et al. 1994:122). Goats and Dall sheep were among the preferred large game animals hunted on the Kenai Peninsula, which also included moose, bear, and caribou (Barry 1973).

Along with other land mammals, goats and sheep hunting was part of the seasonal subsistence cycle for residents of Cooper Landing, occurring between August and November. Meat was preserved through smoking and canning to provide food through the winter. Between 1990 and 1991 ADF&G conducted a comprehensive subsistence survey and described the harvest and search areas used by Cooper Landing residents: "Goats or sheep were hunted in the mountains around Cooper Landing and the mountains of Turnagain Pass; the mountains east of Tustemena Lake, the head of Kachemak Bay, the southern top of the Kenai Peninsula; and in the mountains east of Resurrection Bay" (Seitz et al. 1994: 42). Mapped use areas for Cooper Landing show that the community's search area for goats is concentrated in Unit 7, but extends into 15A. Maps of search areas for other resources, including salmon and non-salmon fish, demonstrate a wide pattern of resource use across the Kenai Peninsula. Cooper Landing residents search for birds, moose, and black bear in Unit 7 and all three subunits of Unit 15 (Seitz et al. 1994).

Redistribution within the community of Cooper Landing through sharing networks is widespread, with 72% of households sharing wild resources and 81% receiving (Seitz et al. 1994). Goats and sheep are among the resources used, shared, and received. In ADF&G's 1990 to 1991 survey, Seitz et al. (1994) found that all the sampled households used wild resources, and almost all (94%) harvested wildlife, fish, and plant resources. Subsistence is practiced by a large portion of the population of Cooper Landing; during the same study period, 88.8% of the population participated in at least one harvesting activity. On average, 8 different wild food resources were used per household, resulting in a per capita harvest of 91.5 pounds (Seitz et al. 1994).

There is some evidence that goat hunting has become less common for Cooper Landing residents due to lack of opportunity posed by competition for a limited number of permits. For example, during the 1990 to 1991 comprehensive subsistence survey, one Cooper Landing household reported taking one to two goats a year in the 1970s. However, as of the early 1990s, they no longer hunted goats, "citing their inability to obtain a drawing permit" (Seitz et al. 1994: 67).

Increased competition from outside hunters—both in hunting lotteries and in the form of physical crowds—was a recurring theme in the ADF&G household survey interviews in Cooper Landing. Non-

local hunters are able to easily access the area through the road system. Competition limits actual opportunity for locals but also discourages attempts to use resources that are open to harvest. For example, the same family described in the case study above now prefers to fish on their own property and moose hunt in a separate wildlife management unit rather than deal with competitive fishing and hunting conditions near Cooper Landing (Seitz et al. 1994).

Hope

Hope and Sunrise are unincorporated CDPs within the Kenai Peninsula Borough. In 2017, the estimated population of Hope was 211 and the estimated population of Sunrise was 12 (ADLWD 2018). The town of Hope is located on the northern end of the Kenai Peninsula at the terminus of the Hope Highway. Hope is about 87 miles south of Anchorage and 74 miles north of Seward (Morris Communication Company 2019). Sunrise is located approximately seven miles east of Hope. Sunrise is considered a sub-community of Hope; for the remainder of this analysis, "Hope" refers to both CDPs.

Hope is located in traditional Dena'ina Athabascan territory. The Russian American Company began to find gold in the Kenai Peninsula in the 1830s. In 1895 a large gold strike occurred at a mine near Sixmile Creek in the northern Kenai Peninsula, bringing more prospectors and settlers into the area. Hope became connected by road to Seward in 1951 (Buzzell and McMahon 1986). Today, Hope is located within the Chugach National Forest.

Wild resources, including goats, were critical to the establishment and viability of the community of Hope. "One longtime Hope resident remembered that when he was a child in the 1940s, his family ate a great deal of fish, moose, goat, and bear" (Seitz et al.1994:11). A comprehensive subsistence survey for the study period August 1990 through July 1991 found that 100% of Hope households use wild resources, with 94% of households harvesting. The total per capita harvest of wild foods for Hope was 110.7 pounds (Seitz et al. 1994). Approximately one third of this total harvest came from land mammals. On average, each household used 9 different wild resources. During the 1990 to 1991 study year, 5% of households used goat (Seitz et al. 1994).

Hope residents hunted wildlife in areas near Hope and Cooper Landing, Turnagain Arm, along the road system, in the mountains south and east of Hope, in the Resurrection Valley, and in the Big Indian Creek drainage (Seitz et al. 1994). Goats and sheep were historically taken by residents of the community "in mountains near Hope as well as in the mountains around Kenai Lake" (Seitz et al. 1994:42). Goats may be hunted in the area between August and November. However, the actual timing of the goat hunt season has been shaped by regulatory seasons set by the State.

Mapped use areas for Hope show that the community's search area for goat is concentrated in Units 7 and 15A. Maps of search areas for other resources, including salmon and non-salmon fish, demonstrates a wide pattern of resource use across the Kenai Peninsula. Search areas for land mammals are concentrated in Units 7 and 15A, extending into 15B (Seitz et al. 1994). It should be noted that use area maps represent only the activity of those households included in surveys, and cannot be considered exhaustive. Furthermore, the distribution of use areas is delimited by the geography of hunting opportunities available under State management.

Sharing is a feature of subsistence practice in Hope. A household case study from the 1990 to1991 comprehensive subsistence survey found that 74% of community households gave away wild resources, and 90% received them from others (Seitz et al. 1994). One hunter included in the survey had a successful goat hunt after winning a permit. A prominent element of his experience was sharing the meat with some of his neighbors: two older Hope households who had harvested their own goats in the past from the Hope area" (Seitz et al. 1994). During the 1990 to 1991 study year, 3% of households received goat meat, but no Hope households reported giving away goat meat (Seitz et al. 1994).

During the same 1990 to 1991 survey, longtime residents of Hope reported that they had become less inclined to search for goats over time because of population decline of this animal over their lifetimes, which they attribute to poor management, predation, and overhunting. They date the beginning of this local decline to World War II, when service men hunted heavily in the area (Seitz et al. 1994). Access has been further limited by competition with outside hunters, who are able to access the area through the road system. For example, one resident who had lived in the area and relied heavily on wild resources since the 1970s reported applying for sheep, goat, bear, caribou, and bison drawing permits over the ten years prior to the 1990 to 1991 study year. Despite his attempts, this hunter only received one caribou permit and one goat permit over this time period (Seitz et al. 1994). Because of competition and uncertainty, local hunters prefer to participate in non-lottery hunts, even if they occur in other units.

Because of lack of availability and competition with outside hunters, "many local hunters no longer wish to harvest big game such as moose and goats in the local area" (Seitz et al. 1994: 11). Access to goats in Unit 15 is restricted by limited availability of State permits. During the 1990 to 1991 comprehensive subsistence survey, some Hope residents were participating in roadkill donation programs as a way to access supplemental wildlife meat.

Because of competition with outside hunters in the area, both Cooper Landing and Hope residents seek opportunities to hunt and fish in other areas. During their comprehensive subsistence survey, Seitz et al. found that "Cooper Landing and Hope both were interested in the idea of local preference in hunting and fishing regulations because of the competition they experience from others who also live along the road system" (1994:122).

Other Alternatives Considered

One less inclusive alternative preliminary conclusion would limit this this customary and traditional use determination for goats in Unit 15 to rural communities within Unit 15: Ninilchik, Nanwalek, Port Graham, and Seldovia. In this alternative, Hope and Cooper Landing, adjacent rural communities on the Kenai Peninsula in Unit 7 with demonstrated customary and traditional use of goat, would be excluded. This alternative was considered and rejected because it may contradict the Board's policy of establishing broad and inclusive customary and traditional use determinations.

Effects of the Proposal

If Proposal WP20-23a is adopted, those eligible to hunt goats under Federal regulations in Unit 15 will be reduced from all rural residents of Alaska to rural residents of Ninilchik. If the Board adopts a

Federal subsistence season, only rural residents of Ninilchik will be eligible for that hunt. Adopting the proposal as written would exclude residents of Cooper Landing, Hope, Nanwalek, Port Graham, and Seldovia, all of whom also have a demonstrated pattern of customary and traditional use of goats in Unit 15.

OSM CONCLUSION

Support Proposal WP20-23a **with modification** to recognize the customary and traditional use of goats in Unit 15 by rural residents of Cooper Landing, Hope, Nanwalek, Ninilchik, Port Graham, and Seldovia.

The modification should read:

Customary and Traditional Use Determination—Goat

Unit 15	~~*All rural residents*~~ ***Rural residents of Cooper Landing, Hope, Nanwalek, Ninilchik, Port Graham, and Seldovia***

Justification

Residents of Cooper Landing, Hope, Nanwalek, Ninilchik, Port Graham, and Seldovia all have demonstrated patterns of customary and traditional uses of goats in Unit 15 consistent with the eight factors. Residents of these communities have sought to use, harvest, and share goats as documented in household surveys and ethnographic data. Port Alsworth, which had one documented goat hunt in Unit 15 between 2009 and 2018 (**Table 1)**, is not in reasonable proximity to Unit 15, and was removed from consideration. The inclusion of the Unit 7 communities of Hope and Cooper Landing in this determination is in keeping with current Board practice of establishing broad and inclusive customary and traditional use determinations.

LITERATURE CITED

Alaska Department of Commerce, Community, and Economic Development (ADCCED). 2019. Alaska Community Database Online: Nanwalek. https://dcra-cdo-dcced.opendata.arcgis.com/. Retrieved 6/27/2019.

Alaska Department of Labor and Workforce Development (ADLWD). 2018. Alaska population overview, 2017 estimates. . http://live.laborstats.alaska.gov/pop/estimates/pub/17popover.pdf. Retrieved: July 18, 2019.

Alaska Department of Fish and Game (ADF&G). 2019a. 2019-2020 Alaska drawing permit hunt supplement. https://www.adfg.alaska.gov/static/applications/web/nocache/license/huntlicense/pdfs/20192020_draw_supplement.pdfDDB3E5422A81D382A439F6878368477C/2019-2020_draw_supplement.pdf. Retrieved: July 16, 2019.

Alaska Department of Fish and Game (ADF&G). 2019b. Community Subsistence Information System. Alaska Department of Fish and Game Division of Subsistence online database. Anchorage, AK.

Arndt, Katherine L. 1993. Released to Reside Forever in the Colonies. Pages 31-46 *in* Agrafena's Children. Wayne Leman, ed. Lulu Press. Ninilchik, AK.

Barry, M. J. 1973. A history of mining on the Kenai Peninsula. Alaska Northwest Publishing Company. Anchorage, AK.

Fall, J. A., V. Vanek, L. Brown, G. Jennings, R.J. Wolfe, and C. Utermohle. 2000. Wild resource harvests and uses by residents of selected communities of the Kenai Peninsula Borough. ADF&G, Div. of Subsistence, Technical Paper No. 253. Juneau, Alaska. 362 pp.

Fall, J.A., editor. 2006. Update of the status of subsistence uses in the Exxon Valdez oil spill area communities. ADF&G, Div. of Subsistence, Technical Paper No. 312. Anchorage, AK. 738 pp.

FSB. 1994. Transcript of Federal Subsistence Board proceedings. April 12, 1994. Office of Subsistence Management, FWS. Anchorage. AK.

FSB. 1996. Transcript of Federal Subsistence Board proceedings. May 3, 1996. Volume V. Office of Subsistence Management, FWS. Anchorage. AK.

Herreman, J. 2014. Units 7 and 15 mountain goat management report. Pages 106–121 *in* Mountain goat management report of survey and inventory activities 1 July 2011–30 June 2013, P. Harper, ed. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR 2014-3, Juneau, AK.

Herreman, J. 2019. Wildlife Biologist. Personal communication with Thomas Evans: email. ADF&G. Homer, AK.

Holmes, C. 1985. Progress report, project F-021-2(15)/(A09812), Sterling Highway archaeological mitigation: phase I excavations at four sites on the Kenai Peninsula. Alaska Department of Transportation and Public Facilities, Division of Geological and Geophysical Surveys. Fairbanks, AK.

Jones, B., and M.L. Kostick, editors. 2016. The Harvest and Use of Wild Resources in Nikiski, Seldovia, Nanwalek, and Port Graham, Alaska 2014. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 420. Anchorage, AK. 439 pp.

McDonough, T., and S. Selinger, Jeff. 2008. Mountain goat management on the Kenai Peninsula, Alaska: a new direction. Pages 50-67 *in* Proceedings of the 16th Biennial Symposium of the Northern Wild Sheep and Goat Council, 27 April-1 May 2008, Midway, Utah.

Merrill, T., and M Opheim. 2013. Assessment of Cook Inlet Tribes Subsistence Consumption. Seldovia Village Tribe.

Ninilchik Traditional Council. n.d. ANILCA Survey Results (1994 vs. 1999). Ninilchik Traditional Council. 56 pp.

Painter, M. 1983. Cooper Landing. Pages 46-50 *in* E. Pedersend, ed. A larger history of the Kenai Peninsula. Adams Press. Chicago, IL.

Reger, D. and A. Boraas. 1996. An overview of the radiocarbon chronology in Cook Inlet prehistory. Pages 155–171 in N.Y. Davis, ed. Adventures through time: readings in the anthropology of Cook Inlet, Alaska, edited by N. Y. Davis. Cook Inlet Historical Society, Anchorage, AK.

Seitz, J., L. Tomrdle, and J.A. Fall, 1994. The use of fish and wildlife in the Upper Kenai Peninsula communities of Hope, Whittier, and Cooper Landing. ADF&G Division of Subsistence, Technical Paper No. 219. Juneau, AK.

U.S. Census Bureau. 2010. Profile of general population and housing characteristics for Ninilchik, Happy Valley, Seldovia, Nanwalek, and Port Graham, Alaska. https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml. Retrieved: 6/24/2019.

WinfoNet. 2019. Wildlife Information Network (WinfoNet). Alaska Department of Fish and Game. Anchorage, AK. https://winfonet.alaska.gov/. Retrieved: August 1, 2019.

Williams, D. 2014. Ninilchik Subsistence Survey. Ninilchik Traditional Council. 67 pp.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southcentral Alaska Subsistence Regional Advisory Council

Support WP20-23a as modified by OSM. The Council believes that there is a clear need for an opportunity for Federally qualified subsistence users to have access to resources where none currently exists. The Council recognizes that it has been difficult for Federally qualified subsistence users to get a State drawing permit in comparison to the drawing permits that are awarded to non-residents.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-23: This proposal, submitted by Ivan Encelewski of the Ninilchik Traditional Council, would modify the pool of federally-qualified users eligible to participate in subsistence mountain goat hunting opportunities on the federal public lands of Unit 15 from all rural residents to only residents of Ninilchik, and then establish a new federal subsistence registration mountain goat hunting season in Unit 15 for residents of Ninilchik with season dates of August 10–November 14. The season would be closed by announcement from the Kenai National Wildlife Refuge manager in consultation with ADF&G and the chair of the Southcentral Alaska Subsistence Regional Advisory Council.

Introduction: Mountain goats are unique compared to other ungulate species due to the habitat they utilize and their reproductive capacity. Mountain goats inhabit alpine and coastal habitats that are adjacent to steep cliffs and rocky terrain that can be used as escape terrain from predators. They typically occur in small isolated populations and have little interchange between these groups. Telemetry and genetic studies have shown that mountain goats maintain a strong fidelity to discrete homeranges (White 2006, Shafer et al. 2012). Mountain goats breed in November and December and adult males typically remain segregated from females and young animals during a large portion of the year. The age of first reproduction of mountain goats is typically 4.5 years old (Festa-Bianchet and Cote 2008, White et al 2006).

Mountain goats in Unit 15 are currently managed under a limited permit system in small discreet hunt areas. Unit 15 currently contains 14 different hunt areas. Due to low population numbers, as determined by minimum counts, 2 of these areas were closed to harvest in 2019. Early season hunts (with the exceptions of RG364 and RG365) are managed under the state draw system and late season hunts are managed under a registration permit system. The number of available permits is calculated based on a system described in McDonough and Selinger (2008).

ADF&G uses five criteria to sustainably manage the Unit 15 goat populations. The criteria are used as general guidelines to determine the number of permits to be issued for hunt areas: other factors may enter the final calculation for permit numbers. First, for a drawing hunt to open the population must contain more than 50 goats. The second criteria considered is whether the quota was exceeded in previous years. For small populations, no hunt is held if the quota was exceeded in the 2 previous seasons. In larger populations, the number of permits is reduced if the quota was exceeded. The third criteria considered is the age of the survey data. If the survey data are greater than 3 years old and the population less than 75 goats, no permits are issued. For areas with greater than 75 goats and data older than 2 years, permit numbers are reduced. The fourth criteria considered is the population trend. If populations are declining, permits are reduced. The fifth criteria considered is access to the area. A greater number of permits are made available for areas with difficult access. The number of animals available for harvest (i.e., goat points, with nannies equaling two) is the final factor that affects the number of permits issued. Goat points are calculated at a rate of 4% of the most recent minimum count for areas with easy access and 5% for areas with difficult access.

Early season RG364 and RG365 hunts are managed similar to the drawing hunts in other hunt areas. Permits are calculated using the same formula, but tags are distributed by registration permits available in the communities of Seldovia, Port Graham, and Nanwalek. In recent years, ample permits have been available for both RG364 and RG365 well after the initial distribution date. In some years, permits have been left over at the end of the early season for RG365.

Late season registration hunts are only opened if an area contains more than 100 goats. If the population is not stable or increasing a hunt is not held. If the survey data are greater than 2 years old a hunt is not held. If the previous year's quota was exceeded a hunt is not held. Lastly, if there are fewer than 4 goat units available in an area after the draw season harvest is accounted for no hunt is held. Registration hunts have been open every year on the Kenai Peninsula since the establishment of this system.

Impact on Subsistence Users: If this hunt was established, it would initially provide additional opportunity, but only to residents of the community of Ninilchik. It could, however, reduce the opportunity for other subsistence users on the Kenai Peninsula because if goats are harvested in areas with limited population numbers, or nannies are harvested, it will decrease future hunting opportunity for all subsistence users.

Impact on Other Users: If the proposed hunt is adopted in the suggested format (all areas of Unit 15), it could disrupt the current state management system, especially in areas in Unit 15 that the state believes should not be open for harvest due to conservation concerns. Opening all of Unit 15 could negatively affect other hunters because managers would likely take a more cautious management approach, including limiting permits issued in Unit 15. If goats were harvested in areas with low numbers, it could decrease future hunting opportunities for other users and potentially impact nonconsumptive uses.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made positive customary and traditional use findings for mountain goats in units 7 and 15C outside the Anchorage-Matsu-Kenai Nonsubsistence Area. Only the portion of Unit 15C that is near the communities of Seldovia, Port Graham, and Nanwalek is outside the nonsubsistence area.

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for mountain goats in units 7 and 15C outside the Anchorage-Matsu-Kenai Nonsubsistence area is 7–10 animals.

The season and bag limit for Unit 7 is:

		Open Season (DG 352-363 & RG 352-375)	
Unit/Area	Bag Limit	Resident[a]	Nonresident
15 (DG352-DG363)	*1 goat*	*Aug.10*–Oct. 15 (*Draw Permit*)	*Aug.10*–Oct. 15 (*Draw Permit*)
15 (RG364)		*Registration Permit*	*No Open Season*
15 (RG365)		*Registration Permit*	*Registration Permit*
15(RG352-RG363, RG375)		*Registration Permit*	*Registration Permit*
15(RG374)		*Registration Permit*	*No Open Season*
	1 goat	*Nov.1*–Nov. 14 (*Registration Permit*)	*Nov.1*–Nov. 14 (*Registration Permit*)

[a] Subsistence and General Hunts.

Special instructions: Taking of nannies with kids is prohibited. If a nanny is taken the hunter is prohibited from hunting any goats in units 7 and 15 for 5 regulatory years.

Conservation Issues: Mountain goats are a slowly reproducing species with distinct home ranges. The average age of first reproduction is 4.5 years (Festa-Bianchet and Cote 2008) and studies of Alaska populations show only a 68% parturition rate (White et al. 2013). Due to these factors, small populations of goats are easily extirpated from distinct areas. If reproductive age nannies are harvested from a small herd it is possible to completely curtail reproduction in that herd. As such, mountain goats should not be managed on a unitwide basis and adding additional harvest on top of current state harvest could negatively impact herds. Hunts must be established to reflect local home ranges and population levels.

In some hunt areas in Unit 15 goats are easily accessible from the water and are valued for viewing purposes. Easy access to some hunt areas, such as Cecil Rhode Mountain (DG341), has led to the near extirpation of discreet populations in the past (Paul 2008). The current state hunt structure helps to prevent this from happening in the future.

Enforcement Issues: None

Recommendation: ADF&G is **NEUTRAL** on the eligibility requirements for the federal subsistence program. However, the Office of Subsistence Management's analysis of customary and traditional uses does not systematically examine each of the 8 criteria used to determine a C&T finding. ADF&G recommends a full and complete analysis be presented to the Councils and Federal Subsistence Board.

Furthermore, page 7 of the OSM analysis cites a decline in goat use by tribal members and other Native residents of Ninilchik; however, the data from the cited studies (1994, 1999 and 2014) cannot be compared to other data due to variation in research methods and sample selection between studies.

ADF&G is **OPPOSED** to opening a unit-wide hunt for mountain goats in Unit 15 due to conservation concerns. ADF&G would support the portion of the proposal that seeks to establish seasons and harvest limits with modification to establish a drawing hunt, instead of a registration hunt, in Unit 15. The proposed bag limit of one goat should not be modified. Furthermore, due to conservation concerns, ADF&G supports modifying the proposal to clarify all of the following: 1) that there would be a quota of two goats; 2) it would be prohibited to take a nanny with kids; 3) if a nanny is taken, the hunter is prohibited from hunting any goats in Unit 15 for 5 regulatory years; 4) if a billy is taken, the hunter is prohibited from hunting any goats in Unit 15 for 3 regulatory years; 5) permits allocated within the current state hunt areas; and 6) the areas in which tags will be issued each year should be determined in consultation with ADF&G in September/October previous to the permit year.

Citations

Fiesta-Bianchet, M. and S. D. Cote. 2008. Mountain Goats (Ecology, Behavior, and Conservation of an Alpine Ungulate). Island Press, Washington D. C.

McDonough, T. J. and J. Selinger. 2008. Mountain goat management on the Kenai Peninsula Alaska: a new direction. Proceedings of the biennial Symposium of the Northern Wild Sheep and Goat Council 16:50-67.

Paul, T. W. 2009. Game transplants in Alaska. Technical Bulletin No. 4, second edition. Alaska Department of Fish and Game, Wildlife Conservation. Juneau, AK. 150pp.

White, K. S. 2006. Seasonal and Sex-specific variation in terrain use and movement patterns of mountain goats in southeastern Alaska. Biennial Symposium of Northern Wild Sheep and Goat Council 15: 183-193.

White, K. S., G. W. Pendleton, D. Crowley, H J. Griese, K. J. Hundertmark, T. McDonough, L. Nichols, M. Robus, C. A. Smith, J. W. Schoen. 2011 Mountain Goat Survival in Coastal Alaska: Effects of age, sex, and climate. Journal of Wildlife Management 75: 1731-1744.

White, K. S., P. Mooney, K. Bovee 2013. Mountain goat movement patterns and population monitoring on Baranof Island. Wildlife Research Annual Progress Report. Alaska Department of Fish and Game, Division of Wildlife Conservation. Douglas, AK.

WP20–24a Executive Summary	
General Description	Proposal WP20-24a asks the Federal Subsistence Board to recognize the customary and traditional use of sheep in Unit 15 by residents of Ninilchik. *Submitted by: Ninilchik Traditional Council*.
Proposed Regulation	**Customary and Traditional Use Determination—Sheep** *Unit 15* ~~*No Federal subsistence priority*~~ ***Residents of Ninilchik***
OSM Conclusion	**Support**
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-24A

ISSUES

Wildlife Proposal WP20-24a, submitted by the Ninilchik Traditional Council, requests a customary and traditional use determination for sheep in Unit 15 for residents of Ninilchik. A related proposal, WP20-24b, addresses a hunting season and harvest limit for sheep in Unit 15.

DISCUSSION

The proponent states these changes are needed to provide subsistence opportunity to harvest sheep in Unit 15, referencing a significant decline in use of sheep by Ninilchik residents between 1994 and the present due to lack of opportunity. The proponent further states that the requested changes would provide a meaningful subsistence preference. Upon clarification with the proponent, this request was not intended to be exclusive; however, the Ninilchik Traditional Council's request is specific to Ninilchik.

Existing Federal Regulation

Customary and Traditional Use Determination—Sheep

Unit 15	*No Federal subsistence priority*

Proposed Federal Regulation

Customary and Traditional Use Determination—Sheep

Unit 15	~~*No Federal subsistence priority*~~ ***Rural residents of Ninilchik***

Extent of Federal Public Lands

Unit 15 is comprised of approximately 47% Federal public lands and consists of 46% U.S. Fish and Wildlife Service (USFWS) managed lands, 1.1% Bureau of Land Management (BLM) managed lands, 0.4% USDA Forest Service managed lands, and 0.1% National Park Service (NPS) managed lands. NPS managed lands in Unit 15 are within Kenai Fjords National Park and are closed to subsistence.

Regulatory History

At the inception of the Federal Subsistence Management Program in Alaska in 1990, the majority of the Kenai Peninsula was in the Kenai Peninsula Nonrural Area (now named the Anchorage-Matsu-Kenai Nonsubsistence Area) established by the State. The exception was the southern-most portion

around the communities of Port Graham, English Bay, and Seldovia. The State did not allow subsistence uses in nonrural areas. In 1992, the Board adopted customary and traditional use determinations from State regulations. The State did not recognize customary and traditional uses of sheep in Unit 15, and the Board adopted a determination of "no Federal subsistence priority" (72 Fed. Reg. 22961; May 29, 1992).

Background: Current Hunting Opportunity

There has never been a Federal subsistence season for sheep in Unit 15. Consequently any sheep harvest in the unit by rural residents has taken place under State of Alaska regulations. Since the 1990s, the Alaska Department of Fish and Game (ADF&G) has managed the hunt for sheep in Unit 15 through a combination of drawing and general season hunts. Drawing permits for ewes were only available in Unit 15 from 1993/1994 to 2003/2004. Drawing permits for rams in Unit 15 began in 2003/2004. A limited drawing hunt (DS150) occurs in the Round Mountain Area, which includes a very small portion of Kenai National Wildlife Refuge in Unit 15A. In the remainder of Unit 15, including most of the lands in the Refuge, Federally qualified subsistence users are able to hunt sheep under a general harvest ticket under the State regulations.

From 1992 to 2018, residents from nonrural areas in Unit 15 took a majority of the sheep (66%) followed by residents from Alaska outside of Unit 15 (23%), nonresidents of Alaska (9%), and rural residents from Unit 15 (2%) (**Table 1**). It should be noted that the number of rural residents is based on mailing addresses in the State harvest database, which may not be the same as the communities in which they live. To the extent that hunters receive mail in a nearby larger community, it may under-represent some smaller community harvests and over-represent harvests in larger communities with post offices. Thus information on rural residents are estimates which are used to represent general harvest patterns.

Table 1. Resident status of successful hunters that harvested sheep in Unit 15 from 1992-2000, 2001-2010 and 2011-2018 (WinfoNet 2019).

Harvest Period	Rural Resident in Unit 15[a]	Nonrural Resident in Unit 15	Alaska Resident not in Unit 15	Nonresident of Alaska
1992-2000	4 (2%)	167 (68%)	61 (25%)	13 (5%)
2001-2010	4 (3%)	81 (63%)	23 (18%)	21 (16%)
2011-2018	0 (0%)	24 (61%)	11 (28%)	4 (10%)
Total	8 (2%)	272 (66%)	95 (23%)	38 (9%)

[a] Hunters were classified as Federally qualified subsistence users by the reported residency in ADF&G's harvest database. As reported, residency may not reflect the location of one's permanent residence, these data should be considered estimates.

Eight Factors for Determining Customary and Traditional Use

A community or area's customary and traditional use is generally exemplified through the eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) a pattern of use recurring in specific seasons for many years; (3) a pattern of use consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area; (5) 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; (6) a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use in which the harvest is shared or distributed within a definable community of persons; and (8) 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 the community or area.

The Board makes customary and traditional use determinations based on a holistic application of these 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.

If a proposal requests to add communities or residents of areas to an existing customary and traditional use determination, as is the case for sheep in Unit 15, then the analyst focuses on the communities or residents of the areas identified in the proposal. Therefore, this analysis will consider the customary and traditional uses of caribou in Unit 15 by only the community of Ninilchik.

For the purposes of this analysis, the community of Ninilchik is comprised of two census-designated places (CDPs): Ninilchik and Happy Valley. ADF&G subsistence use studies conducted for 1998 with Ninilchik residents included residents of Ninilchik and Happy Valley CDPs (Fall et al. 2000). Thus, when reference is made to Ninilchik in this analysis, it includes people living in the Ninilchik CDP as well as the Happy Valley CDP. In the 2010 U.S. Census, Ninilchik CDP had 883 year-round, permanent residents and Happy Valley had 593 year-round permanent residents (U.S. Census 2010); thus the total population for the two CDPs from the last census is 1,476 people. Ninilchik Village Tribe, governed by the Ninilchik Traditional Council (NTC), is the only local government in the immediate Ninilchik area. The community does not have a local municipal government; however, Ninilchik is part of the Kenai Peninsula Borough.

The community of Ninilchik (*Niqnalchint*) is within the traditional territory of the Lower or Outer Cook Inlet Dena'ina Athabaskans; the Dena'ina cultural tradition dates back to around at least 1000 A.D (Reger and Boraas 1996). Non-Native settlement of the Kenai Peninsula began in the 18th century

with the fur trade, and Ninilchik was settled by Russians in the early 1800s. Ninilchik residents have used a wide array of fish and wildlife resources since the founding of the community in 1847. The site was chosen so that retirees, who included Alutiit, Russians, and Creoles, from the Russian-American Company would be able to support themselves by harvesting wild resources and gardening (Arndt 1993:2). At the end of the 19th century, commercial fishing brought about new settlements to the southern Kenai Peninsula. The next major non-Native settlement period began during the Gold Rush era at the end of the 19th century. With the construction of roads and local oil development in the 1950s, the population of the Kenai Peninsula increased substantially through in-migration of people born outside Alaska.

The Board has previously recognized Ninilchik's customary and traditional uses of black bears, brown bears, and moose throughout Unit 15 and for all fish in the Kasilof River and Kenai River drainages located in Unit 15. Based on these previous determinations, Ninilchik has already established a recognized pattern of harvest and use of wild resources in Unit 15 consistent with the eight factors.

In 1998, the most recent year for which subsistence household survey data are available from the Alaska Department of Fish and Game (ADF&G), 99% of Ninilchik households (including in the Happy Valley CDP) used wild resources and 96% of households harvested at least one resource. Harvest was estimated at 164 pounds per person. Large land mammals made up about 40% of the harvest in terms of edible weight with 63% of households reporting using large land mammals and 33% of household harvested large land mammals (ADF&G 2019).

Table 2. The harvest and use of sheep by Ninilchik residents during one year study periods between 1982 and 2014, based on household surveys (HH), blank cell=data unavailable (Source: ADF&G 2019, Fall 2006).

Community	Study Year	% of HH Using	% of HHs Attempting Harvest	% of HHs Harvesting	% of HHs Giving Away	% of HH Receiving	Per Capita Harvest (lbs.)
Ninilchik[a]	1998	3%	2%	2%	2%	1%	0.77
Ninilchik[b]	1982			0%			0

[a] Survey included both Ninilchik and Happy Valley CDPs.

[b] Ninilchik CDP only.

In the same study year, sheep were harvested by an estimated 2% of households in Ninilchik and used by 3% of households. The sheep were harvested in Unit 15B (Fall et al. 2000). No sheep were reported harvested for the 1982 study year (ADF&G 2019, see **Table 2**). According to the OSM database (based on the ADF&G reporting system), between 1992 and 2010, residents of Ninilchik received 32 permits for sheep and participated in the same number of sheep hunts. Of those hunts, eight were successful (USFWS 2019).

In 1994 and 1999, the Ninilchik Traditional Council conducted key respondent interviews with Ninilchik Tribal members as well as Native residents of Ninilchik who were not Tribal members about their harvests and uses of resources. The 1994 interviews collected information from as far back as the

interview participant remembered to the present. The 1999 interviews focused on the previous 5 years. In 2014, the Council surveyed a random sample of households living in the Ninilchik CDP, using a survey methodology similar to that employed by ADF&G. Based on the results of these surveys, sheep use by Tribal members and other Native residents of Ninilchik declined from 24% of households interviewed in 1994 to 5% in 1999. No sheep were reported harvested on the 2014 survey of residents of the Ninilchik CDP (Ninilchik Traditional Council n.d., Williams 2014). Because there is overlap in subsistence use of sheep and goat, data on goat from these same surveys is pertinent. Based on the results of the surveys, goat use was reported by 20% of surveyed households in 1994 and 1999, and no goats were reported harvested in the random sample survey of the Ninilchik CDP in 2014 (Ninilchik Traditional Council n.d., Williams 2014).

Effects of the Proposal

If Proposal WP20-24a is adopted, those eligible to hunt for sheep in Unit 15, which currently has a "no Federal subsistence priority" determination, will be expanded from no rural residents to rural residents of Ninilchik. If the Board adopts a Federal subsistence season, only rural residents of Ninilchik will be eligible for that hunt.

OSM CONCLUSION

Support Proposal WP20-24a.

Justification

Residents of Ninilchik have a demonstrated pattern of customary and traditional use of sheep in Unit 15 consistent with the eight factors. Residents of this community have sought to use, harvest, and share sheep as documented in household surveys and ethnographic data (ADF&G 2019, Ninilchik Traditional Council n.d., Williams 2014, USFWS 2019). Ninilchik is defined here as the Ninilchik and Happy Valley CDPs, consistent with other customary and traditional use determinations for Ninilchik.

LITERATURE CITED

ADF&G. 2019. Community Subsistence Information System. Alaska Department of Fish and Game Division of Subsistence online database. Anchorage.

Arndt, Katherine L. 1993. Released to Reside Forever in the Colonies. Pages 31-46 *in* Agrafena's Children. Wayne Leman, ed. Lulu Press. Ninilchik, AK.

Fall, J. A., V. Vanek, L. Brown, G. Jennings, R.J. Wolfe, and C. Utermohle. 2000. Wild resource harvests and uses by residents of selected communities of the Kenai Peninsula Borough. ADF&G, Div. of Subsistence, Technical Paper No. 253. Juneau, Alaska. 362 pp.

Fall, J.A., editor. 2006. Update of the status of subsistence uses in the Exxon Valdez oil spill area communities. ADF&G, Div. of Subsistence, Technical Paper No. 312. Anchorage, Alaska. 738 pp.

Ninilchik Traditional Council. n.d. ANILCA Survey Results (1994 vs. 1999). Ninilchik Traditional Council. 56 pp.

Reger, D. and A. Boraas. 1996. An overview of the radiocarbon chronology in Cook Inlet prehistory. Pages 155–171 in N.Y. Davis, ed. Adventures through time: readings in the anthropology of Cook Inlet, Alaska, edited by N. Y. Davis. Cook Inlet Historical Society, Anchorage.

Seitz, J., L. Tomrdle, and J.A. Fall, 1994. The use of fish and wildlife in the Upper Kenai Peninsula communities of Hope, Whittier, and Cooper Landing. ADF&G Division of Subsistence, Technical Paper No. 219. Juneau, AK.

Steffian, A., Saltonstall, P. and L.F. Yarborough. 2016. Maritime economies of the central gulf of Alaska after 4000 B.P. Pages 303-321 in T.M. Friesen, T. M. and O.K. Mason, eds. The Oxford handbook of the prehistoric Arctic. Oxford University Press. New York.

U.S. Census Bureau. 2010. https://www.census.gov/. Retrieved: August 23, 2019.

USFWS (U.S. Fish and Wildlife Service. 2019. OSM database. Office of Subsistence Management. USFWS, Anchorage, AK.

WinfoNet. 2019. Wildlife Information Network (WinfoNet). Alaska Department of Fish and Game. Anchorage, AK. https://winfonet.alaska.gov/.

Williams, D. 2014. Ninilchik Subsistence Survey. Ninilchik Traditional Council. 67 pp.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southcentral Alaska Subsistence Regional Advisory Council

Support. The Council believes that the people living closest to the resource should have first access to the resource. The Council remarked that although historically rural residents of multiple communities have been utilizing sheep resources; however, at this point the Council only supported adding the communities mentioned in the proposal to an existing determination. There are future opportunities for any additional communities to submit their own customary and traditional determination proposals.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-24A/B: This proposal, submitted by the Ninilchik Traditional Council, would revise the federal customary and traditional use determination for sheep in Unit 15 from no federal subsistence priority to residents of Ninilchik only. This proposal would also establish a subsistence sheep season of August 10 to November 14 in Unit 15 with a bag limit of 1 sheep.

Introduction: Unit 15 encompasses more than 4800 mi^2. The majority of Unit 15 is within the state's Anchorage-Matsu-Kenai Peninsula Nonsubsistence Area. Sheep are not found in those portions of Unit 15 that are outside the nonsubsistence area (Kalgin Island in Unit 15B, and lands around Seldovia, Port Graham, and Nanwalek in Unit 15C).

Excluding approximately 10 mi^2 in Unit 15A (which is less than 0.5% of the total area in Unit 15), the entire Unit is open to sheep hunting using a general season harvest ticket available to all Alaska residents and nonresidents. The Alaska resident bag limit for Dall sheep throughout Unit 15 under general season regulations is 1 full curl ram per regulatory year.

Harvests of Dall Sheep throughout Unit 15 have been low in recent years (average annual harvest from 2014-2018 was 2.4 sheep/ regulatory year compared to 33 sheep/regulatory year from 1992-1996) and we have experienced a noticeable decline in sheep numbers (average annual count from 1992-1996 was 829 sheep compared to 227 for 2014-2018). With the continuing decline of sheep in the Unit 15, additional harvest is not warranted at this time.

Impact on Subsistence Users: If the proposal is passed it would provide some additional harvest opportunity for federally qualified subsistence users.

Impact on Other Users: Should the sheep harvest increase, along with declining populations, , nonfederally qualified users may have reduced opportunity to harvest a sheep.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made no customary and traditional use findings for Dall sheep in those portions of Unit 15 outside the nonsubsistence area because sheep are not found in those areas.

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

Because there is no C&T finding, there is noANS for Dall sheep in Unit 15. The season and bag limit for Unit 15 is:

		Open Season (Permit/Hunt #)	
Unit/Area	Bag Limit	Resident[a]	Nonresident
15A east of Fuller Lake trail, South of Dike Creek and straight Line From the source of Dike Creek, east through the divide south Of Trout Lake to Juneau Creek, west of Juneau Creek and north of the Sterling Highway	*One Ram with full curl*	*August 10-September 20 (Drawing)*	*August 10-September 20 (Drawing)*
		Youth	Youth
15 remainder	*One Ram with full curl*	*August 1-August 5 (HT)*	*August 1-August 5 (HT)*
15 remainder	*One Ram with full curl*	*August 10-September 20 (HT)*	*August 10-September 20 (HT)*

[a] General Hunts Only.

Special instructions:

Ram horns must be sealed within 30 days of kill and must accompany meat from the field.

Conservation Issues: The current sheep hunting opportunity is managed through drawing permits and a general season harvest ticket. Sheep numbers are low at this time and thus a drawing permit is used to provide some hunting opportunity in a portion of Unit 15A where access is better; the remainder is open to all hunters. All Alaska hunters have some opportunity to hunt sheep in Unit 15 and additional harvest may impact the long-term abundance of sheep in Unit 15. It is not advisable to have an any additional sheep harvest opportunity when you have a decreasing sheep population

Enforcement Issues: Having different bag limits for federal subsistence sheep hunts and state regulated sheep hunts may make enforcement difficult.

Recommendation: ADF&G is **NEUTRAL** on eligibility requirements for the federal subsistence program. However, ADF&G recommends that the USFWS Office of Subsistence Management analysis of customary and traditional uses be revised so it systematically examines each of the 8 criteria used to determine a C&T finding. Furthermore, on page 7 of the C&T analysis, a decline in sheep use by Tribal members and other Native residents of Ninilchik is cited; however the data from the cited studies (1994, 1999 and 2014) cannot be compared due to the variation in research methods and sample selection between studies.

Furthermore, the Department of Fish and Game **OPPOSES** the portion of the proposal that seeks to open an any sheep hunt. The majority of Unit 15 is open to all Alaska hunters under general season management. This provides the appropriate level of opportunity for a sheep population that is declining. If the proposal is adopted, ADF&G would support a modification to restrict the bag limit to 1 full curl ram with season dates of August 10 – September 20.

WP20–28/29 Executive Summary	
General Description	Proposal WP20-28 requests that the bull moose season in Unit 17A be extended by 5 days, from Aug. 25 – Sep. 20 to Aug. 25 – Sep. 25. Proposal WP20-29 requests the addition of an Aug. 25 – Sep. 25 antlerless moose season in Unit 17A. *Submitted by: Togiak National Wildlife Refuge.*
Proposed Regulation	**Unit 17—Moose** *Unit 17A—1 bull by State registration permit* — *Aug. 25 – Sep. ~~20~~ **25*** ***OR*** ***1 antlerless moose by State registration permit*** — ***Aug. 25 – Sep. 25*** ***OR*** Up to 2 moose; one antlered bull by State registration permit, one antlerless moose by State registration permit — Up to a 31-day season may be announced between Dec. 1-last day of Feb.
OSM Conclusion	**Support**
Bristol Bay Subsistence Regional Advisory Council Recommendation	**Support**
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Support**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-28/29

ISSUES

Wildlife Proposals WP20-28 and WP20-29 were submitted by the Togiak National Wildlife Refuge (Refuge). WP20-28 requests that the bull moose season in Unit 17A be extended by 5 days, from Aug. 25 – Sep. 20 to Aug. 25 – Sep. 25. WP20-29 requests the addition of an Aug. 25 – Sep. 25 antlerless moose season in Unit 17A.

DISCUSSION

The Refuge notes that the moose population in Unit 17A is well above established population objectives, with high bull:cow ratios. The intent of this proposal is to reduce the moose population in this area, ensuring it remains productive and guarding against over browsing of the habitat. The Refuge notes that they supported a recent decision by the Alaska Board of Game (BOG), which implemented these changes in State regulation. It was clarified with the Refuge that the intent of the proposal is to impose a fall harvest limit of either one bull or one antlerless moose, with the opportunity for a second moose during the existing may be announced winter season.

Existing Federal Regulation

Unit 17—Moose

Unit 17A—1 bull by State registration permit	*Aug. 25 – Sep. 20*
Unit 17A—up to 2 moose; one antlered bull by State registration permit, one antlerless moose by State registration permit	*Up to a 31-day season may be announced between Dec. 1-last day of Feb.*

Proposed Federal Regulation

Unit 17—Moose

Unit 17A—1 bull by State registration permit	*Aug. 25 – Sep. ~~20~~* ***25***
OR	
1 antlerless moose by State registration permit	***Aug. 25 – Sep. 25***

OR

Up to 2 moose; one antlered bull by State registration permit, one antlerless moose by State registration permit		*Up to a 31-day season may be announced between Dec. 1-last day of Feb.*

Existing State Regulation

Unit 17A—Moose

Residents: *One bull by permit available in person in Dillingham and Togiak beginning Aug. 11.*	*RM573*	*Aug. 25 – Sep. 25*
OR		
One antlerless moose by permit available in person in Dillingham and Togiak beginning Aug. 11.	*RM571*	*Aug. 25 – Sep. 25*
OR		
Two moose total, only one may be an antlered bull (RM575), only one may be an antlerless moose (RM576), by permit available in person in Dillingham and Togiak (up to a 31-day season may be announced Dec. 1 – Feb. 28)	*RM575/ RM576*	*May be announced*
Non-residents: *One bull with 50-inch antlers or antlers with 4 or more brow tines on at least one side by permit. No aircraft use on, or within 2 miles of specific rivers and lakes. Nonresident orientation required.*	*DM570*	*Sep. 5 – Sep. 15*

Extent of Federal Public Lands/Waters

Unit 17A is comprised of approximately 87% Federal public lands, all of which are managed by U.S. Fish and Wildlife Service (See Unit Map).

Customary and Traditional Use Determinations

Rural residents of Unit 17, Goodnews Bay, Kwethluk, and Platinum have a customary and traditional use determination in the portion of Unit 17A north and west of a line beginning from the Unit 18

boundary at the northwestern end of Nenevok Lake, to the southern point of upper Togiak Lake, and to the Unit 17A boundary to the northeast towards the northern point of Nuyakuk Lake.

Rural residents of Unit 17, Akiak, Akiachak, Goodnews Bay, and Platinum have a customary and traditional use determination in the portion of Unit 17A north of Togiak Lake that includes Izavieknik River drainages.

Rural residents of Unit 17, Goodnews Bay and Platinum have a customary and traditional use determination in Unit 17A remainder.

Regulatory History

In 2001, a Federal season for moose was established in Unit 17A, as a result of the Federal Subsistence Board's (Board) action on Wildlife Proposal WP01-20. Submitted by the Refuge, WP01-20 requested the establishment of an Aug. 20 – Sep. 15 season, limited to one bull by State registration permit. The proponent noted that the moose population had increased sufficiently in the previous several years, and that harvest had been allowed since 1997 in State regulation. The Board adopted the proposal with modification to establish an Aug. 25 – Sep. 20 season, consistent with recent adjustments in the State season.

In 2002, Emergency Special Action WSA02-11 was submitted by the Togiak Traditional Council, requesting a winter moose hunt in a portion of Unit 17A. The proponent requested that, in the portion of 17A east of the west shore of Nenevok Lake, west bank of Kemuk River, and west bank of Togiak River south from the confluence of Togiak and Kemuk Rivers, a 14-day season be announced by the Refuge manager between December 1 and January 31 with a harvest limit of one antlered bull. This request was consistent with management guidelines developed jointly by the Refuge and the Alaska Department of Fish and Game (ADF&G), which indicated that a winter hunt could be considered when the population exceeded 600 moose. The Board adopted WSA02-11 with modification to require a State registration permit, to reduce regulatory complexity.

State Proposal 52A was developed in concert with WSA02-11. The Alaska Board of Game (BOG) adopted proposal 52A in late 2002, which resulted in the establishment of a 14 day winter season, to be announced between December 1 and January 31 with a harvest limit of one antlered bull. Unlike the Federal season, the new state season was implemented throughout Unit 17A.

Wildlife Proposal WP03-24, submitted by the Bristol Bay Native Association, requested that the winter season described in WSA02-11 be adopted into regulation. It requested that a Federal registration permit be required. At the recommendation of the Bristol Bay Subsistence Regional Advisory Council (Council), the Board deferred this proposal to allow time for review by the Unit 17A Moose Planning Working Group. The deferred proposal became Wildlife Proposal WP04-46 during the 2004 regulatory cycle. The Board adopted the proposal with modification to authorize a may be announced season up to 14 days long and to require a State registration permit. These modifications were consistent with the recommendations of the Unit 17A Moose Planning Working Group and the Council.

Prior to 2012, the winter season was open in State regulation throughout Unit 17A, but open in Federal regulation only in the portion of 17A east of the west shore of Nenevok Lake, west bank of Kemuk River, and west bank of Togiak River south from the confluence of Togiak and Kemuk Rivers. Wildlife Proposal WP12-40, submitted by the Refuge, requested that the Federal season be expanded geographically to include all of Unit 17A. The Refuge noted that the proposed change would not threaten the conservation status of the population, would provide additional subsistence opportunity, and would reduce regulatory complexity by aligning State and Federal regulation. The Board adopted WP12-40 as part of the consensus agenda.

In early 2013, the Board considered Emergency Special Action WSA12-11. Submitted by the Togiak Traditional Council, WSA12-11 requested that the winter moose season in Unit 17A be extended. The proponent reported that poor winter travel conditions, combined with the long travel distances required to access moose, had resulted in limited opportunity during the previously announced Dec. 18 – Dec. 31 season. As authorized by the Board, the Office of Subsistence Management, with unanimous consent of the Interagency Staff Committee, approved the request and reopened the Federal season Jan. 9 – Jan. 22. ADF&G issued an emergency order to reopen the State season during the same period.

In February 2013, the BOG amended and adopted Proposal 48B. As a result of this action, the State's winter may be announced season was lengthened to up to 31 days. In addition, the harvest limit for the winter season was increased to up to 2 moose.

Following the BOG's action, Emergency Special Action WSA13-01 was submitted by the Council. WSA13-01 requested that the Federal may be announced season be extended to up to 31 days and that the harvest limit for the winter season be increased to up to 2 moose. The Council noted that the requested change would result in additional opportunity for Federally qualified subsistence users, may help slow population growth, was consistent with the Unit 17A Moose Management Plan, and would reduce regulatory complexity by aligning State and Federal seasons and harvest limits. As authorized by the Board, the Office of Subsistence Management, with unanimous consent of the Interagency Staff Committee, approved the request.

The temporary changes implemented by WSA13-01 were proposed for permanent regulations in Wildlife Proposal WP14-21. The Council, who submitted the proposal, noted that these regulations could help prevent continued population growth and overuse of the habitat, while providing additional subsistence opportunity. The Board adopted WP14-21 with modification to delegate authority to the Refuge manager to open and close the season and set the harvest limit, including sex restrictions, via a delegation of authority letter.

In February 2015, the BOG considered Proposal 49, which requested extending the window of opportunity for announcing the winter hunt from Dec. 1 – Jan. 31 to Dec. 1 – Feb 28. ADF&G, the proponent, noted that changing weather patterns and marginal snow conditions had prevented access to moose in recent years. They argued that extending the window of opportunity would provide flexibility to managers to open the season during years when travel conditions weren't adequate until

later in the winter. ADF&G also requested a change in the harvest limit, from up to two moose, to one antlered bull and one antlerless moose. The latter request was aimed at protecting cows from overharvest, preventing disturbance of moose by hunters trying to distinguish antlerless bulls from cows, and shifting the harvest pressure from large breeding bulls to younger bulls that carry their antlers later into winter. The BOG adopted Proposal 49.

These changes in State regulation prompted requests for the same changes in Federal regulation. Wildlife Proposals WP16-27 and WP16-28 were submitted by the Togiak Fish and Game Advisory Committee and the Nushagak Fish and Game Advisory Committee, respectively. Both proposals requested that Federal regulations for the Unit 17A winter moose hunt mirror the recently adopted State regulations. The Board took no action on WP16-28 and adopted WP16-27 with modification to make minor changes to the regulatory language.

The BOG liberalized the fall moose season in Unit 17A at their February 2018 meeting. Proposal 137, submitted by the Togiak Fish and Game Advisory Council, requested that the fall season for residents begin and end five days later, a change from Aug. 25 – Sep. 20 to Aug. 30 – Sep. 25. Proposal 138, submitted by the Traditional Council of Togiak, requested that the resident season be extended by five days, a change from Aug. 25 – Sep. 20 to Aug. 25 – Sep. 25. The proponents of both proposals stated that moose movement was more conducive to hunting later in September. ADF&G, in their comments to the BOG, noted that moose abundance exceeded objectives and that bull:cow ratios appeared to be sufficient to allow additional bull harvest. They also noted that the proposed actions would be consistent with the management plan and might substantially increase bull harvest. The BOG took no action on proposal 137 and amended and adopted proposal 138. As a result of the BOG's decisions, the State season is currently Aug. 25 – Sep. 25 and the harvest limit is one bull or one antlerless moose by registration permit.

Biological Background

Moose are relative newcomers to the Bristol Bay region and, until recently, Unit 17 supported only a small population with limited distribution. Moose populations in the region have grown substantially in the past 30 years, however, and have continued to expand their range westward into western Unit 17A. They are now common wherever there is suitable habitat (Barten 2018).

Moose management within Unit 17A is guided by the Moose Management Plan for Game Management Unit 17A (management plan). The management plan was developed by the Unit 17A Moose Management Group, consisting of the Bristol Bay Subsistence Regional Advisory Council, the Nushagak and Togiak Fish and Game Advisory Committees, the Togiak National Wildlife Refuge, and ADF&G. The management plan outlines a series of management goals and objectives. Population and harvest objectives relevant to this proposal included maintaining a population of 800 – 1,200 moose, allowing a limited winter hunt for antlerless moose when the population is stable or increasing and above 600 moose, and allowing harvest of up to 2 moose when the population exceeds 1,200 moose (Unit 17A Moose Management Group 2013). ADF&G identifies a target population size of

1,100 – 1,750 moose (Barten 2018), which is somewhat higher than the population objective laid out in the management plan.

Assessment of the Unit 17A moose population is a cooperative undertaking by the Refuge and ADF&G. The first major survey of Unit 17A, conducted in 1981, yielded three moose. In 1994, 84 moose were observed. The population appears to have increased relatively steadily since (Aderman 2014) (**Figure 1**). Growth is attributed continuing immigration from Unit 17C, regulatory changes, commitment from Unit 17A communities to support population growth, availability of Mulchatna caribou as an alternate resource, and good productivity and recruitment due to good forage conditions, mild weather, and low predation (Unit 17A Moose Management Group 2013). At last count, in March 2017, an estimated 2,370 moose (90% CI = 1,805 – 2,934 moose) were present in Unit 17A (Aderman 2017, pers. comm.). This represents a 9% annual growth rate since 2011, and is above the population objectives established by the Unit 17A Moose Management Group and ADF&G.

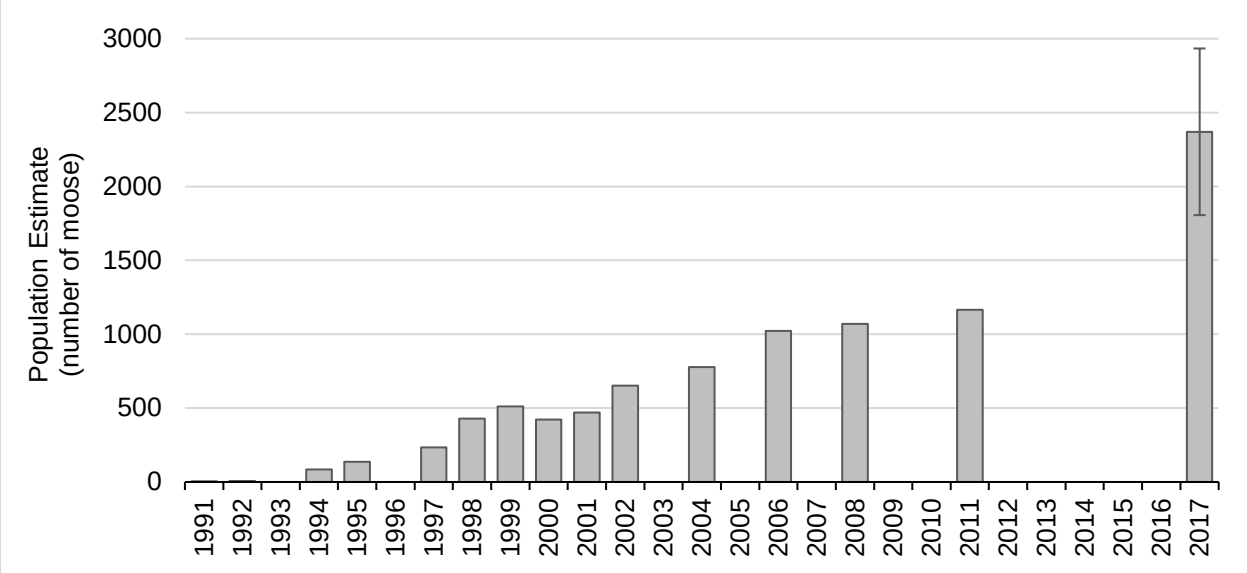


Figure 1. Unit 17A moose population estimates, 1991 – 2017. Prior to 2017, estimates are minimum counts. In 2017, GPSE methodology was used. Error bars represent the 90% confidence interval (Aderman 2014, Aderman 2017, pers. comm.)

Estimates of productivity are high in Unit 17A. Between 1998 and 2013, radio collared cows produced an average of 128 calves:100 cows. During this time period, twin births accounted for 64% of total births (Aderman 2014). Between 1998 and 2016, spring recruitment averaged 60 calves:100 cows and has remained relatively stable (Aderman 2019, pers. comm).

Estimating bull:cow ratios in Unit 17A has been difficult, due to lack of adequate survey methods. Typically, moose surveys occur during the fall. However, when there is no snow cover during that time of year, as often happens in the Bristol Bay region, moose are difficult to spot. Consequently, moose surveys in Unit 17A have occurred in the spring, after bulls have dropped their antlers. This has largely precluded estimation of bull:cow ratios (Barten 2018). However, in 2016 and 2017,

favorable fall conditions allowed estimation of bull:cow ratios. There were 64 bulls:100 cows and 77 bulls:100 cows observed in October of 2016 and 2017, respectively (Aderman 2019, pers. comm.)

Cultural Knowledge and Traditional Practices

Two Central-Yup'ik groups, the Kiatagmiut and the Aglurmiut, traditionally inhabited and hunted in subunit 17C (Fall et al. 1986; VanStone 1984). In historic times, the region supported a limited number of moose and, as such, the species accounted for a small portion of these groups' overall diet (Hensel 1996). Moose were hunted opportunistically and were valued as a source of food, as well as for clothing purposes (Holen et al. 2005; VanStone 1984). The occurrence of moose hunting and use among the Kiatagmiut and Aglurmiut is limited in published literature. However, Hensel (1996) noted that moose were treated with respect and, as the population increased, the species became more important. Holen et al. (2005) stated that moose populations did not increase dramatically until the 1980s and 1990s.

The Russians constructed Fort Alexander in the vicinity of Nushagak Bay in 1820 (Michael 1967). It was the establishment of this fort that enabled the Russians and other Europeans to branch out into the interior parts of Southwestern Alaska. Inland movement brought about more contact between the Russians, Europeans, and Central-Yup'ik groups, which proved to bring about major changes to the Native way of life (Michael 1967; VanStone 1984). The fur trade was the first major disruptor; it altered the subsistence cycle and placed great emphasis on fur trapping, which meant that more time was spent in the pursuit of animals that had little food value. Over time, the Central-Yup'ik groups became increasingly reliant on the trading posts for basic needs (VanStone 1984). The arrival of the Russian explorers and traders was followed by missions, schools, canneries, trappers, and prospectors (VanStone 1984).

ADF&G has conducted several comprehensive subsistence surveys in the Bristol Bay region (Evans et al. 2009; Fall et al. 2006; Krieg et al. 2009; Holen et al. 2012). Over numerous study years it was noted that large mammals made up approximately 15% to 25% of the total harvest of the communities surveyed (Evans et al. 2013; Holen et al. 2012). Those participating communities in the area had a per capita moose harvest that ranged from 24 lbs./person to 188 lbs./person (Coiley-Kenner et al. 2003; Evans et al. 2009; Fall et al. 2006; Krieg et al. 2009; Holen et al. 2012).

Harvest History

Moose harvest in Unit 17A is allowed under both State and Federal regulation. A state permit is required for all hunters, regardless of which regulatory framework they adhere to. Quotas for both antlered and antlerless moose are used to prevent overharvest.

Overall, harvest has increased since 2001, the year a Federal season was established. That year, a total of 7 moose were reported harvested in Unit 17A. Reported harvest peaked in 2016, with 85 moose. Since 2001, 36% of harvest has occurred during winter (December – March), with the remainder occurring during fall hunts (**Figure 2**). Harvest is dominated by local users, defined here as Federally qualified subsistence users. Since 2013, the year the State's nonresident season was established, 83%

of reported harvest can be attributed to local users. Non-local residents of Alaska account for 9 % of the reported harvest, while nonresidents account for 7% of the reported harvest during this period (ADF&G 2019).

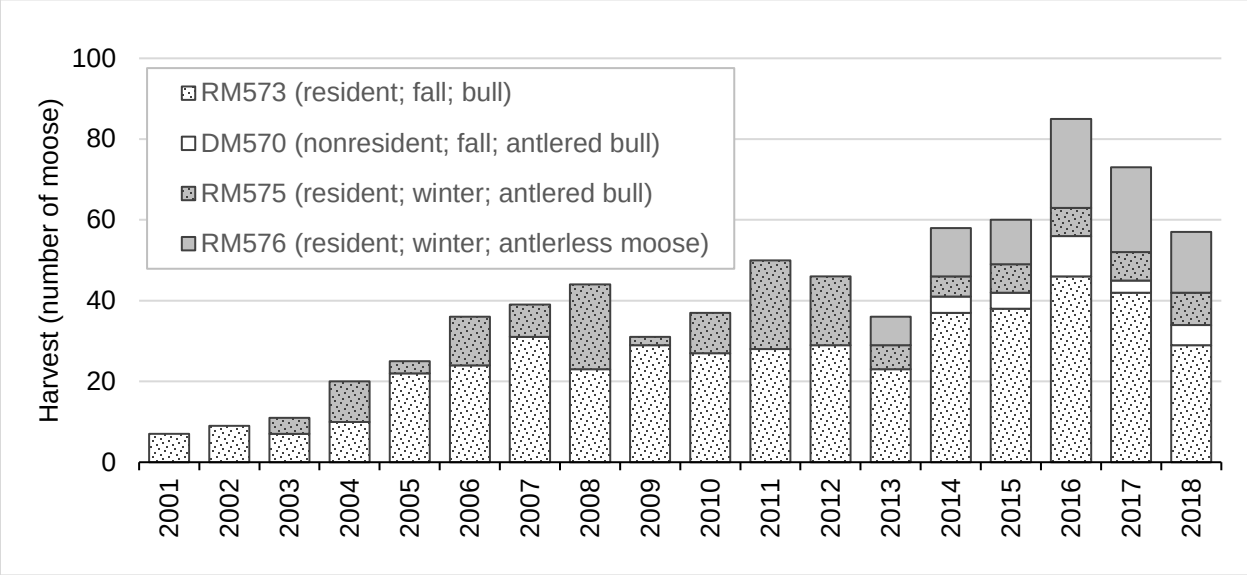


Figure 2. Reported moose harvest in Unit 17A, 2001 – 2018, by permit. White bars indicate fall harvest and grey bars indicate winter harvest (ADF&G 2019).

Effects of the Proposal

If Wildlife Proposal WP20-28 is adopted, the existing bull moose season in Unit 17A will be extended by 5 days, ending on September 25 instead of September 20. If Wildlife Proposal WP20-29 is adopted, an antlerless moose season will be implemented, concurrent with the Aug. 25 – Sep. 25 bull season. These changes will be consistent with changes recently made in State regulation, and all moose hunts in Unit 17A will require a State registration permit. Collectively, these changes may result in additional harvest, providing long-term benefits to a moose population that is currently well above established population objectives.

OSM CONCLUSION

Support Proposal WP20-28/29.

Justification

The Unit 17A moose population has grown to nearly double the upper limit of the population objective established by the Unit 17A Moose Management Group. It is also well above the target population size identified by ADF&G. Recent composition estimates reveal high bull:cow ratios, and there are no concerns related to productivity or calf recruitment. Consequently, encouraging additional harvest of this population does not pose a conservation concern, and may be useful for checking population growth and ensuring that the moose population does not over browse available habitat. Because harvest of this population is managed by quota, this additional opportunity poses little risk of

overharvest. Adding an additional antlerless hunt also increases flexibility for managers, in terms of maintaining appropriate sex ratios.

Collectively, these two proposals will result in increased subsistence opportunity for Federally qualified subsistence users. In the long term, preventing unchecked population growth by increasing harvest also ensures long-term subsistence use of moose in this area.

These changes, which mirror recent changes in State regulation, will result in reduced regulatory complexity by aligning seasons and harvest limits in State and Federal regulation. This will reduce confusion for Federally qualified subsistence users, who are eligible to hunt under both regulatory frameworks. Requiring a State registration permit is consistent with existing management practices for moose throughout Unit 17 and will ensure that harvest records continue to be consolidated in a single system, improving harvest management. Requiring a State permit will also benefit Federally qualified subsistence users, who, for a given hunt, will be able to hunt seamlessly across jurisdictions with a single permit.

LITERATURE CITED

Aderman, A.R. 2014. Monitoring moose demographics at Togiak National Wildlife Refuge, Southwestern Alaska, 1998 – 2003. Togiak National Wildlife Refuge. Dillingham, AK.

Aderman, A.R. 2017. Wildlife biologist. Personal communication: phone & email. Togiak National Wildlife Refuge. Dillingham, AK

Aderman, A.R. 2019. Wildlife biologist. Personal communication: phone & email. Togiak National Wildlife Refuge. Dillingham, AK

ADF&G. 2019. Winfonet. Accessed May 15, 2019.

Barten, N.L. 2018. Moose management report and plan, game management unit 17: Report period 1 July 2015 – 30 June 2020. ADF&G. Juneau, AK.

Coiley-Kenner, P., T.M. Krieg, M.B. Chythlook, and G. Jennings. 2003. Wild Resource Harvests and Uses by Residents of Manokotak, Togiak, and Twin Hills, 1999/2000. ADF&G, Div. of Subsistence Tech. Paper No. 275. Juneau, AK. 210 pp.

Evans, S., M. Kukkonen, D. Holen, and D.S. Koster. 2013. Harvests and of Wild Resources in Dillingham, Alaska, 2010. ADF&G, Div. of Subsistence Tech. Paper No. 375. Anchorage, AK. 145 pp.

Fall, J.A., J.C. Schichnes, M. Chythlook, and R.J. Walker. 1986. Harvests and of Wild Resources in Dillingham, Alaska, 2010. ADF&G, Div. of Subsistence Tech. Paper No. 375. Anchorage, AK. 187 pp.

Fall, J.A., D.L. Holen, B. Davis, T. Krieg, and D. Koster. 2006. Subsistence Harvest and Use of Wild Resources in Iliamna, Newhalen, Nondalton, Pedro Bay, and Port Alsworth, Alaska, 2004. ADF&G, Div. of Subsistence Tech. Paper No. 302. Juneau, AK. 405 pp.

Hensel, C. 1996. Telling Our Selves: Ethnicity and Discourse in Southwestern Alaska. Oxford University Press. New York. 220 pp.

Holen, D., T. Krieg, R. Walker. and H. Nicolson. 2005. Harvests and Use of Caribou, Moose, Bear, and Dall Sheep by Communities of Game Management Units 9B and 17, Western Bristol Bay, Alaska, 2001-2002. ADF&G, Div. of Subsistence Tech. Paper No. 283. Anchorage, AK. 174 pp.

Holen, D., J. Stariwat, T.M. Krieg, and T. Lemons. 2012. Harvests and of Wild Resources in Aleknagik, Clark's Point, and Manokotak, Alaska, 2008. ADF&G, Div. of Subsistence Tech. Paper No. 368. Anchorage, AK. 197 pp.

Krieg, T.M., D.L. Holen, and D. Koster. 2009. Subsistence Harvest and Use of Wild Resources in Igiugig, Kokhanok, Koliganek, Levelock, and New Stuyahok, Alaska, 2005. ADF&G, Div. of Subsistence Tech. Paper No. 322. Juneau, AK. 404 pp.

Michael, H.N. 1967. Part One: By Way of Introduction. Page 79. Lieutenant Zagoskin's Travels in Russian America, 1842-1844, The First Ethnographic and Geographic Investigations in the Yukon and Kuskokwim Valleys of Alaska. University of Toronto Press. Toronto, Canada. 358 pp.

Unit 17A Moose Management Group. 2013. Draft moose management plan for game management unit 17A. Jan. 8, 2013. Dillingham, AK.

VanStone, J.W. 1984. Mainland Southwest Alaska Eskimo. Pages 224-242 *in* D. Damas, ed. Handbook of North American Indians. Vol. 5, Arctic. Smithsonian Institution, Washington DC.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Bristol Bay Subsistence Regional Advisory Council

Support WP20-28/29. If this proposed regulation is adopted, it will provide for subsistence opportunity for rural residents of the region. Extending the season will provide an increased subsistence opportunity for Federally qualified subsistence users. The proposed Federal regulatory changes will also align them with current changes in State regulations and reduce regulatory complexity by aligning seasons and harvest limits in State and Federal regulations. The Council stated the proposed regulation will help to keep the growing moose population in the area in check. There has been an extensive habitat evaluation done, and the Togiak Refuge should be able to closely monitor this population and react accordingly if changes need to be made.

Yukon Kuskokwim Delta Subsistence Regional Advisory Council

Support WP28/29. The Council supports this additional subsistence moose hunt opportunity in Unit 17A. The data reported to the Council shows that the moose population in the area is quite healthy and can sustain additional harvest. The Council fully supports this additional subsistence opportunity, and it reduces regulatory complexity by aligning State and Federal regulations for moose in Unit 17A.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposals WP20-28/29: The proposals, submitted by the Togiak National Wildlife Refuge (Refuge), would extend the bull moose season in 17A by 5 days from Aug. 25–Sep. 20 to Aug. 25 – Sep. 25., and create an additional antlerless moose season in 17A from Aug. 25 to Sep. 25.

Introduction: This proposal was submitted by the Refuge because the moose population is well above established population objectives, with high twinning rates, calf-to-cow, and bull-to-cow ratios. Their intent is to reduce the moose population in this area, ensuring it remains productive and guarding against over browsing of the habitat.

Impact on Subsistence Users: These changes would provide additional hunting opportunity for federally qualified subsistence users hunting under federal regulations.

Impact on Other Users: If adopted, this change would not affect the harvest success rate for other nonfederally qualified users.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made a positive customary and traditional use determination for moose in Unit 17.

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for moose in Unit 17 is 100–150 animals. The seasons and bag limits for 17A are:

		Open Season (Permit/Hunt #)	
Unit/Area	Bag Limit	Resident[a]	Nonresident
17A	1 bull	August 25-September 25 (RM573)	August 25-September 25
	1 antlerless moose	(RM571)	
	1 bull	To be announced December 1 – February 29 (RM575)	
	OR		
	1 antlerless moose	To be announced December 1 – February 29 (RM576)	
	1 bull		September 5 – September 15 (DM570)

[a] Subsistence and General Hunts.

Special instructions:
RM573 & RM571: Permit available in person in Dillingham and Togiak beginning August 12.
RM573 & RM571: No aircraft use on, or within 2 miles of specific rivers and lakes.
RM575 and RM576: Bag limit is two moose total, only one may be an antlered bull (RM575), only one may be an antlerless moose (RM576), by permit available in person in Dillingham and Togiak (up to a 31 day season may be announced December 1 – February 29.)

Conservation Issues: Although the moose population in Unit 17A currently exceeds population objectives, it is possible that an extended season and antlerless harvest could reduce the 17A moose

population to undesirable levels if not monitored closely or harvest are not accurately reported. There should be recognition that an antlerless hunt is a management tool that should only be applied under certain circumstance. They do not go on in perpetuity and would be expected to be removed when the population returns to a sustainable level.

Enforcement Issues: None

Recommendation: ADF&G **SUPPORTS** the adoption of WP20-28/29. These proposals align with the current state regulation; would reduce hunter confusion on hunt start and end dates; and the potential for additional harvest would bring the 17A moose population down to levels that would reduce the potential for over browsing of forage.

WP20–31 Executive Summary	
General Description	Proposal WP20-31requests that the harvest limit for ptarmigan in Unit 9 be decreased from 20 ptarmigan per day/40 in possession to 10 ptarmigan per day/20 in possession and that the harvest season be shortened from Aug. 10 – Apr. 30 to Aug. 10 – last day of February. *Submitted by: Alaska Peninsula and Becharof National Wildlife Refuges.*
Proposed Regulation	**Unit 9—Ptarmigan (Rock, Willow, and White-tailed)** *~~20~~ **10** ptarmigan per day, ~~40~~ **20** in possession* — *Aug. 10 – ~~Apr. 30.~~ **Last day of February.***
OSM Conclusion	**Support**
Bristol Bay Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Support**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-31

ISSUES

Wildlife Proposal WP20-31, submitted by Alaska Peninsula and Becharof National Wildlife Refuges, requests that the harvest limit for ptarmigan in Unit 9 be decreased from 20 ptarmigan per day/40 in possession to 10 ptarmigan per day/20 in possession and that the harvest season be shortened from Aug. 10 – Apr. 30 to Aug. 10 – last day of February.

DISCUSSION

The proponent states that Refuge staff documented a significant decline in ptarmigan density (~90%) on many transects surveyed between 2013 and 2015. It is mentioned that the Lake Iliamna Fish and Game Advisory Committee also noted very low ptarmigan numbers in the area and submitted a proposal (#134) to the Alaska Board of Game (BOG), requesting a decrease in the allowable harvest. Local hunters in Unit 9 also report that ptarmigan densities are lower than in the past and that this decrease in numbers is widespread. The proponent states that this proposal would align State and Federal regulations, which would lessen user confusion, and would allow the ptarmigan population in the area to recover.

Existing Federal Regulation

Unit 9—Ptarmigan (Rock, Willow, and White-tailed)	
20 ptarmigan per day, 40 in possession	*Aug. 10 – Apr. 30.*

Proposed Federal Regulation

Unit 9—Ptarmigan (Rock, Willow, and White-tailed)	
*~~20~~ **10** ptarmigan per day, ~~40~~ **20** in possession*	*Aug. 10 – ~~Apr. 30.~~* ***Last day of February.***

Existing State Regulation

Unit 9—Ptarmigan (Including willow, rock, and white-tailed ptarmigan)	
Ten per day, Twenty in possession	*Aug 10 –Last day of February*

Extent of Federal Public Lands/Waters

Federal public lands comprise approximately 53% of Unit 9 and consist of 28% National Park Service (NPS) managed lands, 22% U.S. Fish and Wildlife Service (USFWS) managed lands, and 3% Bureau of Land Management (BLM) managed lands (**Figure 1**).

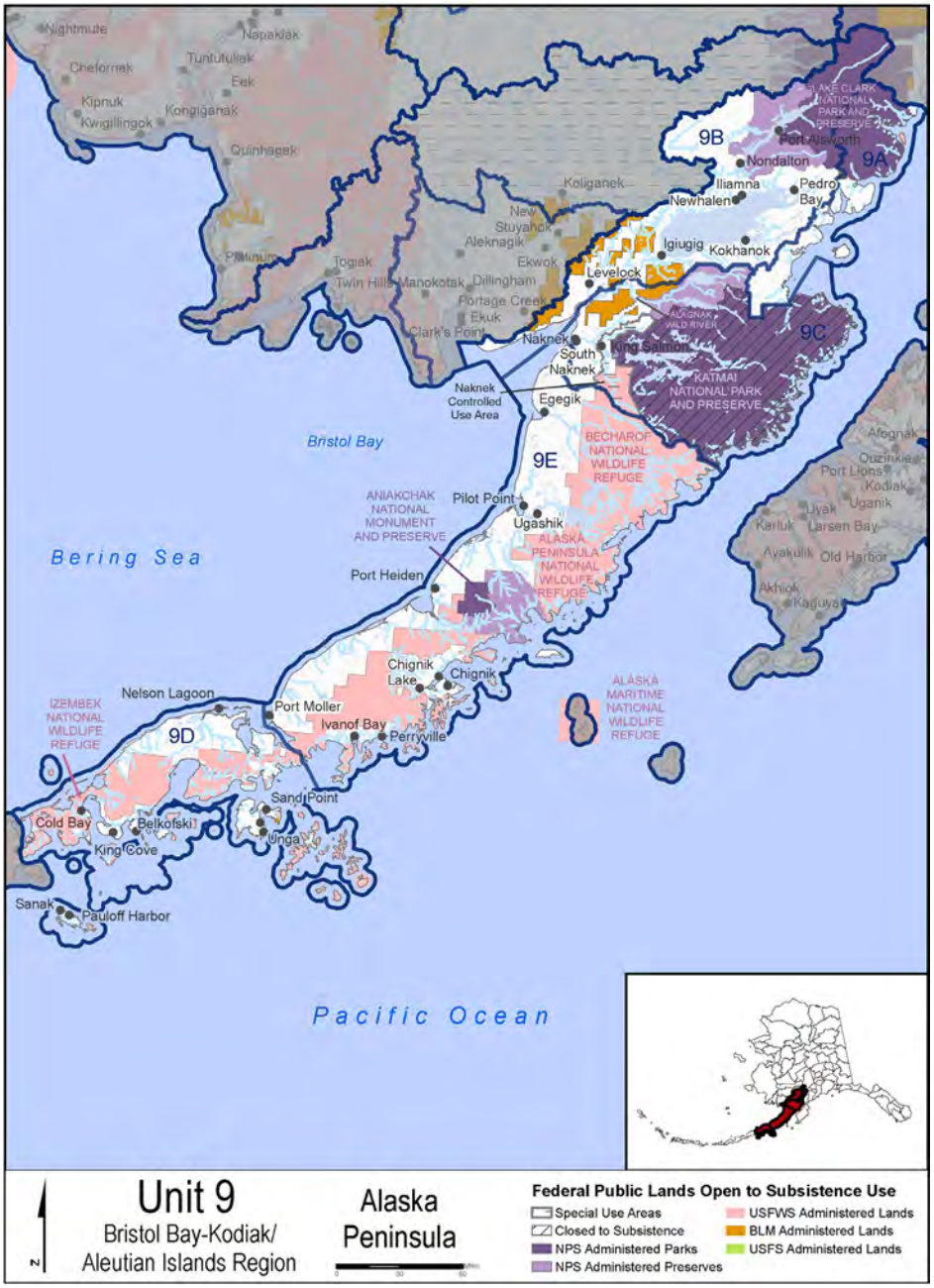


Figure 1. Federal public lands located in Unit 9.

Customary and Traditional Use Determinations

The Federal Subsistence Board (Board) has not made a customary and traditional use determination for ptarmigan in Unit 9. Therefore, all Federally qualified subsistence users may harvest ptarmigan in Unit 9.

Regulatory History

In 1990, the Board adopted subsistence regulations for ptarmigan from State regulations. Federal regulations set the harvest limit at 20 ptarmigan per day and 40 in possession and a season from Aug. 10–Apr. 30.

In February of 2018 the BOG adopted Proposal 134 to shorten the season for ptarmigan and reduce the daily harvest and possession limits in Unit 9. This proposal was adopted due to observed declines in ptarmigan populations in Unit 9 since 2014, and ongoing public concern pertaining to the decline in the region.

Biological Background

There are no current population surveys being conducted for ptarmigan in Unit 9. Ptarmigan abundance may fluctuate along with snowshoe hare populations, as predators use alternative food sources when hare abundance is low (Hannon et al. 1998). Similarly, specialist predator populations, such as gyrfalcons, show slight delayed population fluctuations relative to ptarmigan abundance cycles, and often accelerate the decline in ptarmigan populations during the low phase of the ptarmigan cycle (Nielson 1999). Ptarmigan experience a complete population cycle over approximately a ten-year period, similar to snowshoe hare (Nielson 1999). However, Alaska Department of Fish and Game (ADF&G) staff observations near King Salmon and Dillingham show that ptarmigan populations in this area may be much lower than in the past (Carroll and Merizon 2017, Merizon and Carroll 2018, 2019).

Climate variables may play a large part in the observed decline of ptarmigan populations on the Alaska Peninsula. Part of this decline is thought to be caused by recent cool and wet summers, followed by warmer winters in the area with little or no snow, which would help to provide thermal regulation and camouflage (Carroll and Merizon 2017, Merizon and Carroll 2018, 2019). Cool and wet weather patterns in early summer months can lead to reduced chick survival (Merizon and Carroll, 2018, 2019). This overall change in climate may also have an impact on general flock sizes and movements (Carroll and Merizon 2017). `

Ptarmigan typically have white feathers during the winter season and brown coloration in the summer months. This change in color allows them to blend in with their surroundings in any season, even when congregating in large flocks. By following the snowline, ptarmigan are better able to maintain camouflage through the spring molt. In recent years, snow cover has been minimal in Unit 9, which has led to ptarmigan mismatching their surroundings during winter months, making these populations more susceptible to predation and vulnerable to lack of thermal protection (Merizon 2018, pers.

comm.). Behavioral changes have been observed in conjunction with the lack of snow; ptarmigan are more spread out on the landscape, congregate in much smaller flocks, and migrate through areas at a quicker rate (Jones 2017, pers. comm.).

Regulations do not differentiate between willow ptarmigan and rock ptarmigan harvest. Willow and rock ptarmigan are the first and second most abundant ptarmigan species, respectively, in Alaska and can be found throughout the state (Carroll and Merizon 2017, Merizon and Carroll 2019).

The diet of willow ptarmigan is highly specialized, with up to 94% of their diet consisting of the buds and twigs of willows in the winter months (Weeden 1965, West and Meng 1966). In summer months, the average ptarmigan diet becomes more varied as herbaceous vegetation availability increases (Weeden 1965, West and Meng 1966). Availability of food resources is primarily based on the height of plants and the level of snow cover (West and Meng 1966). Ptarmigan often feed during daylight hours and have been found to fill their crop during the minimal daylight in winter and digest during hours when it was dark, whereas in the summer they were found to feed at more regular intervals without needing to fill their crops (West and Meng 1966).

The diet of rock ptarmigan often consists of dwarf birch and willow buds in winter months, but becomes more varied in summer months as they begin to consume new growth vegetation, insects, berries, and seeds (Weeden 1965).

Habitat

Willow ptarmigan are well adapted to live in treeless arctic areas that contain open shrub habitats in summer months and willow/shrub thickets with few scattered trees during the winter season (Weeden 1965). In Alaska, male and female willow ptarmigan are often segregated during the winter season (Weeden 1965). Willow ptarmigan are locally migratory, overwintering in the interior and breeding closer to the coast. Breeding territories are located in transitional shrub habitat in or near stands of willows and occur in most subalpine and alpine habitats across the state (Carroll and Merizon 2017). Male willow ptarmigan begin defending breeding territories in April (Carroll and Merizon 2017, Merizon and Carroll 2019).

Rock ptarmigan typically inhabit more exposed slopes and higher elevation ridges with abundant dwarf birch (Weeden 1965, Carroll and Merizon 2017). Similar to willow ptarmigan, male rock ptarmigan begin defending breeding territories in April (Carroll and Merizon 2017, Merizon and Carroll 2019). These breeding territories occur above tree-line and tend to have a higher proportion of open habitat area with little shrub cover (Weeden 1964, 1965) compared to willow ptarmigan. Similar to willow ptarmigan, male and female rock ptarmigan often separate into different flocks and/or habitat types in the winter, often wintering just below tree-line (Weeden 1964, 1965). Although rock ptarmigan are not typically as migratory as willow ptarmigan, they have been observed migrating 10-50 miles from breeding sites to over-wintering sites in portions of interior Alaska (Weeden 1965).

Cultural Knowledge and Traditional Practices

At least four Alaska indigenous groups, Unangan, Alutiiq, Central-Yup'ik, and Dena'ina Athabaskans, historically inhabited and hunted in Unit 9. Sources document traditional hunting of the regions healthy supply of game birds, including ptarmigan, by the Central-Yup'ik and Dena'ina (Birket-Smith 1959, Osgood 1976). Historical accounts suggest that ptarmigan was an important subsistence resource and that the bird was hunted mainly in the winter (Birket-Smith 1959; Osgood 1976). The Central-Yup'ik hunted ptarmigan with darts, throwing boards, snares, nets, and bow and arrow. The Dena'ina hunted the bird with the use of snare, rocks, bolas, and bow and arrows (Birket-Smith 1959, Osgood 1976, Townsend 1981).

Russian traders and explorers travelled to the Aleutian Islands and up the Alaska coast in the mid-eighteenth century (McCartney 1984; Clark 1984). Russia claimed sovereignty over Alaska and a 126-year period of exploration fueled by economic interest ensued (McCartney 1984, Partnow 2001, Morseth 2003). These activities brought both Russian and later Europeans into contact with Alaska indigenous groups (VanStone 1984, Morseth 2003). Intermarriages between indigenous people, Russians, and Europeans took place as both Russian and Europeans settled into indigenous territories (Partnow 2001). An influx of European exploration and settlement occurred on the Alaska Peninsula after 1867, when Russia sold Alaska to the United States (Morseth 2003). Today, residents of the region are from diverse backgrounds, and Unit 9 is open to statewide ptarmigan harvest and use by all Federally qualified subsistence users (Fall et al. 1995, 1998, Krieg et al. 2009, Holen et al. 2011).

The most recent comprehensive subsistence surveys conducted for the Alaska Peninsula by ADF&G show that ptarmigan use ranged from no use in some households to 93% in others (Fall et al. 1995, ADF&G 2019a). The per capita ptarmigan harvest from Chignik Bay, Chignik Lagoon, Chignik Lake, Egegik, False Pass, Igiugig, Iliamna, King Cove, King Salmon, Kokhanok, Levelock, Naknek, Nelson Lagoon, Newhalen, Nondalton, Perryville, Pedro Bay, Pilot Point, Port Alsworth, Port Heiden, Sand Point, and Ugashik ranged from 0.3 lbs/person in Pedro Bay to approximately 4 lbs/person in Perryville (Fall et al. 1987, 2006).

During each study year, communities within Unit 9 harvested or hunted for ptarmigan throughout the region including areas along the shores of Iliamna Lake, Kaskanak, King Salmon, and Peck Creeks, Naknek River, the Upper Talawik area, and around the communities of Igiugig, King Salmon, Kokhanok, Levelock, Naknek, Newhalen, Nondalton, and Pedro Bay (Fall et al. 2006, Krieg et al. 2009, Holen et al. 2011).

Harvest History

ADF&G collects hunter-harvested wings, tails, and heads of all species of grouse and ptarmigan to better understand annual harvest composition and annual population productivity (Merizon and Carroll 2019). The collection of these samples helps biologists determine age, sex, and species of harvested birds throughout the state in a very cost efficient manner (Merizon and Carroll 2019). ADF&G provides free wing envelopes to users and encourages them to send in wings from their harvest to help the agency better understand what is happening to grouse and ptarmigan populations throughout the

state (Merizon and Carroll 2019). In regulatory year 2016, 19 willow ptarmigan wings were collected from users in Unit 9 (Merizon and Carroll 2019). No wings were collected in Unit 9 during regulatory year 2017 (Merizon and Carroll 2019).

Information pertaining to ptarmigan harvest is collected during the Alaska Subsistence Harvest of Birds and Eggs survey conducted by the Alaska Migratory Bird Co-Management Council annually. Current harvest estimates for ptarmigan in Unit 9 have limited utility for assessing impacts of management decisions such as season lengths or harvest limits. Harvest estimates from the Alaska Migratory Bird Subsistence Harvest Estimates household survey may have high levels of variation due to (1) annual changes in ptarmigan abundance, (2) hunter access (e.g., snow conditions), (3) annual variation in hunting effort due to the availability of other resources (e.g., salmon, caribou), (4) inadequate sampling coverage (e.g., variable household/village participation, bias toward "high" or active hunting households, political climate influence, unknown under or over reporting), (5) variability of survey methodology over the years, and (6) heterogeneity of harvest patterns within villages (Wentworth 2007, Naves 2015a, 2016). In addition, the harvest seasons defined in the survey were designed for migratory birds and do not align with the current Federal ptarmigan season in Unit 9. Starting in 2016, the sampling design was revised to ensure that the same five regions are surveyed annually, one of which is the Bristol Bay Region (**Figure 2**; Naves and Otis 2017). This is a change from previous years, when sampling effort varied depending on funding and monitoring priorities (Naves and Otis 2017).

Bristol Bay households were surveyed for ptarmigan harvest in 2016 and 2017 using the updated sampling design methodology. The estimated ptarmigan harvest from the 2016 survey was 767 ptarmigan, all of which were harvested during the spring season (**Table 1, Table 2**; Naves 2015a, 2015b, Naves and Otis 2017, Naves and Keating 2018, 2019). In 2017, the harvest for Bristol Bay households was estimated at 1,988 ptarmigan, most of which were taken during winter months (**Table 1, Table 2**; Naves and Keating 2018, 2019). As mentioned above, these surveys were administered differently than previous surveys. Due to the change of methodology, an overall Bristol Bay Region estimate was produced rather than developing harvest estimates for each subregion (**Figure 3**) within the region. It is important to note that not all communities in this region are located in Unit 9, but surveyed households may have harvested ptarmigan from Unit 9.

Sandercock et al. (2011) found that in Norway, harvest levels of willow ptarmigan above 15% could be additive to natural mortality rather than compensatory and that a harvest above 30% of the post breeding population could be "superadditive" (harvest could cause additional natural mortality). It is important to consider these findings when determining harvest limits for willow ptarmigan. Due to uncertainties in abundance and harvest, it is difficult to understand how ptarmigan harvest impacts the overall population in Unit 9.

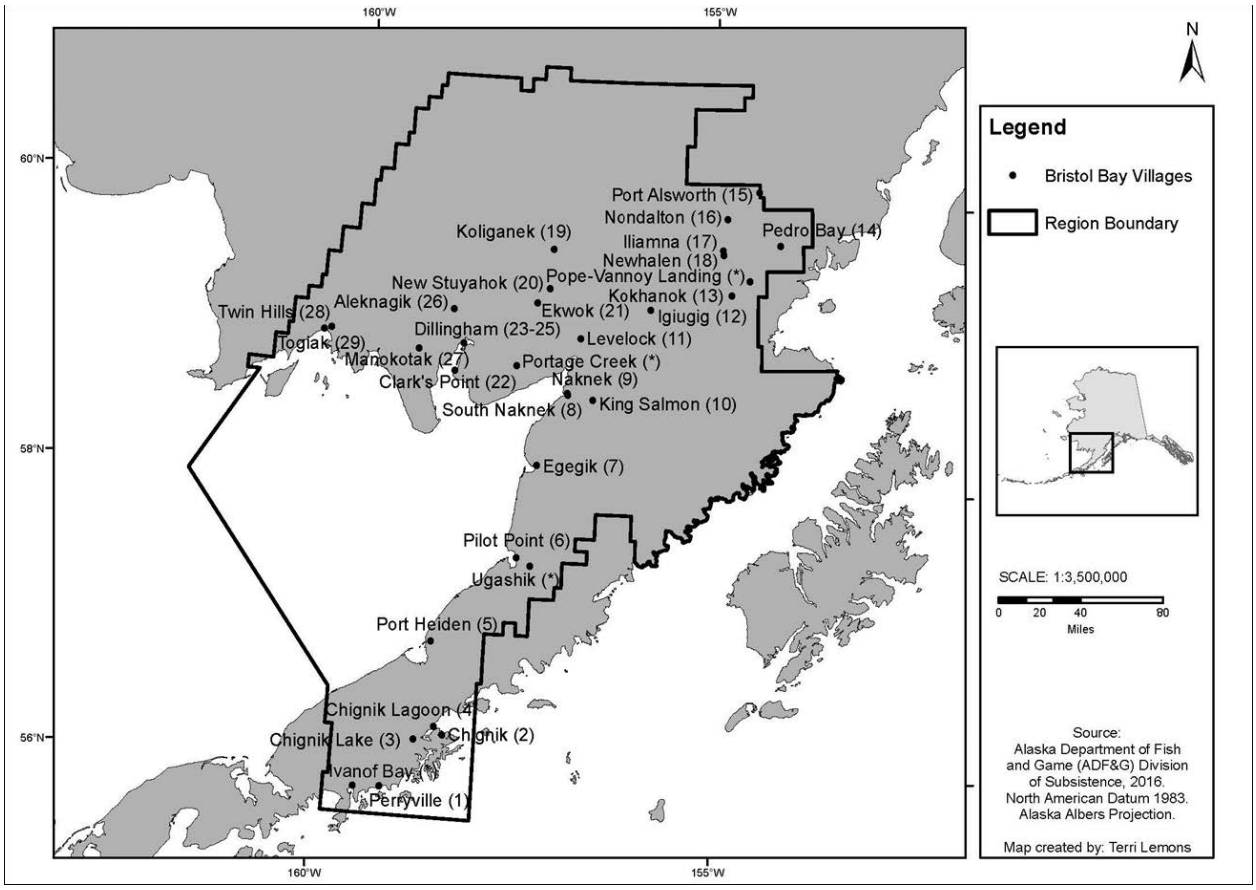


Figure 2. Bristol Bay Region survey area with sequential numbering of communities for systematic random sampling for the Alaska Subsistence Harvest of Birds and Eggs survey. Communities with no number contained fewer than ten households and were excluded from the sample frame. This new sampling methodology was put in place starting with the 2016 harvest survey year. Figure was taken from Naves and Otis 2017.

Table 1. Estimated harvest of ptarmigan in each subregion located in the Bristol Bay Region (Naves 2015a, 2015b, Naves and Otis 2017, Naves and Keating 2018, 2019, ADF&G 2019). Due to changing methodologies and the aspects listed above that could lead to high levels of variation, recent survey results are not directly comparable to older survey results.

Subregion	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
South Alaska Peninsula	127	-	-	245	27	-	-	664	-	-	-	-	-	-
Southwest Bristol Bay	2,862	6,117	7,928	2,033	7,057	-	-	12,128	-	-	-	-	-	-
Dillingham	-	1,663	-	1,263	809	-	-	239	-	-	-	-	-	-
Total Region Estimate	*****	**8,269**	*****	**3,441**	**7,893**	**-**	**-**	**13,031**	**-**	**-**	**-**	**-**	**767**	**1,988**

- denotes that no surveys were completed; * denotes that less than 75% of region households were represented, so region harvest estimates were not produced.

Table 2. Estimated harvest of ptarmigan in the Bristol Bay Region broken down by season for years where a region-wide estimate was produced (Naves and Keating 2018, 2019, ADF&G 2019). Survey seasons are broken down as follows: spring (April 2—June 30), summer (July 1—August 31), fall (September 1—October 31), and winter (November 1—April 1) (Naves 2015a, 2015b, Naves and Otis 2017, Naves and Keating 2018, 2019).

Year	Spring	Summer	Fall	Winter	Total Estimate
2005	5,604	1,666	999	0	**8,269**
2007	2,542	44	855	0	**3,441**
2008	6,783	226	883	0	**7,893**
2011	11,595	300	927	209	**13,031**
2016	767	0	0	0	**767**
2017	222	276	316	1,175	**1,988**

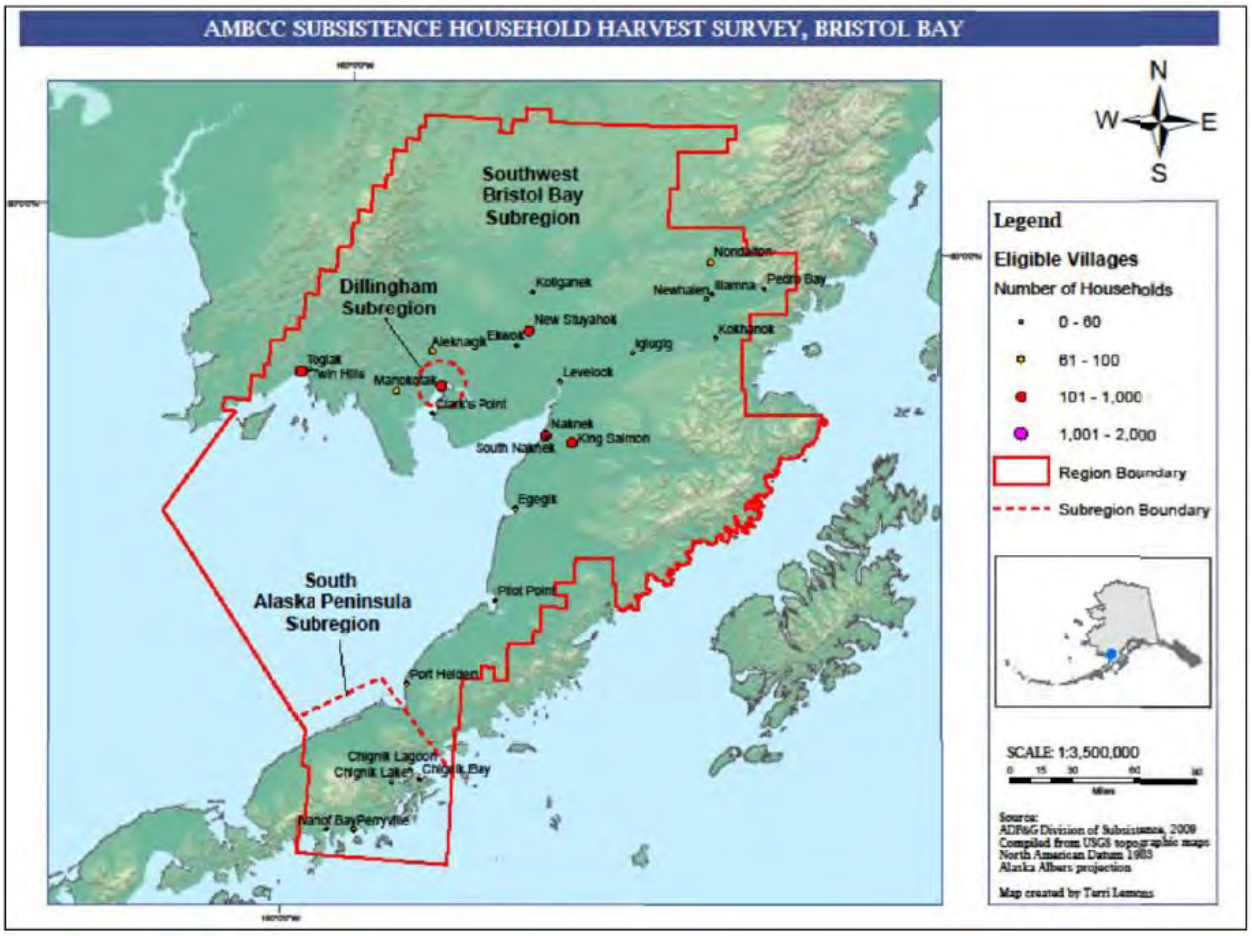


Figure 3. Subregions within the Bristol Bay Region of the Alaska Subsistence Harvest of Birds and Eggs survey. These subregions were used for harvest surveys prior to 2016. Figure was taken from Naves 2014.

Effects of the Proposal

If adopted, this proposal would reduce subsistence opportunity for Federally qualified subsistence users who harvest ptarmigan in Unit 9. This proposal may result in decreased harvest, which could help to protect ptarmigan populations during this time of observed population declines in the area. If adopted, this may provide the protections needed to ensure that this resource is available into the future. The change of both the harvest limits and harvest season would also align State and Federal regulations, which would reduce regulatory complexity for users.

It is unknown what effect current harvest is having on the ptarmigan population on the Alaska Peninsula. Although the general consensus of biologists in the region is that the ptarmigan population is declining due to climatic change, it is uncertain what the cumulative effects caused by additional mortality due to harvest may be. Without an estimate of ptarmigan populations in Unit 9, it is not possible to know the impacts caused by current harvest levels.

OSM CONCLUSION

Support Proposal WP20-31.

Justification

Local residents and biologists indicate that ptarmigan numbers are declining in Unit 9. Although it is expected that this decrease is likely caused by climatic changes impacting levels of natural predation over the last few years, human harvest could have an additive or superadditive effect on the already declining population. It may be important to limit harvest until ptarmigan numbers rebound to maintain this resource for local users.

LITERATURE CITED

ADF&G. 2019. Alaska Subsistence Bird and Egg Harvest Estimates (2004-2013). http://www.adfg.alaska.gov/index.cfm?adfg=subsistence.migratorybird_cmc Retrieved: May 20, 2019.

ADF&G. 2019a. Egegik: 2014. Retrieved from http://www.adfg.alaska.gov/sb/CSIS/index.cfm?ADFG=commInfo.Summary&CommID=122&Year=2014

ADF&G. 2019b. Pilot Point: 2014. Retrieved from http://www.adfg.alaska.gov/sb/CSIS/index.cfm?ADFG=harvInfo.harvest

ADF&G. 2019c. Ugashik: 2014. Retrieved from http://www.adfg.alaska.gov/sb/CSIS/index.cfm?ADFG=harvInfo.harvest

Birket-Smith, K. 1959. The Eskimos. London: Methuen.

Carroll, C.J. and R.A. Merizon. 2017. Status of grouse, ptarmigan, and hare *in* Alaska, 2015 and 2016. ADF&G Division of Wildlife Conservation. Wildlife Management Report ADF&G/DWC/WMR-2017-1. Juneau, AK

Clark, D.W. 1984. Pacific Eskimo: Historical Ethnography. Pages 185-197 in W. Sturtevant, ed. Handbook of North American Indians. Vol. 5, Arctic. Smithsonian Institution, Washington DC.

Fall, J., & J.M. Morris. 1987. Fish and Wildlife Harvest and Use in Pilot Point, Ugashik, and Port Heiden, 1986-1987. Juneau: ADF&G, Division of Subsistence, Technical Paper No. 158.

Fall, J., A. Paige, V. Vamek, & L. Brown. 1998. Subsistence Harvests and Uses of Birds and Eggs in Four Communities of the Aleutian Islands Area: Akutan, False Pass, Nelson Lagoon, and Nikolski.. Juneau:ADF&G, Division of Subsistence, Technical Paper No. 243.

Fall, J., D.L. Holen, B. Davis, T. Krieg and D. Koster. 2006. Subsistence Harvests and Uses of Wild Resources in Iliamna, Newhalen, Nondalton, Pedro Bay, and Port Alsworth, Alaska, 2004. Juneau: ADF&G, Division of Subsistence, Technical Paper No. 302.

Fall, J., L.B. Hutchinson-Scarbrough, and P.A. Coiley. 1995. Fish and Wildlife Harvest and Use in Five Alaska Peninsula Communities, 1989. Juneau: Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 202.

Hannon, S. J., P. K. Eason, and K. Martin. 1998. Willow Ptarmigan (Lagopus lagopus), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/369.

Holen, D., T.M. Krieg, and T. Lemons. 2011. Subsistence Harvests and Uses of Wild Resources in King Salmon, Naknek, and South Naknek, Alaska, 2011. Anchorage: ADF&G, Division of Subsistence, Technical Paper No. 360.

Jones, P. 2017. Assistant area biologist. Personal communication: phone. ADF&G. Bethel, AK

Krieg, T.M., D.L. Holen, and D. Koster. 2009. Subsistence Harvests and Uses of Wild Resources in Igiugig, Kokhanok, Koliganek, Levelock, and New Stuyahok, Alaska, 2009. Dillingham: ADF&G, Division of Subsistence, Technical Paper No. 322.

McCartney, A. 1984. Prehistory of the Aleutian Region. Pages 119-135 in W. Sturtevant, ed. Handbook of North American Indians. Vol. 5, Arctic. Smithsonian Institution, Washington D.C.

Merizon, R. 2018. Small game biologist. Personal communication: phone. ADF&G. Palmer, AK

Merizon, R.A. and C.J. Carroll. 2018. Alaska small game summary 2018. ADF&G Division of Wildlife Conservation. Wildlife Management Report. Juneau, AK

Merizon, R.A. and C.J. Carroll. 2019. Status of grouse, ptarmigan, and hare in Alaska, 2017 and 2018. ADF&G Division of Wildlife Conservation. Wildlife Management Report ADF&G/DWC/WMR-2019-2. Juneau, AK

Morseth, M. 2003. Puyulek Pu'irtuq! The People of the Volcanoes: Aniakchak National Monument and Preserve Ethnographic Overview and Assessment. National Park Service. Anchorage, Alaska. ISBN: 0941555054. Robbin Office.

Naves, L.C. 2014. Alaska subsistence harvests of birds and eggs, 2011, Alaska Migratory Bird Co-Management Council. ADF&G Division of Subsistence, Technical Paper No. 395, Anchorage, AK.

Naves, L.C. 2015a. Alaska subsistence bird harvest, 2004-2014 data book, Alaska Migratory Bird Co-Management Council. ADF&G Division of Subsistence, Special Publication No. 2015-05, Anchorage, AK.

Naves, L.C. 2015b. Alaska subsistence harvests of birds and eggs, 2013, Alaska Migratory Bird Co-Management Council. ADF&G Division of Subsistence, Technical Paper No. 409, Anchorage, AK.

Naves, L.C. 2016. Alaska subsistence harvests of birds and eggs, 2015, Alaska Migratory Bird Co-Management Council. ADF&G Division of Subsistence, Technical Paper No. 422, Anchorage, AK.

Naves, L.C. and D. Otis. 2017. Alaska subsistence harvests of birds and eggs, 2016, Alaska Migratory Bird Co-Management Council. ADF&G Division of Subsistence, Technical Paper No. 434, Anchorage, AK.

Naves, L.C. and J.M. Keating. 2018. Alaska subsistence harvests of birds and eggs, 2017, Alaska Migratory Bird Co-Management Council. ADF&G Division of Subsistence, Technical Paper No. 443, Anchorage, AK.

Naves, L.C. and J.M. Keating. 2019. Alaska subsistence bird harvest, 2004-2017 data book, Alaska Migratory Bird Co-Management Council. ADF&G Division of Subsistence, Special Publication No. 2019-04, Anchorage, AK.

Nielsen, O.K. 1999. Gyrfalcon predation on ptarmigan:numerical and functional responses. Journal of Animal Ecology 68: 1034-1050.

Osgood, C. 1976. The Ethnography of the Tanaina. New Haven: Human Relations Area Files Press.

Partnow, P.H. 2001. Making History: Alutiiq/Sugpiaq Life on the Alaska Peninsula. University of Alaska Press. Fairbanks, Alaska. 207 pp.

Sandercock, B.K., E.B. Nilsen, H. Broseth, and H.C. Pederson. 2011. Is hunting mortality additive or compensatory to natural mortality? Effects of experimental harvest on the survival and cause-specific mortality of willow ptarmigan. Journal of Animal Ecology 80:244-258.

Townsend, J.B. 1981. Tanaina. Pages 623-640 in J. Helm, ed. Handbook of North American Indians. Vol. 6, Subarctic. Smithsonian Institution, Washington DC.

VanStone, J.W. 1984. Mainland Southwest Alaska Eskimo. Pages 224-242 in W. Sturtevant, ed. Handbook of North American Indians. Vol. 5, Arctic. Smithsonian Institution, Washington DC.

Weeden, R.B. 1964. Spatial separation of sexes in rock and willow ptarmigan in winter. The Auk 81:534-541.

Weeden, R.B. 1965. Grouse and ptarmigan in Alaska, their ecology and management. ADF&G. Juneau, AK.

Wentworth, C. 2007. Subsistence migratory bird harvest survey, Yukon-Kuskokwim Delta, 2001-2005 with 1985-2005 species tables. U. S. Fish and Wildlife Service Migratory Birds and State Programs in cooperation with Yukon Delta National Wildlife Refuge. Anchorage, AK.

West, G.C. and M.S. Meng. 1966. Nutrition of willow ptarmigan in northern Alaska. The Auk 83:603-615.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Bristol Bay Subsistence Regional Advisory Council

Support WP20-31. The Council supports the proposal to reduce the season and harvest limit. There is a conservation concern for the ptarmigan population in Unit 9. It is important to limit the harvest on ptarmigan in Unit 9 until the population numbers increase.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-31: This proposal, submitted by the Alaska Peninsula and Becharof National Wildlife Refuges, would decrease the bag limit for ptarmigan in Unit 9 from 20 per day, 40 in possession to 10 per day and 20 in possession. It would also reduce the season duration by 2 months from 10 August to 30 April to 10 August to the last day of February.

Introduction: This proposal seeks to align federal subsistence ptarmigan (including rock and willow ptarmigan) hunting regulations with state regulations in Unit 9. In February 2018, the Alaska Board of Game reduced the season duration and daily bag and possession limits for ptarmigan in Unit 9 due to conservation concerns from local residents as well as federal and state biologists.

No consistent abundance or productivity estimates exist for either rock or willow ptarmigan in Unit 9. Inconsistent harvest data from the area also make it difficult to gain a comprehensive understanding about hunter effort and harvest. However, regular field observations since 2015 have suggested both species are at low to much lower density than has historically been observed. These observations led to a local state Fish and Game Advisory Committee submitting a proposal to the Alaska Board of Game in 2018.

Despite the lack of Unit 9-specific ptarmigan abundance, productivity, or consistent harvest estimates, much has been learned through surveys and research in other areas of the state. Merizon et al. (2018) was able to document late winter (after mid to late February) harvest mortality was additive and caused reduced breeding density. The same research was also able to document several short-duration, high mortality events that were likely due to plumage and landscape color mismatch. Increased vulnerability to predation and lack of thermal protection are driving these mortality events exacerbated by inconsistent or nonexistent snow cover beginning in September each year. Recent weather patterns throughout the greater Bristol Bay area suggest this could be a contributing factor to low ptarmigan densities in Unit 9. Carroll and Merizon (2019) have also documented the significant effects of

inclement weather immediately post hatch for ptarmigan (late-June through early July). Ptarmigan chicks have limited ability to independently thermoregulate for several days after hatching and are highly vulnerable to snow, rain, and strong winds. Local ADF&G staff and residents have reported these weather patterns during several summers beginning in 2015, adding further negative pressure to Unit 9 rock and willow ptarmigan population productivity.

Ptarmigan in Alaska do not exhibit a traditional population cycle similar to that observed with snowshoe hare or even ruffed grouse. However, they do appear to be more irruptive and appear to be strongly influenced by both mid-summer and winter weather patterns. The recent 4 to5year weather pattern has likely not been favorable to rock and willow ptarmigan throughout Bristol Bay and Southwest Alaska.

Impact on Subsistence Users: If adopted, this proposal would likely have minimal effects on subsistence users because current low abundance is resulting in low harvests.

Impact on Other Users: If adopted this proposal would have no direct effect on other non-federally qualified users. Overtime, all users may benefit from this proposal and the Board of Game's actions to conserve the population through reductions in seasons and bag limits

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made a positive customary and traditional use finding for ptarmigan in Unit 9.

Amounts Reasonably Necessary for Subsistence (ANS): Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

Although a positive customary and traditional use finding has been made for ptarmigan in Unit 9, the Board of Game has not yet made an ANS finding, due to limited harvest data. Once there are sufficient harvest data, the Board of Game may take action on an ANS finding. . The current state season and bag limit for Unit 9 is:

		Open Season (Permit/Hunt #)	
Unit/Area	Bag Limit	Resident[a]	Nonresident
9	*10/day;20 in possession*	*Aug. 10-last day of Feb.*	*Aug. 10-last day of Feb.*

[a] Subsistence and General Hunts.

Special instructions: None.

Conservation Issues: Currently there are no abundance or productivity estimates available for the Unit 9 rock and willow ptarmigan populations. However, Federal and ADF&G staff as well as local residents have observed declines in the population throughout the unit. If adopted, this proposal would align both the federal subsistence regulations with the current state regulations, which would further address conservation concerns by reducing ptarmigan harvest in Unit 9.

Enforcement Issues: If this proposal is adopted, the regulations would be aligned, making it easier for enforcement officers.

Recommendation: ADF&G **SUPPORTS** this proposal, which will help conserve the ptarmigan population in Unit 9 that may be reduced due to weather patterns in the Bristol Bay area. Ending the season on the last day of February will alleviate losses due to additive late winter harvest mortality.

WP20–32/33 Executive Summary	
General Description	Proposal WP20-33 requests that the Federal moose hunt area in the portion of Unit 18 south of and including the Kanektok River drainages to the Goodnews River drainage be enlarged to match the existing State hunt area boundary. The existing Federal hunt area consists of Federal public lands south of and including the Kanektok River to the Goodnews River drainage. The proposed addition consists of Federal public lands between the Kanektok and Eek River drainages. WP20-32 requests that the Federal public lands closure within this hunt area be rescinded and that a Federal season be established. *Submitted by: Togiak National Wildlife Refuge*
Proposed Regulation	**Unit 18—Moose** *Unit 18—south of ~~and including the Kanektok River drainages to~~* ***the Eek River drainage and north of*** *the Goodnews River drainage****—1 antlered bull by State registration permit****.* — ~~*No open season*~~ ***Sep. 1 – Sep. 30*** ~~*Federal public lands are closed to the taking of moose by all users*~~ *Unit 18, remainder—2 moose, only one of which may be antlered. Antlered bulls may not be harvested from Oct. 1 through Nov. 30* — *Aug. 1 – Apr. 30*
OSM Conclusion	**Support**
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Support**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-32/33

ISSUES

Proposals WP20-32 and WP20-33 were submitted by the Togiak National Wildlife Refuge (Refuge). WP20-33 requests that the Federal moose hunt area in the portion of Unit 18 south of and including the Kanektok River drainages to the Goodnews River drainage be enlarged to match the existing State hunt area boundary. The existing Federal hunt area consists of Federal public lands south of and including the Kanektok River to the Goodnews River drainage. The proposed addition consists of Federal public lands between the Kanektok and Eek River drainages (**Figure 1**). WP20-32 requests that the Federal public lands closure within this hunt area be rescinded and that a Federal season be established.

DISCUSSION

Currently, the hunt area that includes the Kanektok drainage of Unit 18 is different in State and Federal regulation. The State hunt area encompasses the entire area between the Eek River drainage to the north and the Goodnews River drainage to the south. Most of this area is drained by the Kanektok and Arolik Rivers. However, the northernmost portion of the hunt area is drained by several smaller creeks that are not part of the Kanektok watershed, including Kuskokwak and Tungak Creeks (**Figure 1**). The Federal hunt area excludes these drainages. Rather, these drainages are a noncontiguous portion of the Federal Unit 18 remainder moose hunt area, which occurs in northern Unit 18 and includes the lower Yukon River, where moose abundance is very high and season and harvest limits are liberal. WP20-33 requests that the Federal Kanektok/Arolik hunt area be enlarged to include these minor drainages, consistent with the State's hunt area.

WP20-32 requests that, within this newly described hunt area, the Federal public lands closure be rescinded, and a Sep. 1 – Sep. 30 season be opened with a harvest limit of 1 antlered bull by State registration permit. The Refuge notes that recent surveys show that the moose population within the Kanektok and Arolik drainages has increased significantly since 2013. The Refuge believes that the proposed changes will not have a negative impact on the moose population in the area. They also note that the changes will result in alignment of State and Federal regulation, which will allow Federally qualified subsistence users to hunt moose throughout the hunt area with a single permit, regardless of land status.

Proposal WP20-32/33 is also associated with a Wildlife Closure Review (WCR20-40), which reviewed the current closure of Federal lands to moose hunting by all users. This closure review was considered by the Yukon Kuskokwim Subsistence Regional Advisory Council at its Spring 2019 meeting.

Existing Federal Regulation

Unit 18—Moose

Unit 18—south of and including the Kanektok River drainages to the Goodnews River drainage.	*No open season*
Federal public lands are closed to the taking of moose by all users	
Unit 18, remainder—2 moose, only one of which may be antlered. Antlered bulls may not be harvested from Oct. 1 through Nov. 30	*Aug. 1 – Apr. 30*

Proposed Federal Regulation

Unit 18—Moose

Unit 18—south of ~~and including the Kanektok River drainages to~~ ***the Eek River drainage and north of*** *the Goodnews River drainage****—1 antlered bull by State registration permit****.*	*~~No open season~~* ***Sep. 1 – Sep. 30***
~~Federal public lands are closed to the taking of moose by all users~~	
Unit 18, remainder—2 moose, only one of which may be antlered. Antlered bulls may not be harvested from Oct. 1 through Nov. 30	*Aug. 1 – Apr. 30*

Existing State Regulation

Unit 18—Moose

Residents: Unit 18—south of the Eek River drainage and north of the Goodnews River drainage— one antlered bull by permit available in Quinhagak Aug. 1 – Sep. 30.	*RM617*	*Sep. 1 – Sep. 30*
Nonresidents: Unit 18—south of the Eek River drainage and north of the Goodnews River drainage		*No open season*

Extent of Federal Public Lands/Waters

Federal public lands comprise approximately 79% of the existing Kanektok/Arolik moose hunt area, and consist of 69% U.S. Fish and Wildlife Service (USFWS) managed lands and 10% Bureau of Land Management managed lands. Federal public lands comprise approximately 87% of the proposed addition (the area including the Kuskokwak and Tungak Creek drainages), all of which are managed by USFWS (**Figure 1**).

Customary and Traditional Use Determinations

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

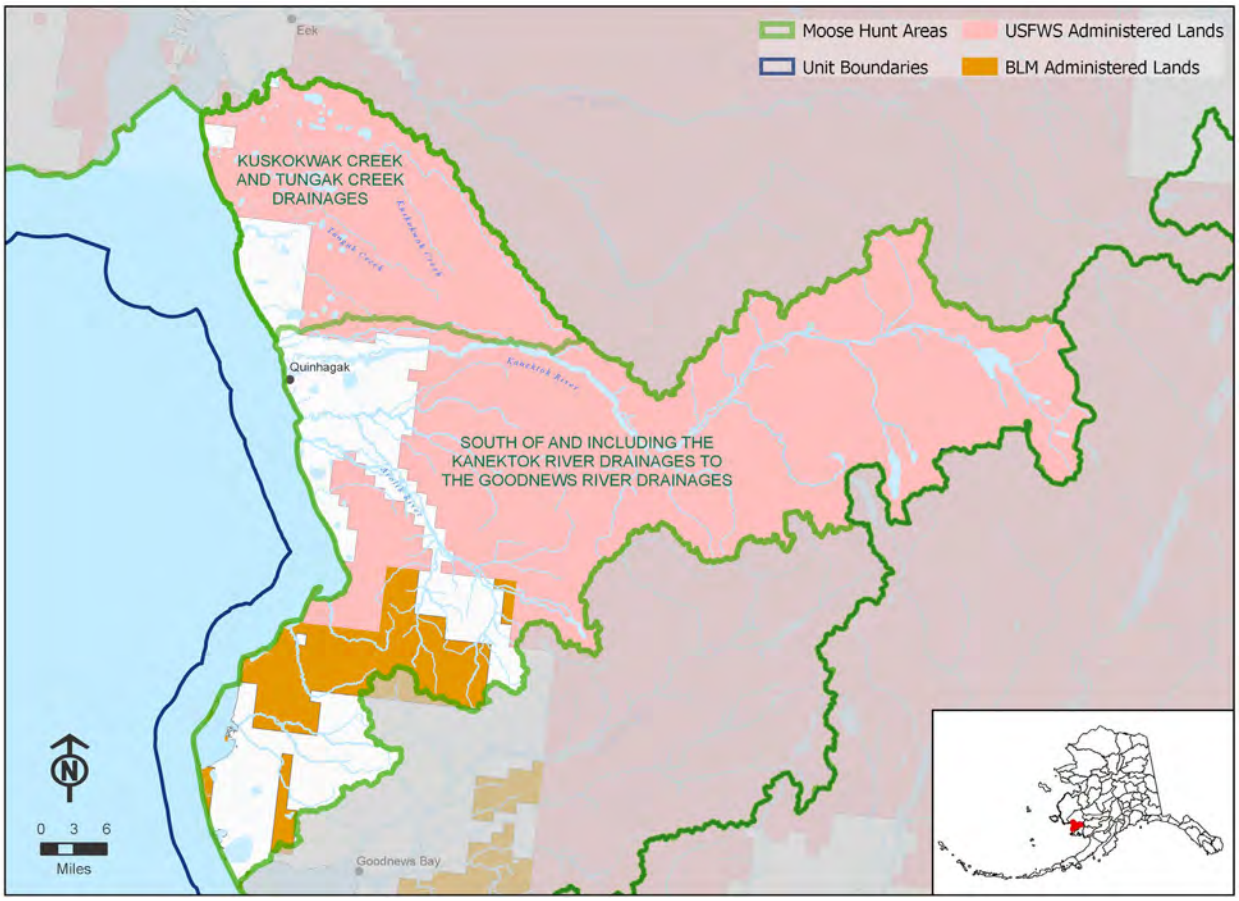


Figure 1. The existing Federal hunt area includes only the area south of and including the Kanektok River drainage to the Goodnews River drainage. This proposal requests the addition of the area including the Kuskokwak Creek and Tungak Creek drainages to the existing Federal hunt area. These minor drainages are currently a noncontiguous portion of the Unit 18 remainder hunt area.

Regulatory History

Federal public lands in this hunt area have been closed to the harvest of moose since 1991. That year, the Federal Subsistence Board (Board) considered Proposal P91-124, submitted by the Refuge.

Proposal P91-124 requested that the regulations for portions of Unit 18 in the Kanektok and Goodnews river drainages be consolidated with the regulation for the lower Yukon hunt area, which had no open moose season at that time. The Refuge believed that closing the season was necessary to allow for the establishment of a harvestable moose population in the Kanektok/Goodnews area. The Board adopted this proposal with modification to close Federal public lands to moose harvest throughout Unit 18.

Separate regulations were established for the Kanektok/Goodnews hunt area and the lower Yukon hunt area in 1994, when Proposal P94-45 was adopted by Board. This proposal initiated a moose season in the lower Yukon hunt area, but Federal public lands in the Kanektok/Goodnews River hunt area remained closed.

In 1998, as a result of the Board's adoption of WP98-63, the hunt area descriptor for the Kanektok/Goodnews area was modified to include the portion of Unit 18 "south of and including the Kanektok River drainage". The change clarified that the hunt area included the Arolik River drainage, which is located between the Kanektok and Goodnews drainages, as originally intended. It did not address the minor drainages north of the Kanektok drainage, which remained part of the lower Yukon hunt area.

In 2008, the Board considered WP08-34, which requested that a season be established in the southern portion of the Kanektok/Arolik/Goodnews hunt area. The Board adopted the proposal with modification and established the contemporary Federal hunt areas. In the portion of Unit 18 in the "Goodnews River drainage and south to the Unit 18 boundary", the Federal public lands closure was rescinded and a season was established. In the portion of Unit 18 "south of and including the Kanektok River drainages to the Goodnews River drainage", the closure was retained. The Board's action followed a 2005 decision by the Alaska Board of Game (BOG) on Proposals 21 and 22 to similarly create two distinct hunt areas; the portion "south of and including the Goodnews River drainage" and the portion "south of the Eek River drainage and north of the Goodnews River drainage". While the boundary dividing the two hunt areas was identical in State and Federal regulation, discrepancies persisted in the Kanektok/Arolik hunt areas due to the existing exclusion of the minor drainages north of the Kanektok River drainage in Federal regulation.

There have been two previous attempts to establish a Federal moose season in the Kanektok/Arolik hunt area. Proposal WP10-61 and special action request WSA14-01 were both submitted by the Native Village of Quinhagak IRA Council. Each requested the establishment of a Sep. 1 – Sep. 30 moose season with a harvest limit of one antlered bull by State registration permit. However, these requests were rejected due to ongoing conservation concerns.

The existing Sep. 1 – Sep. 30 State resident season has been in place since 2005 and has been limited to one antlered bull since 2006.

Current Events Involving the Species

As outlined in the Board's closure policy (**Appendix 1**), closures should be rescinded as soon as practicable when the conditions that originally justified the closure no longer exist. The Federal public lands closure in the Kanektok/Arolik hunt area was reviewed in 2018 with WCR20-40 (formerly identified as WCR18-40). At their March 12 – 13, 2019 meeting, the Yukon Kuskokwim Delta Subsistence Regional Advisory Council (Council) supported opening Federal public lands only to Federally qualified subsistence users.

At their March 14 – 19, 2019 meeting, the BOG adopted Proposal 150, which requested that a registration permit be required for the State moose hunt in the Kanektok/Arolik hunt area, rather than the existing harvest ticket. The proposal, submitted by the Alaska Department of Fish and Game (ADF&G), was one of a series of coordinated regulatory requests made to the Federal and State boards related to this hunt area. In addition to Proposal 150, these requests include Temporary Special Action Request WSA19-01 and Wildlife Proposal WP20-32/33. The latter two requests were submitted by the Refuge and asked that the Kanektok/Arolik Federal moose hunt area be enlarged to match the existing State hunt area boundary, that the Federal public lands closure within this hunt area be rescinded, and that a Federal season be opened.

On July 10, 2019, an ANCSA corporation consultation, a Tribal consultation, and a public hearing were held in Quinhagak to gather feedback on WSA19-01. Quinhagak is the sole community within the Kanektok/Arolik moose hunt area, though residents of neighboring communities of Eek and Goodnews Bay likely hunt there too.

There were no corporation representatives present for the ANCSA corporation consultation. However, OSM staff were invited to meet informally with the CEO and several board members of Qanirtuuq Inc. following the formal consultation. During this discussion, corporation representatives expressed some concern with the special action request. They noted that the popularity of the Kanektok River among sport anglers has impacted river banks. They were concerned that opening Federal land may result in an influx of non-local users that could exacerbate these impacts, including on corporation lands. They also expressed concern about the potential for increased air traffic, and the possibility that an increase in sport hunting may ultimately harm subsistence users if harvest quotas are met early.

The Tribal consultation with the Native Village of Kwinhagak was well attended, with the Tribal Administrator and eight Tribal Council members present. In addition to OSM staff, Togiak National Wildlife Refuge biological staff were also present for the discussion. Questions from Tribal Council members prompted discussion about the status of moose in the area, the geographic limits of the proposed hunt, and potential effects on subsistence users from neighboring communities, specifically residents of Eek. There was also a discussion, with staff and among Tribal Council members, about the implications of using a State registration permit for the proposed Federal hunt. Because this fall will be the first year that the State's registration permit will be implemented, there was some confusion about what the requirements for that hunt will be, and how those requirements would change with the

addition of a Federal hunt. Though the Tribal Council did not offer a formal position, several individuals representing their own position expressed support for the special action request. Overall, comments included general support for more opportunity for the community to hunt moose in the area and to put food on the table. The Tribal Council members expressed appreciation for the information and for the opportunity to discuss the proposal. They also noted that if the Temporary Special Action is approved, there will be additional opportunities to make recommendations on any needed adjustments when the associated wildlife regulatory proposal is considered.

The public hearing was held in the evening, with 22 members of the public attending in-person and one joining by teleconference. In addition to OSM and Refuge Staff, ADF&G biological staff were also present. Prior to opening the floor for public comment, there was a general discussion about hunting requirements. Echoing the Tribal Consultation, much of the discussion was focused on licensing and permitting requirements for hunting under the new State permit. One notable point that came from this discussion is that the State's Area Biologist has the discretion and willingness to expand distribution of State registration permits. This ameliorates one concern with the special action request—that residents of Eek, who have C&T for a Federal hunt in this area, would have to travel to Quinhagak to secure permits to hunt in drainages that are relatively close to their community.

Federal and State staff fielded several questions about allowances for proxy or designated hunts, as well as funerary hunts. There were also enquiries about how enforcement pressure was expected to change, given the new State permit and, potentially, a Federal hunt. There were several questions related to private lands such as Native Allotments and Alaska Native Corporation lands, including those that are inholdings within Federal public lands. This discussion focused on which regulations were applicable on these lands and whether it would change in the fall. This was a particular concern for Qanirtuuq Inc., which has allotments along the Arolik River corridor. The community of Quinhagak is familiar with the impact of sport and commercial activity on local resources, given the popularity of the Kanektok River among anglers and rafters, and they are cautious about inviting an additional influx of non-locals.

Among participants who spoke during the public comment portion of the meeting, there was support for the special action request. Participants noted that they have seen the moose population increase and that opening Federal lands would provide additional opportunities for Federally qualified subsistence users. One individual noted that this regulatory change would allow local hunters to hunt in the uplands in areas where the river is bounded by Federal lands, rather than be restricted to State-managed gravel bars. He also noted that having the same permit to hunt on Federal and State lands would allow for a seamless moose hunt during the established season, minimizing regulatory complexity. Some supporters suggested that the Federal hunt could be opened early, or that a winter hunt could be established if the moose population supported additional hunting opportunity. One teleconference participant from the Native Village of Eek said that the community has seen the moose population go up in their area. She noted that they mostly see residents of Eek and Quinhagak hunting along the river, along with a few hunters from Tuntutuliak. The Eek representative expressed her personal support for the proposal based on what she heard from the discussion, but did not offer a formal comment from the Tribe.

On August 15, 2019, the Board adopted Temporary Special Action WSA19-01 with modification to delegate authority to the manager of the Togiak National Wildlife Refuge to close Federal public lands to non-Federally qualified users if warranted. The Board noted that the action unifies State and Federal hunt area boundaries and regulations, decreasing confusion among subsistence users and enabling them to use a single permit regardless of land status. Rescinding the Federal public lands closure increases the land available for Federally qualified subsistence users, increasing their subsistence opportunity. The Board acknowledges that, while its action also increases opportunity for non-Federally qualified users, non-local participation will likely be limited by local distribution of State registration permits. The Board believes that this decision is biologically appropriate and was made in accordance with the Board's closure policy. The modification to delegate authority to the Federal manager to close Federal public lands to non-Federally qualified users ensures that a Federal subsistence priority can be provided, if needed.

In their deliberations, the Board expressed concern about disenfranchising residents of Eek, who may have to travel to Quinhagak to obtain the required State registration permit. Follow-up communications with ADF&G confirmed that permits for RY2019-20, the period covered by the special action, had been distributed in Eek. However, for this practice to continue in future years, it would need to be endorsed by the BOG. There is an opportunity for this to occur in January 2020, when the BOG convenes in Nome for their Western/Arctic regulatory meeting.

Biological Background

Prior to the early 2000s, moose were not commonly observed in southern Unit 18. Early population growth is attributed to emigration from adjacent Unit 17A, with high calf recruitment sustaining growth (Aderman 2014). Minimum population counts, obtained by the Refuge as part of their Refuge-wide moose monitoring program, show substantial recent growth of the moose population in this area (**Figure 2**). In 2002, only 3 moose were observed in the Kanektok and Arolik drainages. More than 10 moose were observed for the first time in 2012, and at last count, in 2018, 173 moose were observed (Aderman 2018, pers. comm.). This represents a 42% annual growth rate between 2013 and 2018.

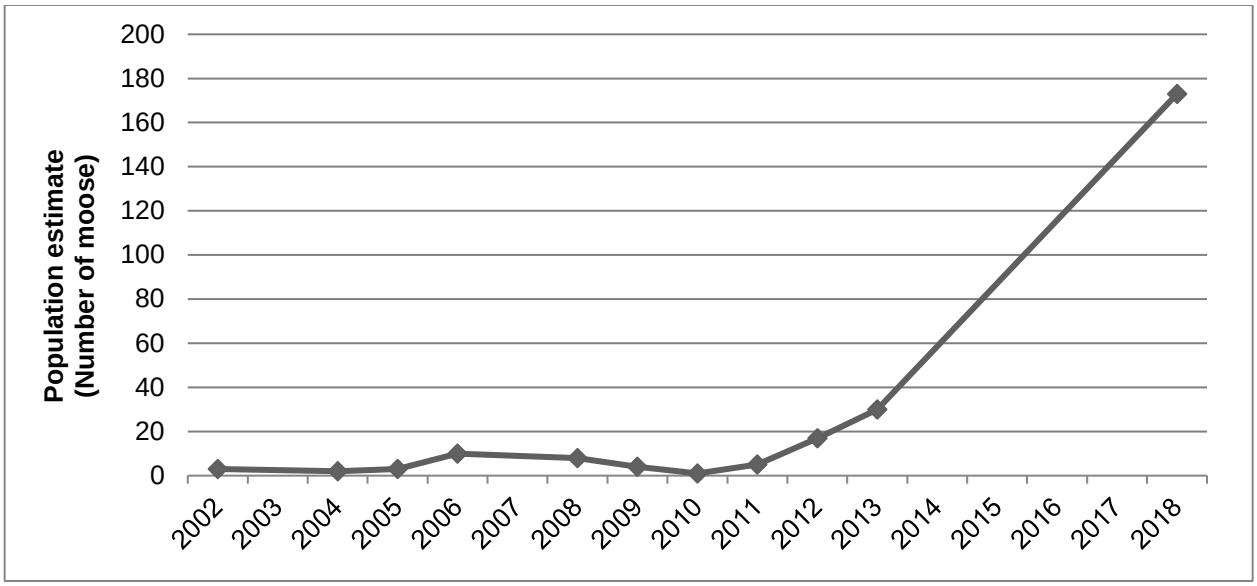


Figure 2. Estimated moose population size (minimum count) in the Kanektok and Arolik river drainages, 2002 – 2018 (Aderman 2014, Aderman 2018, pers. comm.).

Recent composition surveys showed that there were 48 bulls:100 cows in 2016 and 43 bulls:100 cows in 2017. These surveys showed 41 calves:100 cows in 2016 and 29 calves:100 cows in 2017. Refuge biologists believe that these estimates are likely biased high for bulls and biased low for calves (Aderman 2019, pers. comm.)

Recent growth of the Kanektok/Arolik moose population is similar to that previously exhibited by the Unit 17A and Goodnews River moose populations. In these areas, early surveys revealed few to no moose. Then, over a period of several years, the population increased rapidly and now supports harvest on both Federal and State managed lands. The population in the Goodnews hunt area, in particular, may provide context for understanding when it is appropriate to modify the Federal public lands closure in the Kanektok/Arolik hunt area, given similarities in size, location, land status, and human population size. In the Goodnews hunt area, State and Federal seasons were established in 2008, when the population exceeded a threshold of 100 moose. Subsequent population growth was sufficient to establish may-be-announced winter seasons in 2017 and 2018. This appears to validate that the timing for initiating harvest was not premature in the Goodnews hunt area.

Cultural Knowledge and Traditional Practices

Over 20,000 rural residents, Federally qualified subsistence users, live in communities throughout Unit 18. The focus of this section is Federally qualified subsistence users harvesting moose in both the existing Federal hunt area and the proposed addition.

Quinhagak

Quinhagak is situated along the Kanektok River near the Bering Sea coast. About 700 people are residents of Quinhagak, the majority with Yup'ik cultural heritage (Ikuta et al. 2016). Quinhagak is

the only community within the hunt area. Quinhagak residents hunt for moose primarily in this area because of its close proximity and accessibility by boat, for example up the Kanektok River drainage where myriad historical hunting, trapping, and fishing camps exist.

Wolfe et al. describe moose hunting patterns and locations used by Quinhagak residents in 1983: "From September through October, groups of three to six hunters go by skiffs on hunting trips up the Kanektok and Eek rivers in search of moose, brown bear, squirrel and beaver. Hunting trips last several days to several weeks. Hunters operate from traditional camps and tend to be mobile" (1984: 322–323). Wolfe et al. also note that residents of Quinhagak occasionally harvest moose during the winter (November–March) in the general area of the headwaters of the Kisaralik, Kanektok, Arolik, and Togiak Rivers (Wolfe et al. 1984: 326).

More recently, in 2013, Ikuta et al. described a Quinhagak hunting party of three people travelling inland by boat, setting up camp, and continuing on foot. Hunters recount collecting from a harvested moose, in addition to meat, the tongue, fat surrounding the gut, heart, liver, kidneys, and arteries. The moose was shared widely in Quinhagak (Ikuta et al. 2016:131–132).

Subsistence Harvest History

Residents of Quinhagak and nearby Eek and Tuntutuliak have documented their moose search and harvest areas, marking up maps to show areas where they harvested or searched for moose in 2013. Quinhagak residents searched and harvested moose "in areas as far north as the Yukon River and as far south as the Goodnews Bay area" (Ikuta et al. 2016:145). Quinhagak moose search and harvest areas included the Kanektok River drainage, and also middle and upper Kwethluk and Eek River drainages. In 2013, Eek and Tuntutuliak search and harvest areas did not extend into the existing or proposed hunt areas. A sample of households in each community completed mapping exercises describing their search and harvest areas for a one year period, and search and harvest areas likely extend beyond those reported by these households.

Ikuta and others describe harvest patterns in 2013:

> For moose, September was the most intense harvest period for Quinhagak residents. Of a total of 42 moose, 36 were harvested during this month. Two moose were harvested in the month of February. The month or months in which 4 moose were harvested were unknown. Of the moose harvested in September, 31 were bull moose, 5 were unknown, and no cow moose were reported. Quinhagak hunters did harvest 2 cow moose in February (Ikuta et al. 2016:132).

It should be noted that caribou is an important alternative resource to moose, and Quinhagak residents harvested an estimated 125 caribou in 2013. Their large land mammal harvest was 58% moose and 42% caribou in pounds edible weight in 2013 (Ikuta et al. 2016). This is a contrast to 1982 reports, when their harvest was on 33% moose and 67% caribou (ADF&G 2019a).

In 2013, the Quinhagak moose harvest estimate was similar to harvest estimates in other Kuskokwim area communities when comparing harvest rates in pounds per person based on ADF&G Division of Subsistence household surveys (**Table 1**).

Harvest History

In the existing Federal hunt area, all lands were closed to the harvest of moose in 1991. State-managed lands within this area were reopened in 2005. In the proposed Federal addition, Federal public lands were closed to the harvest of moose to all except Federally qualified subsistence users in 1991, and re-opened in 1994 as part of Unit 18 remainder. Within the proposed addition, Federal regulations currently allow the harvest of up to 2 moose during an 8 month season, by harvest ticket.

Within the State's hunt area, a harvest ticket was required for moose harvest through regulatory year 2018/19. Beginning in fall 2019, a State registration permit will be required, available in Quinhagak beginning August 1. Due to the Federal public lands closure, harvest under State regulation within Kanektok and Arolik drainages is currently limited to State managed lands. These lands comprise a significant length of the Arolik River corridor but only extend approximately 20 miles up the Kanektok River, a floatable river popular with sport anglers (BOG 2019).

Reported harvest is dominated by local users, defined here as Federally qualified subsistence users (residents of Unit 18, Upper Kalskag and Lower Kalskag). Between 2003 and 2018, reported harvest was 61 moose (**Figure 3**). Of those, 90% (55 moose) were taken by local users. Residents of Quinhagak, the only community located within the hunt area, harvested 70% (43 moose) of the total reported harvest during this time period. Only 2 moose were reported harvested by residents of Eek, the nearest community to the proposed Federal addition (ADF&G 2019b). While reported harvest is low, averaging just four moose per year, observations by local biologists in the past decade indicate that at least some illegal harvest occurs (Aderman 2014). Though the magnitude of unreported harvest is unknown, additional insights into harvest by locals can be gleaned from household harvest surveys conducted by ADF&G's Division of Subsistence. These surveys estimated that residents of Quinhagak harvested 33 moose (CI 95% 4–67) in 1983 and 42 moose (CI 95% 42–42) in 2013 (ADF&G 2019a).

Table 1. Estimated harvest of moose based on household surveys (CI 95%, lower harvest estimate is the lower bound of the estimate or the reported harvest, whichever is larger) (Source: ADF&G 2019a).

Community	Study Year	Estimated Moose Harvest (number of moose)	Lower Harvest Estimate (number of moose)	Upper Harvest Estimate (number of moose)	Harvest (pounds per person)
Tuluksak	2010	20	16	24	24.0
Akiak	2010	27	20	33	37.6
Akiachak	1998	106	93	119	145.4
Kwethluk	1986	33			45.3
Kwethluk	2010	33	25	42	25.2
Bethel	2011	279	220	338	24.5
Bethel	2012	357	294	419	33.9
Nunapitchuk	1983	12	3	22	18.9
Oscarville	2010	2	2	4	20.0
Napakiak	2011	13	13	13	28.7
Napaskiak	2011	29	29	29	43.4
Tuntutuliak	2013	17	17	0	22.3
Eek	2013	14	14	14	21.9
Quinhagak	2013	42	42	42	30.7
Quinhagak	1982	33	4	67	31.0

Other Alternatives Considered

Opening Federal public lands only to Federally qualified subsistence users may be a viable alternative to full rescission of the closure. This alternative was favored by the Council when they reviewed WCR20-40 (formerly identified as WCR18-40) at their March 2019 meeting in Bethel. As the Council noted, this alternative would limit opportunity to harvest moose on Federal public lands to Federally qualified subsistence users. However, practically speaking, closing Federal public lands to non-Federally qualified users is probably not necessary to limit participation. The fact that State registration permits are available only in local communities is likely to exclude most hunters who do not live within or adjacent to the hunt area.

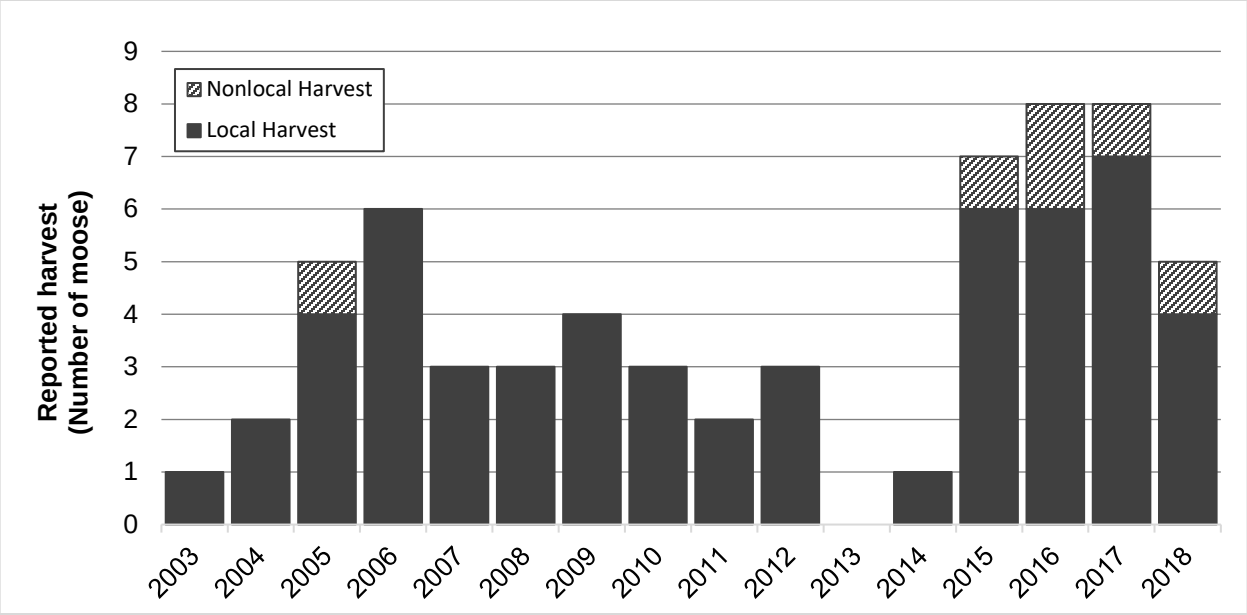


Figure 3. Reported harvest in the Kanektok and Arolik river drainages, 2003 – 2018 (ADF&G 2019b).

Effects of the Proposal

If these proposals are adopted, the Federal Kanektok/Arolik hunt area will be expanded to include the minor drainages situated between the Eek and Kanektok River drainages, including Kuskokwak Creek and Tungak Creek. Currently, these drainages are a non-contiguous part of the Unit 18 remainder hunt area, which primarily describes the area along the lower Yukon River and which has very high moose densities. If these drainages are incorporated in the Kanektok/Arolik hunt area, the Federal harvest limit in the proposed addition will be reduced from two moose to one antlered bull, and the season will be shortened from Aug. 1 – Apr. 30 to Sep. 1 – Sep. 30. In addition, hunters from Eek who may utilize these drainages will be required to comply with the conditions of the State's registration permit, which may only be distributed in Quinhagak. If realized, the latter drawback is expected to be small, given that reported harvest is low by residents of Eek, and that these drainages don't represent their primary moose search areas.

The newly described hunt area will be consistent with the hunt area described in State regulation. This reduction in regulatory complexity will benefit subsistence users, who may not be aware of the discrepancy between State and Federal hunt areas and are thus prone to inadvertent non-compliance. A uniform hunt area across jurisdictions will also simplify harvest management for State and Federal wildlife managers and simplifies enforcement of regulations.

Opening Federal public lands and establishing a Federal season within the Kanektok Arolik hunt area will result in additional subsistence opportunity by significantly expanding the area available for moose hunting by Federally qualified users. Full rescission of the closure will also provide additional opportunity to non-Federally qualified subsistence users hunting under State harvest regulation, though participation will likely be limited due to local permit distribution. A single permit will be required to hunt under both State and Federal regulation, which is consistent with joint State and Federal hunt

administration in adjacent moose hunts in Units 17 and 18, and which should ease the burden of compliance within the dual management system. Adoption of this proposal is not expected to have a negative effect on the moose population, given recent population growth.

OSM CONCLUSION

Support Proposal WP20-32/33.

Justification

Dissimilar hunt areas in State and Federal regulation pose a problem for Federally qualified subsistence users. For these hunters, divergent hunt area boundaries are a burden that compounds the existing difficulty of hunting under two sets of harvest regulations in areas with complex land status. This reduction in regulatory complexity will also facilitate harvest management and reduce confusion associated with enforcement. Biologically, inclusion of these minor drainages in the Kanektok/Arolik hunt area is more appropriate than their current inclusion in the Unit 18 remainder hunt area, where harvest limits and season are liberal, due to high moose densities along the lower Yukon River.

As outlined in the Board's closure policy, closures should be rescinded as soon as practicable when the conditions that originally justified the closure no longer exist. The moose population in this hunt area has increased significantly in recent years. Given the relative newness of this population, the small area it occupies, and the lack of published population objectives, it can be difficult to find context for assessing future management actions. However, the adjacent Goodnews moose population likely provides an adequate model and suggests that additional harvest is sustainable. Assuming so, rescinding the Federal public lands closure and establishing a Federal season is appropriate at this time.

Rescinding the Federal public lands closure and establishing a season will significantly increase the land area available for moose hunting by Federally qualified subsistence users, representing an increase in subsistence opportunity. Although full rescission of the closure also provides additional opportunity to non-Federally qualified users, the conditions associated with the State registration permit are likely to limit participation by non-local users, mitigating the risk of competition with Federally qualified subsistence users.

At the outset, State registration permits may be more burdensome to Federally qualified subsistence users, who until the current regulatory year, have been required to use only a harvest ticket. However, a registration permit will be required for State hunts in the area beginning this fall. Requiring a State registration permit for the Federal hunt will further reduce regulatory complexity and will allow Federally qualified subsistence users to hunt seamlessly across Federal and State regulations. In addition, use of registration permits will allow managers to better track harvest, while use of a State permit in both Federal and State regulation consolidates reporting within a single system. These are important features, considering that this is still a small population requiring close harvest management.

LITERATURE CITED

Aderman, A.R. 2014. Demographics and Home Ranges of Moose at Togiak National Wildlife Refuge, Southwest Alaska, 1998 – 2013. Unpublished report. USFWS, Togiak National Wildlife Refuge. Dillingham, AK.

Aderman, A.R. 2018. Wildlife biologist. Personal communication: phone & email. Togiak National Wildlife Refuge. Dillingham, AK.

Aderman, A.R. 2019. Wildlife biologist. Personal communication: phone & email. Togiak National Wildlife Refuge. Dillingham, AK.

ADF&G. 2019a. Community Subsistence Information System. Alaska Department of Fish and Game Division of Subsistence online database. Anchorage, AK. http://www.adfg.alaska.gov/sb/CSIS/

ADF&G. 2019b. Winfonet. Retrieved: April 30, 2019.

BOG. 2019. Audio transcripts of the Alaska Board of Game proceedings. March 20, 2019. Anchorage, AK. Alaska Department of Fish and Game, Juneau, AK.

Ikuta, H., and D.M. Runfola, J.J. Simon, and M.L. Kostick, editors. 2016. Subsistence harvests in 6 communities on the Bering Sea, in the Kuskokwim River drainage, and on the Yukon River, 2013. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 417. Anchorage, AK.

Wolfe, R. J., J. J. Gross, S. J. Langdon, J. M. Wright, G. K. Sherrod, L. J. Ellanna, V. Sumida and P. J. Usher. 1984. Subsistence Based Economies in Coastal Communities of rural Alaska. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 89. Anchorage, AK.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Yukon Kuskokwim Delta Subsistence Regional Advisory Council

Support WP20-32/33. The Council fully supports the opportunity to hunt moose in this area now that the population has grown enough to support a subsistence hunt. The Council believes that the proposal as presented with the plan to issue registration permits only in Quinhagak could effectively provide a federal subsistence priority for those rural residents in the hunt area.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP18-32/33: Proposal 32 submitted by the Togiak National Wildlife Refuge asks the FSB to rescind the federal land moose hunting closure in the area south of and including the Kanektok River Drainage to the Goodnews River Drainage. Proposal 33 also submitted by the Togiak National Wildlife Refuge requests a new season for moose be established in the same area.

Introduction: Moose hunting for bull moose in September in the Kanektok and Arolik River drainages has been open under state regulations for the past 30 years. Federal lands have been closed to all moose hunting for approximately the same time frame. Moose numbers have increased in this part of south west Alaska in the past decade. Total closures of moose hunting north of the area and south of the area occurred in 2004 to 2008 and those areas now have large expanding populations. Overall harvests in those neighboring areas are now higher than ever before. The population of moose on the Kanektok and Arolik Rivers has increased from very few moose in the 1990's and early 2000's to 173 moose counted in 2018 by Togiak NWR staff.

In March 2019 the Alaska Board of Game passed a proposal to change the moose season in the area to a state registration permit that would be issued only in the community of Quinhagak.

Impact on Subsistence Users: The two proposals will increase the opportunity to subsistence users. A large part of the area that hunters can access while hunting moose is currently closed. Adding a season on federal lands will give hunters access to the rest of the Kanektok River. Currently, hunters can only hunt the bottom 20 miles of the river that are state managed (private) lands.

Impact on Other Users: If adopted, there would be little effect on other users. Non-federally qualified Alaska residents would continue to be allowed to hunt only on state lands.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made positive customary and traditional use findings for moose in Unit 18.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for Moose in Unit 18 is 200-400 animals. The season and bag limit for this portion of Unit 18 is:

		Open Season (Permit/Hunt #)	
Unit/Area	Bag Limit	Resident[a]	Nonresident
18 south of the Eek River drainage And North of the Goodnews River Drainage	*one Antlered bull*	*Sept 1 – Sept 30 (RM617 Registration permit)*	*No open season*

[a] Subsistence and General Hunts.

Special instructions: The state Registration permit RM617 will only be given out in the communities of Quinhagak and Eek.

Conservation Issues: There are no conservation concerns related to the adoption of this proposal.

Enforcement Issues: Determining if a moose was shot on closed federal lands is difficult. Elimination of the federal closed area would simplify enforcement

Recommendation: ADF&G **SUPPORTS** the OSM recommendation to eliminate the closure in the Kankektok and Arolik River drainages and **SUPPORTS** the establishment of a federal season to match the state season. By adopting these proposals, the Federal Subsistence Board will align the state and federal season dates, the bag limit and require the use of a single permit for all lands within the hunt area. This should also reduce confusion for hunters. With a bull only harvest the population will be able to continue growing and expanding its population in the Kanektok and Arolik drainages.

APPENDIX 1

POLICY ON CLOSURES TO HUNTING, TRAPPING AND FISHING ON FEDERAL PUBLIC LANDS AND WATER IN ALASKA

FEDERAL SUBSISTENCE BOARD

Adopted August 29, 2007

PURPOSE

This policy clarifies the internal management of the Federal Subsistence Board (Board) and provides transparency to the public regarding the process for addressing federal closures (closures) to hunting, trapping, and fishing on Federal public lands and waters in Alaska. It also provides a process for periodic review of regulatory closures. This policy recognizes the unique status of the Regional Advisory Councils and does not diminish their role in any way. This policy is intended only to clarify existing practices under the current statute and regulations: it does not create any right or benefit, substantive or procedural, enforceable at law or in equity, against the United States, its agencies, officers, or employees, or any other person.

INTRODUCTION

Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA) establishes a priority for the taking of fish and wildlife on Federal public lands and waters for non-wasteful subsistence uses over the taking of fish and wildlife on such lands for other purposes (ANILCA Section 804). When necessary for the conservation of healthy populations of fish and wildlife or to continue subsistence uses of such populations, the Federal Subsistence Board is authorized to restrict or to close the taking of fish and wildlife by subsistence and non-subsistence users on Federal public lands and waters (ANILCA Sections 804 and 815(3)). The Board may also close Federal public lands and waters to any taking of fish and wildlife for reasons of public safety, administration or to assure the continued viability of such population (ANILCA Section 816(b)).

BOARD AUTHORITIES

- ANILCA Sections 804, 814.815(3), and 816.
- 50 CFR Part 100 and 36 CFR Part 242, Section .10(d)(4).

POLICY

The decision to close Federal public lands or waters to Federally qualified or non-qualified subsistence users is an important decision that will be made as set forth in Title VIII of ANILCA. The Board will not restrict the taking of fish and wildlife by users on Federal

public lands (other than national parks and park monuments) unless necessary for the conservation of healthy populations of fish and wildlife resources, or to continue subsistence uses of those populations, or for public safety or administrative reasons, or 'pursuant to other applicable law." Any individual or organization may propose a closure. Proposed closures of Federal public lands and waters will be analyzed to determine whether such restrictions are necessary to assure conservation of healthy populations of fish and wildlife resources or to provide a meaningful preference for qualified subsistence users. The analysis will identify the availability and effectiveness of other management options that could avoid or minimize the degree of restriction to subsistence and non-subsistence users.

Like other Board decisions, closure actions are subject to change during the yearly regulatory cycle. In addition, closures will be periodically re-evaluated to determine whether the circumstances necessitating the original closure still exist and warrant continuation of the restriction. When a closure is no longer needed, actions to remove it will be initiated as soon as practicable. The Office of Subsistence Management will maintain a list of all closures.

Decision Making

The Board will:

- Proceed on a case – by – case basis to address each particular situation regarding closures. In those cases for which conservation of healthy populations of fish and wildlife resources allows, the Board will authorize non-wasteful subsistence taking.

- Follow the statutory standard of "customary and traditional uses." Need is not the standard. Established use of one species may not be diminished solely because another species is available. These established uses have both physical and cultural components, and each is protected against all unnecessary regulatory interference.

- Base its actions on substantial evidence contained within the administrative record, and on the best available information; complete certainty is not required.

- Consider the recommendations of the Regional Advisory Councils, with due deference (ANILCA § 805 (c)).

- Consider comments and recommendations from the State of Alaska and the public (ANILCA § 816(b)).

Conditions for Establishing or Retaining Closures

The Board will adopt closures to hunting, trapping or fishing by non-Federally qualified users or Federally qualified subsistence users when one or more of the following conditions are met:

- Closures are necessary for the conservation of healthy populations of fish and wildlife:

a) When a fish or wildlife population is not sufficient to provide for both Federally qualified subsistence users and other users, use by non-Federally qualified users may be reduced or prohibited, or
b) When a fish or wildlife population is insufficient to sustain all subsistence uses, the available resources shall be apportioned among subsistence users according to their:

1) Customary and direct dependence upon the populations as the mainstay of livelihood.
2) Local residency, and
3) Availability of alternative resources, or

c) When a fish or wildlife population is insufficient to sustain any use, all uses must be prohibited.

- Closures are necessary to ensure the continuation of subsistence uses by Federally qualified subsistence users.
- Closures are necessary for public safety.
- Closures are necessary for administrative reasons.
- Closures are necessary "pursuant to other applicable law."

Considerations in Deciding on Closures

When acting upon proposals recommending closure of Federal public lands and waters to hunting, trapping, or fishing. The Board may take the following into consideration to the extent feasible:

- The biological history (data set) of the fish stock or wildlife population.
- The extent of affected lands and waters necessary to accomplish the objective of the closure.
- The current status and trend of the fish stock or wildlife population in question.
- The current and historical subsistence and non-subsistence harvest, including descriptions of harvest amounts effort levels, user groups, and success levels.
- Pertinent traditional ecological knowledge.
- Information provided by the affected Regional Advisory Councils and Alaska Department of Fish and Game.
- Relevant State and Federal management plans and their level of success as well as any relationship lo other Federal or State laws or programs.
- Other Federal and State regulatory options that would conserve healthy populations and provide a meaningful preference for subsistence, but would be less restrictive than closures.
- The potential adverse and beneficial impacts of any proposed closure on affected fish and wildlife populations and uses of lands and waters both inside and outside the closed area.

- Other issues that influence the effectiveness and impact of any closure.

Reviews of Closures

A closure should be removed as soon as practicable when conditions that originally justified the closure have changed to such an extent that the closure is no longer necessary. A Regional Council a State or Federal agency, or a member of the public may submit, during the nom1al proposal period, a proposal requesting the opening or closing of an area. A closure may also be implemented, adjusted, or lifted based on a Special Action request according to the criteria in 50 CFR 100.19 and 36 CFR 242.19.

To ensure that closures do not remain m place longer than necessary, all future closures will be reviewed by the Federal Subsistence Board no more than three years from the establishment of the closure and at least every three years thereafter. Existing closures in place at the time this policy is implemented will be reviewed on a three-year rotational schedule, with at least one-third of the closures reviewed each year.

Closure reviews will consist of a written summary of the history and original justification for the closure and a current evaluation of the relevant considerations listed above. Except in some situations which may require immediate action through the Special Action process, closure review analyses will be presented to the affected Regional Cow1cil(s) during the normal regulatory proposal process in the form of proposals to retain, modify or rescind individual closures.

Chair, Federal Subsistence Board

Board Member, U.S. Fish and Wildlife Service

Board Member, Bureau of Indian Affairs

Board Member, U.S. Forest Service

Board Member, National Park Service

Board Member, Bureau of Land Management

WP20–34 Executive Summary	
General Description	Proposal WP20-34 requests that the mink and weasel trapping season in Unit 18 be extended from Nov. 10 – Jan. 31 to Nov. 10 – Mar. 31. *Submitted by: Yukon Delta National Wildlife Refuge.*
Proposed Regulation	**Unit 18—Mink and Weasel** *No limit* *Nov. 10 –* ~~*Jan. 31*~~ ***Mar. 31***
OSM Conclusion	**Support**
Yukon-Kuskokwim Delta Subsistence Regional Advisory Council Recommendation	**Support**
Seward Peninsula Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Support**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-34

ISSUES

Wildlife proposal WP20-34, submitted by the Yukon Delta National Wildlife Refuge, requests that the mink and weasel trapping season in Unit 18 be extended from Nov. 10 – Jan. 31 to Nov. 10 – Mar. 31.

DISCUSSION

The proponent notes that the Federal trapping season for mink and weasel ends two months earlier than the State season. The proponent say that extending the Federal season to match the State season will allow for continuation of subsistence uses and practices, and does not pose a conservation threat to furbearer populations.

Existing Federal Regulation

Unit 18—Mink and Weasel

No limit	*Nov. 10 – Jan. 31*

Proposed Federal Regulation

Unit 18—Mink and Weasel

No limit	*Nov. 10 – ~~Jan. 31~~* ***Mar. 31***

Existing State Regulation

Unit 18—Mink and Weasel (least and short-tailed)

No limit	*Nov. 10 – Mar. 31*

Extent of Federal Public Lands/Waters

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

Customary and Traditional Use Determinations

The Federal Subsistence Board (Board) has not made a customary and traditional use determination for mink and weasel in Unit 18. Therefore, all Federally qualified subsistence users may harvest these species in this unit.

Regulatory History

In 1990, at the inception of the Federal Subsistence Management Program, State and Federal trapping seasons for mink and weasel were Nov. 10 – Jan 31. In 2006, the closing date for the State season was changed to March 31. The Federal season has not changed.

Biological Background

Mink

Mink occur throughout mainland Alaska, occupying a variety of habitats including boreal forests, freshwater and saltwater coastal areas, and tundra. Presence of mink is dependent upon the availability of water/wetlands and prey, which may include fish, amphibians, crustaceans, small mammals, and eggs (Larivière 2003).

Unit 18 contains extensive habitat suitable for mink. The Alaska Department of Fish and Game (ADF&G) characterizes mink as plentiful in Unit 18 but notes that they are inconspicuous and not often perceived by trappers as being abundant (Jones 2013). For the ten year period of 2008 – 2017, trappers across Units 18, 22, 23, and 26 reported that mink were common. The exception was 2016 when they were reported to be scarce. During that ten year period, trappers reported that mink abundance was neither increasing nor decreasing (Schumacher 2010, 2012, 2013a, 2013b; Parr 2016, 2017, 2018; Spivey 2019).

Across the North American range of mink, few harvest regulations are imposed, yet harvest remains relatively stable. This suggests that overexploitation is rare (Larivière 2003). Rather, it has been suggested that survival of young-of-the-year, born in June, is the primary factor affecting mink abundance during a given trapping season (Burns 1964). Overall, deterioration of wetland habitat is the primary conservation threat to mink (Larivière 2003).

Mink harvest is regulated primarily by season length, which is dictated by pelt quality (Larivière 2003). Historically on the YK Delta, pelts attain prime condition by approximately November 20 and then begin to deteriorate.

Weasel

Weasels in Alaska include ermine (short-tailed weasel) and least weasel. Both are distributed throughout Alaska, inhabiting a variety of habitats including marshes, meadows, brushy areas, woodlands, and montane environments (Svendsen 2003). ADF&G characterizes ermine as ubiquitous in Unit 18, noting that they can be a nuisance at fish camps, cabins and homes. For the ten year period of 2008 – 2017, trappers across Units 18, 22, 23, and 26 reported that ermine were common. The exception was 2016 when they were reported to be scarce. During that ten year period, trappers reported that ermine abundance was neither increasing nor decreasing, except in 2008, when they reported an increasing trend (Schumacher 2010, 2012, 2013a, 2013b; Parr 2016, 2017, 2018; Spivey 2019).

Cultural Knowledge and Traditional Practices

In Alaska, furs have been traded for money and other goods for over two centuries. In rural Alaska, trapping is generally profitable when attached to a larger complex of traditional fishing, hunting, and gathering activities with incremental use of equipment and land used for other subsistence activities. Harvesting furbearers is part of the annual cycle of subsistence activities (Wolfe 1991).

Customary trade and the sale of handicraft articles of fur are recognized as subsistence uses under Federal and State regulations, and, in both, trapping is a single regulatory category. Trapping is defined as the taking of mammals declared as furbearers.

The purchase of trapping permits throughout Alaska peaked in 1987 at almost 28,000 licenses and began a steep decline until 1992 when less than 19,000 licenses were purchased by Alaska residents (ADF&G 2019a). This decline in trapping license sales was probably associated with decreases in fur prices, which makes trapping less profitable (Wolfe 1991). Alaska furs were considered by industry to be among the highest quality wild furs available, but the market was depressed by factors including an oversupply of ranched furs, increasing anti-trapping/animal rights sentiments, and changes in lifestyle and fashion characterized by more casual dress (Andersen 1993). Since 1992, trapping license purchases have gradually increased, peaking in 2016 when over 32,000 licenses were purchased. Low income license purchases have gradually grown from 30% of trapping license purchases in 1976 to almost 70% in 2018 (ADF&G 2019a). This trend could be an effect of more licenses vendors available in remote communities making it easier for people to purchase trapping licenses. Key respondents in Emmonak linked their reduced furbearer harvest primarily to relatively low fur prices in 2009 for most species (Fall et al. 2012:155).

In Unit 18, people harvest furbearers for food and also to sell their pelts or to use them domestically, for example to create handicrafts. Communities have reported their harvests of furbearers on household surveys conducted by the ADF&G Division of Subsistence. In Unit 18, these surveys have included questions about the harvest of beaver, fox, hare, land otter, marten, mink, muskrat, weasel, wolf, and wolverine, but not all species are found in the entire unit. Additionally, weasels were included on surveys in only some communities.

The general trend in participation in the harvest of furbearers is downward, based on percentages of households reporting harvest on surveys and the estimated harvests of mink and weasel (**Tables 1, 2 and 3**). We have multiple years of data for only Kwethluk, Quinhagak, Emmonak, and Mountain Village.

Table 1. Percentages of households that reported harvesting furbearers based on household harvest surveysconducted in Unit 18 communities 1980–2013 (Source: ADF&G 2019b).

Community	Study Year	% of Households Harvesting Furbearers
Alakanuk	1980	85.7
Emmonak	1980	83.3
Kotlik	1980	100.0
Mountain Village	1980	87.5
Nunam Iqua	1980	85.7
Quinhagak	1982	58.3
Nunapitchuk	1983	94.1
Kwethluk	1986	67.5
Tununak	1986	51.5
Akiachak	1998	77.8
Emmonak	2008	33.0
Akiak	2010	46.0
Kwethluk	2010	40.9
Marshall	2010	34.8
Mountain Village	2010	26.1
Oscarville	2010	8.3
Tuluksak	2010	58.8
Bethel	2011	5.9
Napakiak	2011	37.5
Napaskiak	2011	19.6
Russian Mission	2011	50.0
Bethel	2012	14.4
Eek	2013	20.3
Pilot Station	2013	29.8
Quinhagak	2013	23.9
Scammon Bay	2013	23.3
Tuntutuliak	2013	29.9

Table 2. Estimated harvests of mink based on household harvest surveys conducted in Unit 18 communities 1980–2013 (CI 95%, lower harvest estimate is the lower bound of the estimate or the reported harvest, whichever is larger) (Source: ADF&G 2019b).

Community	Study Year	% of Households Harvesting Mink	Estimated Harvest (Number of Mink)	Lower Harvest Estimate (Number of Mink)	Upper Harvest Estimate (Number of Mink)
Alakanuk	1980	66.7	939	939	939
Emmonak	1980	22.2	189	189	189
Kotlik	1980	35.7	848	848	848
Mountain Village	1980	37.5	210	210	210
Nunam Iqua	1980	42.9	266	266	266
Quinhagak	1982	25.0	253	31	655
Nunapitchuk	1983	47.1	1,091	494	1,688
Kwethluk	1986	8.7	117	117	117
Tununak	1986	9.1	33	17	65
Akiachak	1998	6.2	23	16	36
Emmonak	2008	2.8	5	5	5
Akiak	2010	0.0	0	0	0
Kwethluk	2010	1.1	2	0	4
Marshall	2010	0.0	0	0	0
Mountain Village	2010	0.9	3	2	7
Oscarville	2010	0.0	0	0	0
Tuluksak	2010	1.5	4	0	7
Bethel	2011	0.8	84	21	189
Napakiak	2011	0.0	0	0	0
Napaskiak	2011	0.0	0	0	0
Russian Mission	2011	6.5	21	20	21
Bethel	2012	1.9	60	17	106
Eek	2013	1.6	4	4	4
Pilot Station	2013	1.1	10	9	10
Quinhagak	2013	3.7	12	12	12
Scammon Bay	2013	5.8	32	31	32
Tuntutuliak	2013	3.0	8	8	8

Table 3. Estimated harvests of weasel based on household harvest surveys conducted in Unit 18 communities 1980–2013 (CI 95%, lower harvest estimate is the lower bound of the estimate or the reported harvest, whichever is larger) (Source: ADF&G 2019b).

Community	Study Year	% of Households Harvesting Weasel	Estimated Harvest (Number of Weasels)	Lower Harvest Estimate (Number of Weasels)	Upper Harvest Estimate (Number of Weasels)
Tununak	1986	3.0	6	1	14
Akiachak	1998	3.7	13	4	22
Emmonak	2008	0.0	0	0	0
Akiak	2010	0.0	0	0	0
Kwethluk	2010	0.0	0	0	0
Marshall	2010	0.0	0	0	0
Mountain Village	2010	0.9	2	1	3
Oscarville	2010	0.0	0	0	0
Tuluksak	2010	1.5	1	0	2
Napakiak	2011	1.8	2	2	2
Napaskiak	2011	0.0	0	0	0
Russian Mission	2011	0.0	0	0	0
Bethel	2012	1.3	64	18	116
Pilot Station	2013	0.0	0	0	0
Quinhagak	2013	0.9	15	15	15

Harvest History

Historically, about one third of fur sealed in Alaska came from Unit 18. However, current harvest of furbearers is well below historic levels and remains below desired levels. Trapper effort is influenced by environmental factors such as travel conditions and furbearer abundance, and by economic and social factors such as fur prices and the presence or absence of a local fur buyer. In addition to trapping, hunters harvest furbearers opportunistically using firearms (Jones 2013).

Harvest reporting is not required for mink or weasel in Unit 18 (Jones 2013). Consequently, harvest information is anecdotal and summarized in ADF&G's annual Alaska Trapper Report. The most recent reports for mink and weasel are summarized below. Additional insights into participation and harvest patterns over time can be gleaned from household survey data, presented in the Cultural Knowledge and Traditional Practices section.

Mink

In Unit 18, one method of harvest for mink and otters is the *taluyaq* (or *taluyak*), a funnel-type trap derived from traditional blackfish traps (Burns 1964; Jones 2013). The early part of the season offers the best opportunity to deploy this type of trap. Regardless of method, trapping typically begins as soon as travel conditions allow, and most mink are harvested within the first few weeks of the season (Jones 2013). This coincides with prime pelt conditions and is consistent with historical patterns, when Christmas typically marked the end of the trapping season (Burns 1964).

For the ten year period of 2008 – 2017, trappers across Units 18, 22, 23, and 26 reported an average harvest of 23 mink annually, according to the Alaska Trapper Report. However, participation is voluntary, and only a subset of all trappers are represented in the report. Assuming that the proportion of total mink harvest reflected in the report is the same as the proportion for species that are required to be sealed, and comparing these anecdotal reports to sealing records, 23% of all mink harvests are reflected in the Alaska Trapper Report for 2008 – 2017. Extrapolated, harvest averages 156 mink annually for these four units (Schumacher 2010, 2012, 2013a, 2013b; Parr 2016, 2017, 2018; Spivey 2019). This is assumed to be a very rough estimate, however, and is likely biased low. Of the harvest reported in the Alaska Trapper Report, 90% of mink were trapped and 10% were shot (Schumacher 2010, 2012, 2013a, 2013b; Parr 2016, 2017, 2018; Spivey 2019).

Weasel

Except when they are targeted as a nuisance, ermine are generally harvested secondarily to other target species. Consequently, harvest tends to be low (Jones 2013). No harvest records for least weasel are available.

For the ten year period of 2008 – 2017, trappers across Units 18, 22, 23, and 26 reported harvesting an average of 18 ermine annually. Assuming that the proportion of total ermine harvest reflected in the report is the same as the proportion for species that are required to be sealed, and comparing these anecdotal reports to sealing records, 23% of all ermine harvests are reflected in the Alaska Trapper Report for 2008 – 2012. Extrapolated, harvest averages 91 ermine annually for these four units (Schumacher 2010, 2012, 2013a, 2013b; Parr 2016, 2017, 2018; Spivey 2019). Again, this is assumed to be a very rough estimate, and likely underestimates harvest. Of ermine harvest reported in the Alaska Trapper Report, 98% were trapped and the remainder were shot (Schumacher 2010, 2012, 2013a, 2013b; Parr 2016, 2017, 2018; Spivey 2019).

Effects of the Proposal

If this proposal is adopted, Federally qualified subsistence users will have additional opportunity to trap mink and weasel under Federal subsistence regulations. This is not likely to result in additional harvest, since the State season doesn't end until March 31. For mink, extending the season is of little concern because most mink harvest occurs during the early part of the season, when furs are in prime condition. This proposal does not pose a conservation concern for either mink or weasel. Adoption

of this proposal will also reduce regulatory complexity by aligning State and Federal trapping seasons for mink and weasel within Unit 18.

OSM CONCLUSION

Support Proposal WP20-34.

Justification

Adoption of this proposal is not likely to have any effect on the harvest of furbearers, for several reasons. First, the State season already extends to March 31 and all Federal public lands are open for trapping. Although Federally qualified subsistence users will have additional opportunity to trap under Federal regulation, there will be no realized additional opportunity, in terms of a longer season or expanded trapping areas, beyond what is currently available in State regulation. In addition, for mink in particular, most trapping occurs early in the season when pelts are in prime condition. Any additional harvest in the extended season is likely to be small and inconsequential to overall harvest. There is unlikely to be a change in the conservation status of mink or weasel as a result of adopting this request, because harvest is well below historical averages and is not expected to change.

The main effect of this proposal will be to reduce regulatory complexity. On the whole, a simpler regulatory landscape benefits Federally qualified subsistence users, who are burdened with a dual management system and complex land status. Given that there is expected to be no realized effect on subsistence use or furbearer populations, there is little reason to oppose this proposal.

LITERATURE CITED

ADF&G. 2019a. License statistics. https://www.adfg.alaska.gov/index.cfm?adfg=licensevendors.statistics, accessed June 6, 2019. Alaska Department of Fish and Game. Juneau, AK.

ADF&G. 2019b. Community Subsistence Information System. Alaska Department of Fish and Game Division of Subsistence online database. Anchorage, AK.

Andersen, D.B. 1993. Trapping in Alaska and the European economic community import ban on furs taken with leghold traps. Alaska Department of Fish and Game, Division of Subsistence Technical Paper No. 223. Anchorage, AK.

Burns, J.J. 1964. The ecology, economics and management of mink in the Yukon-Kuskokwim Delta, Alaska. M.S. Thesis, University of Alaska Fairbanks. Fairbanks, AK. 114 pp.

Fall, J.Al, C.L. Brown, N. Braem, L. Hutchinson-Scarbrough, D. S. Koster, T.M. Krieg, and A.R. Brenner. 2012. Subsistence harvests and uses in three Bering Sea communities, 2008: Akutan, Emmonak, and Togiak. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 371. Anchorage, AK.

Jones, P. 2013. Unit 18 furbearer. Pages 243 – 252 *in* P. Harper and L.A. McCarthy, eds. Furbearer management report of survey and inventory activities 1 July 2009 – 30 June 2012. ADF&G. Juneau, AK.

Larivière, S. 2003. Mink. Pages 662 – 671 *in* G.A Feldhamer, B.C. Thompson and J.A. Chapman, eds. Wild mammals of North America: Biology Management and Conservation. The Johns Hopkins University Press. Baltimore, MD. 1216 pp.

Parr, B. L. 2016. 2015 Alaska trapper report: 1 July 2015 – 30 June 2016. ADF&G. Juneau, AK.

Parr, B. L. 2017. 2016 Alaska trapper report: 1 July 2016 – 30 June 2017. ADF&G. Juneau, AK.

Parr, B. L. 2018. 2013 Alaska trapper report: 1 July 2013 – 30 June 2014. ADF&G. Juneau, AK.

Schumaker, T. 2010. Trapper questionnaire statewide annual report, 1 July 2008 – 30 June 2009. ADF&G. Juneau, AK.

Schumaker, T. 2012. Trapper questionnaire statewide annual report, 1 July 2010 – 30 June 2011. ADF&G. Juneau, AK.

Schumaker, T. 2013a. Trapper questionnaire statewide annual report, 1 July 2012 – 30 June 2013. ADF&G. Juneau, AK.

Schumaker, T. 2013b. Trapper questionnaire statewide annual report, 1 July 2011 – 30 June 2012. ADF&G. Juneau, AK.

Spivey, T. J. 2019. 2017 Alaska trapper report: 1 July 2017 – 30 June 2018. ADF&G. Juneau, AK.

Svendsen, G.E. 2003. Weasels and black-footed ferret. Pages 650 – 661 *in* G.A Feldhamer, B.C. Thompson and J.A. Chapman, eds. Wild mammals of North America: Biology Management and Conservation. The Johns Hopkins University Press. Baltimore, MD. 1216 pp.

Wolfe, R.J. 1991. Trapping in Alaska communities with mixed, subsistence-cash eocnomies. Alaska Department of Fish and Game, Division of Subsistence Technical Paper No. 217. Anchorage, AK.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Yukon Kuskokwim Delta Subsistence Regional Advisory Council

Support WP20-34. The Council supports this additional federal subsistence opportunity to trap mink and weasel by extending the season until at least March 31. The Council discussed that trapping mink and weasel used to be much more prevalent in the region, and, since there is currently no conservation concern, this extended season might help to encourage continuation of traditional cultural practices. The Council discussed that the mink and weasel have been observed to be abundant around their communities. The winter season is a good time to trap and extending the season into the end of March may encourage youth to participate in trapping and get involved with fur arts and crafts through the local school in the spring. Council members discusses that mink and weasel are often the first animals children learn to trap and practice their subsistence skills. This extended season will be additional opportunity to continue a traditional way of life and also help to generate some income through traditional skills such as making parkas.

Seward Peninsula Subsistence Regional Advisory Council

Support WP20-34. The Council voted unanimously to support WP20-34. The opportunity to trap weasel during the proposed dates currently exists under State regulations; therefore, no additional harvest is expected. This proposal would reduce confusion by aligning State and Federal regulations.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-34: Proposal WP20-34, submitted by the Yukon Delta National Wildlife Refuge, asks that the mink and weasel trapping season in Unit 18 be extended from Nov 10- Jan 31 to Nov 10 – Mar. 31.

Introduction: The state trapping season for mink and weasel ends 2 months later than the federal trapping season. This proposal seeks to change the federal regulations to match the state trapping season.

Impact on Subsistence Users: There are no expected impacts on subsistence users.

Impact on Other Users: There are no expected impacts on other users.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has found that all resident uses of furbearers and fur animals are customary and traditional uses.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game (BOG) to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for mink and weasel in Alaska, including Unit 18, is 90% of the harvestable surplus. The current and proposed seasons and bag limit for this portion of Unit 18 are:

Unit/Area	Season	Bag Limit
State Season		
Unit 18	*Nov. 10 – Mar. 31*	*No Limit*
Current Federal Season		
Unit 18	*Nov. 10 – Jan. 31*	*No Limit*
Proposed Federal Season		
Unit 18	*Nov. 10 – Mar. 31*	*No Limit*

Conservation Issue: There is no conservation concerns related to the harvest of mink and weasel in Unit 18

Enforcement Issues: Unifying State and Federal seasons for mink and weasel will simplify enforcement for State and Federal agencies.

Recommendation: ADF&G **SUPPORTS** the OSM recommendation to unify the state and federal trapping season for mink and weasel.

WP20–35 Executive Summary	
General Description	Proposal WP20-35 requests the addition of a winter season for moose in the Kuskokwim hunt area of Unit 18. Specifically, they are requesting that a may be announced season be established Dec. 1 – Jan. 31. *Submitted by: Yukon Kuskokwim Delta Subsistence Regional Advisory Council.*
Proposed 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 antlered bull by State registration permit; quotas will be announced annually by the Yukon Delta National Wildlife Refuge Manager* — *Sep. 1 – 30* ***A season may be announced Dec. 1 – Jan. 31*** *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*
OSM Preliminary Conclusion	**Support**
OSM Conclusion	**Oppose**
Yukon-Kuskokwim Delta Subsistence Regional	**Oppose**

WP20–35 Executive Summary	
Advisory Council Recommendation	
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Oppose**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-35

ISSUES

Wildlife Proposal WP20-35, submitted by the Yukon Kuskokwim Delta Subsistence Regional Advisory Council (Council), requests the addition of a winter season for moose in the Kuskokwim hunt area of Unit 18. Specifically, they are requesting that a may be announced season be established Dec. 1 – Jan. 31.

DISCUSSION

The Council states that the addition of a winter season will provide additional subsistence opportunity to those hunters who are unable to harvest a moose during the fall season. It notes that a winter season offers potentially better access via snowmachine, and that cold weather is conducive to meat preservation. The Council also points out that they are not requesting an increase in the harvest limit or a change in the harvest quota, so the proposal poses little conservation concern. The Council acknowledged that fewer and fewer antlered bulls would be available as the winter progressed, but felt it was important to have an extended winter opportunity to maximize flexibility in the face of increasing variable winter weather and travel conditions.

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 antlered bull by State registration permit; quotas will be announced annually by the Yukon Delta National Wildlife Refuge Manager	*Sep. 1 – 30*
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	

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 antlered bull by State registration permit; quotas will be announced annually by the Yukon Delta National Wildlife Refuge Manager	*Sep. 1 – 30* ***A season may be announced Dec. 1 – Jan. 31***
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	

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 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	*RM615*	*Sep. 1 – 7*

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'.	*RM615*	*Sep. 1 – 30*

Extent of Federal Public Lands

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

Customary and Traditional Use Determinations

Residents of Unit 18, Upper Kalskag, Aniak, and Chuathbaluk have a customary and traditional use determination in the portion of Unit 18 that includes the Yukon River drainage upstream of Russian Mission and 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 in Unit 18 remainder.

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.

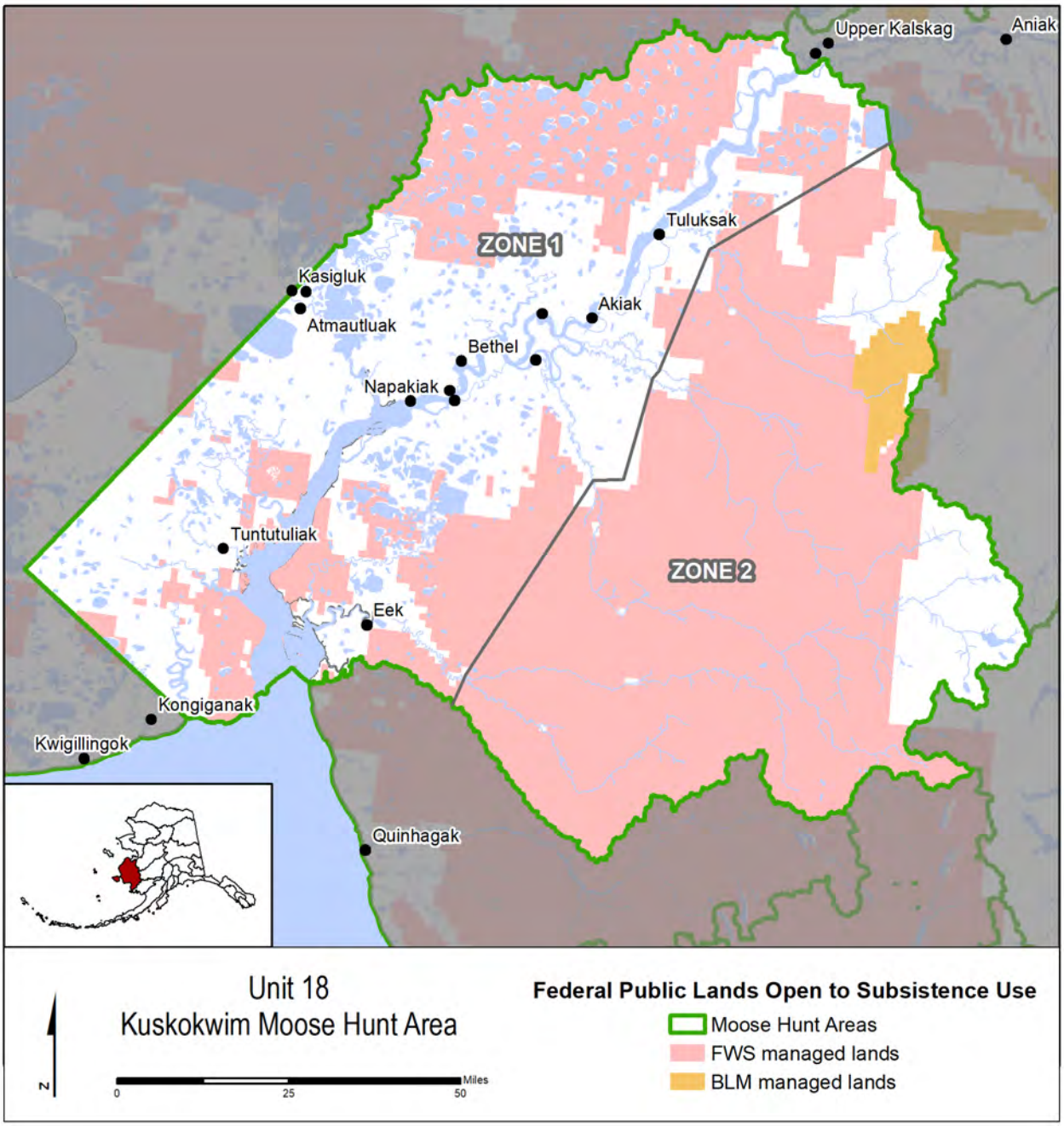


Figure 1. Federal public lands and hunt zones within the Kuskokwim moose hunt area, Unit 18.

Until 2004, Federal and State moose harvest limits for the lower Kuskokwim River area were one bull or one antlered bull, and the fall seasons were approximately one month. The State winter season varied widely from a continuous fall/winter season (Sep. 1–Dec. 31) to a 10-day December season and a winter "to be announced" season. The Federal winter season 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, 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 Sep. 1 – 10 season was established, with a harvest limit of one antlered bull by registration permit. The season was closed when the quota was met. In November 2009, the BOG adopted a proposal that changed the boundary separating the Unit 18 lower Kuskokwim area from the Unit 18 remainder area.

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

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

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

Current Events Involving the Species

The Federal public lands closure was reviewed by the Council in March 2019, via WCR20-38 (formerly identified as WCR18-38). The Council voted to maintain the status quo, as recommended by OSM.

Biological Background

Moose are believed to have begun colonization of the Yukon-Kuskokwim Delta in the 1940s (Perry 2014). By the 1990s, when the Federal public lands closure was initiated, moose densities throughout much of Unit 18 were very low. Though established populations existed in the far eastern portions of Unit 18, moose were only sparsely distributed throughout much of the unit. Harvested moose were likely to be 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 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 main stem and in its tributaries continues to grow.

The most recent population survey of the lower Kuskokwim survey area, which includes the main stem riparian corridor between Kalskag and Kwethluk, occurred in 2015. At that time, the population was estimated to be 1,378 moose, or 1.6 moose/mile^2 (**Figure 2**). This represents an annual growth rate of 20% between 2011 and 2015. 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). Browse surveys indicated that the population is about half of what it could be (YKDRAC 2017a).

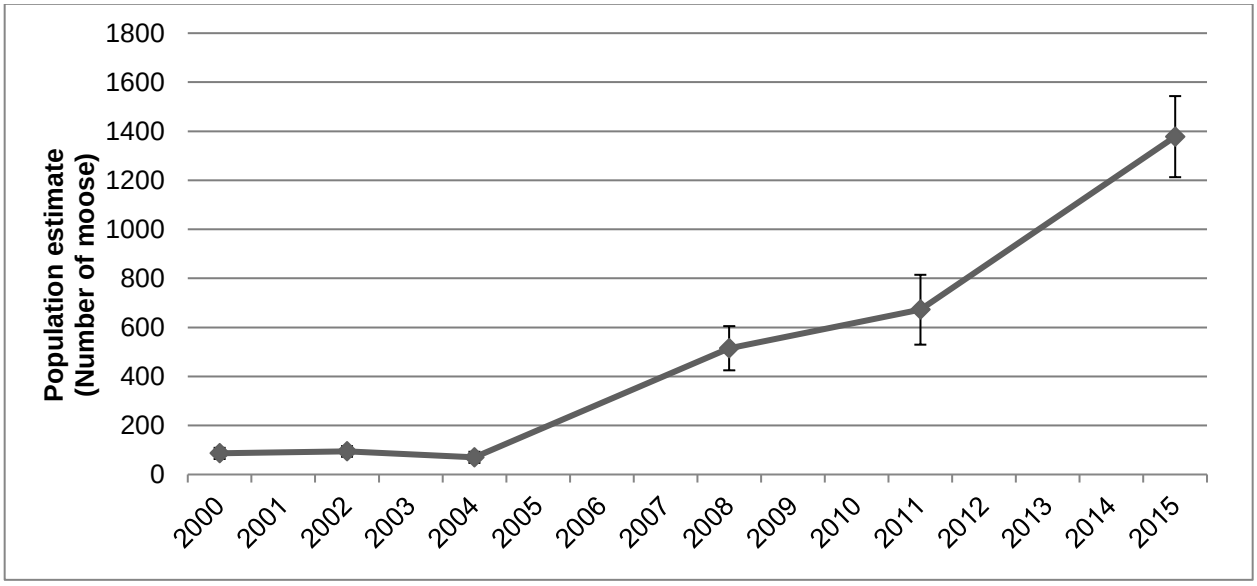


Figure 2. Estimated moose population size along the main stem of the Kuskokwim River, 2000 – 2015 (Perry 2014; Jones 2018, pers. comm.)

Composition estimates for the main stem were last obtained in 2016, when there were 70 bulls:100 cows and 56 calves:100 cows (Jones 2018, pers. comm.). Bull:cow ratios, which were quite high

during the harvest moratorium, declined when harvest resumed in 2009, but have remained consistently above the minimum objective of 30 bulls:100 cows (**Table 1**). Bull:cow ratios in the Kuskokwim tributaries are also reported to be high (Rearden 2018, pers. comm.).

Table 1. Composition estimates for moose along the main stem of the Kuskokwim River, 2007 – 2016 (YDNWR 2015, Jones 2018, pers. comm.).

Year	Bulls:100 cows	Calves:100 cows
2007	98	73
2009	52	49
2010	51	49
2013	41	71
2016	70	56

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 151 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 2 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).

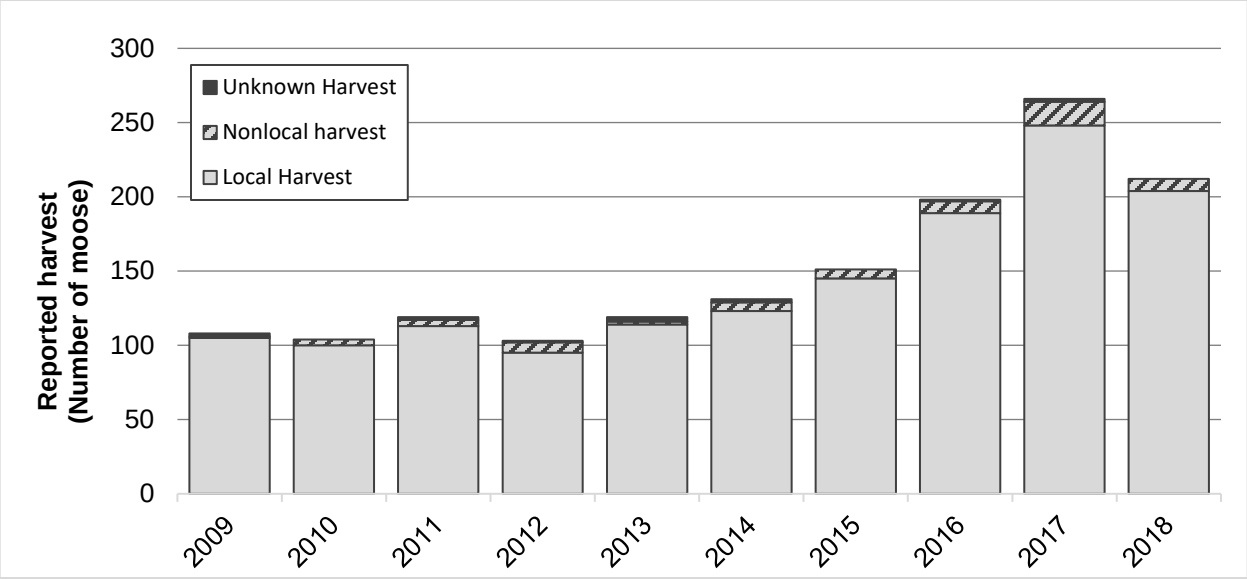


Figure 3. Reported moose harvest by RM615 in the Kuskokwim hunt area, 2009 – 2018 (ADF&G 2019a).

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 has routinely resulted in emergency closure of the State season within days of its opening (**Table 2**). This has resulted in some frustration among locals, who note that short unpredictable seasons make planning difficult. 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).

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

	Scheduled season dates		Actual season dates		Actual season length (number of days)	
Year	State	Federal	State	Federal	State	Federal
2011	Sep. 1 - 10	Sep. 1 - 5	Sep 1 - 6	Sep 1 - 6	6	6
2012	Sep. 1 - 10	Sep. 1 - 10	Sep. 1 - 8	Sep. 1 - 8	8	8
2013	Sep. 1 - 10	Sep. 1 - 10	Sep. 1 - 6	Sep. 1 - 6	6	6
2014	Sep. 1 - 10	Sep. 1 - 10	Sep. 1 - 4	Sep. 1 - 4	4	4
2015	Sep. 1 - 10	Sep. 1 - 8	Sep. 1 - 4	Sep. 1 - 8	4	8
2016	Sep. 1 - 10	Sep. 1 - 15	Sep. 1 - 5	Sep. 1 - 15	5	15
2017[a]	Sep. 1 - 10	Sep. 1 - 25	Sep. 1 - 5	Sep. 1 - 25	5	25
2018[a]	Sep. 1 - 10	Sep. 1 - 30	Sep. 1 - 7	Sep. 1 - 30	7	30

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

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 quota. 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 are managed by ADF&G. Zone 2 is comprised primarily of Federal public lands, including those in the Tuluksak, Kisaralik, Kasigluk and Eek river drainages ("tributaries"). The season and harvest quota in the tributary hunt is managed by the Refuge (Rearden 2018, pers. comm.; YKDRAC 2017a).

There is more demand for moose in Zone 1, along the main stem, compared to Zone 2, in the tributaries. This is evidenced by the rate at which the quota is met within each zone, and the corresponding season length. On average, the main stem hunt has been open fewer than six days annually since 2011, and the quota has been met or exceeded most years. 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.).

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

	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

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

Other Alternative Considered

It may be necessary to require a Federal registration permit, rather than a State registration permit. As submitted, the requested change will require that State permits be used by Federally qualified subsistence users in a way that is not allowed by non-Federally qualified users. Specifically, it will

require the use of State registration permits outside of the State season on lands that are closed to non-Federally qualified users. Though not unprecedented, use of a State registration permit under these conditions will require concurrence from ADF&G. If this is not an amenable solution, a Federal permit will be required.

Effects of the Proposal

If this proposal is adopted, the Refuge manager will be delegated the authority to establish a may be announced winter moose season on Federal public lands within the Unit 18 Kuskokwim hunt area. Specifically, the existing delegation of authority letter, which allows the Refuge manager to close the fall season and determine annual quotas, will be modified to include the authority to open and close a winter season (**Appendix 1**). The window of opportunity for opening a season will be Dec. 1 – Jan. 31 and the harvest limit will remain one antlered bull for both the fall and winters seasons.

This change will result in increased subsistence opportunity for the residents of Tuntutuliak, Eek, Napakiak, Napaskiak, Kasigluk, Nunapitchuk, Atmautluak, Oscarville, Bethel, Kwethluk, Akiachak, Akiak, Tuluksak, Lower Kalskag, and Kalskag, who are eligible to hunt moose on Federal public lands within the Unit 18 Kuskokwim hunt area. A winter hunt may result in additional harvest of moose in the tributaries of the lower Kuskokwim drainage. However, this isn't expected to pose a conservation concern to the Kuskokwim moose population, because harvest will continue to be managed by quota.

As proposed, the winter hunt will require the use of State registration permit. This will minimize regulatory complexity by utilizing a single permit across seasons and jurisdictions, to the benefit of Federally qualified subsistence users. However, it will require that State registration permits be used by Federally qualified subsistence users in a way that is not allowed by non-Federally qualified users. Specifically, it will require the use of registration permits outside of the State season on lands that are closed to non-Federally qualified users. This is not unprecedented, however. For instance, in 2018, Federal regulations in Unit 24B were changed in a manner that required the use of State registration permits or harvest tickets on Federal public lands within the Kanuti Controlled Use Area, which are closed except to Federally qualified subsistence users, and on which State permits would typically be invalid. This was part of an effort to increase overall opportunity and reduce regulatory complexity in an area with complex hunt areas, seasons, and land statuses, and was implemented with concurrence from the State.

OSM PRELIMINARY CONCLUSION

Support Proposal WP20-35.

Justification

Residents of the Kuskokwim hunt area have consistently expressed the desire for an opportunity to hunt moose later in the year, given the recent warm September conditions. The addition of a may be announced winter season provides that opportunity in years when the harvest quota has not been met during the fall season. Because total harvest will continue to be regulated through the establishment

of quotas, this change does not pose a threat to the conservation status of the moose population. Rather, the establishment of a winter season improves the likelihood that harvest targets will be met, and may result in a more even distribution of harvest among Zone 1 and Zone 2. The harvest limit of one antlered bull helps ensure that cows will not be taken inadvertently, yet provides additional subsistence opportunity for local residents who were unable to harvest a moose during fall.

Requiring a State registration permit instead of a Federal registration permit has several advantages. It will benefit Federally qualified subsistence users by allowing them to hunt across seasons with a single permit, easing the burden of compliance in a dual management system. It will also likely be advantageous for harvest management, by ensuring that harvest reports continue to be consolidated in a single reporting system. Though it requires that State permits be used in a way not allowed by non-Federally qualified users, this alternative has been successfully implemented in other hunts in various parts of the state.

ANALYSIS ADDENDUM

OSM CONCLUSION

Oppose Proposal WP20-35.

Justification

Information presented by local managers to the Council at their Fall 2019 meeting underscored the complexity of the Kuskokwim area moose hunt and illustrated several points that were not considered in OSM's analysis of the proposal. Among those points are the practical challenges of managing a limited winter hunt, and the likelihood of exceeding the quota.

As detailed in the in the analysis, moose in the Kuskokwim drainage are in high demand, with nearly 1,500 permits distributed annually and fall harvest rates as high as 50 moose/day (YKDRAC 2019). In winter, hunter access and hunting conditions improve considerably in Zone 2, where the excess quota exists, due to snow cover, increased visibility, etc. Collectively, these factors could result in rapid depletion of the winter quota. Given that the unmet fall quota has been 30 – 40 moose in the past two years, it raises unresolved questions about how to manage a small quota without limiting distribution of permits. In addition, the season would need to occur in November and December, while bulls still have antlers, to minimize incidental cow harvest (YKDRAC 2019).

Routinely overshooting the harvest quota or harvesting cows poses a risk to the conservation gains that have been observed for this moose population since the harvest moratorium commenced in 2004. While the unmet fall quota represents bulls that are available for harvest under the current harvest rate, ADF&G's area biologist notes that the population is not so large that it is a biological necessity to meet the quota each year. Rather he estimates that the Kuskokwim drainage can support two- to three-times the number of moose currently observed. He also notes the high potential for future growth, given the good bull:cow ratios, high productivity, and adequate browse. An alternate approach to a winter hunt

is an extended fall hunt, which would provide additional harvest opportunity while avoiding many of the administrative and biological pitfalls associated with a winter hunt (YKDRAC 2019).

This position was echoed by the Council, who agreed it was too soon to initiate a winter hunt and expressed a desire for continued recovery of this population to support subsistence uses into the future.

LITERATURE CITED

ADF&G. 2019a. Winfonet. Retrieved: May 1, 2019.

ADF&G. 2019b. News Release for EO 05-06-18. September 5, 2018. ADF&G. Juneau, AK.

FSB. 1991. Transcripts of the Federal Subsistence Board proceedings. March 6, 1991. Office of Subsistence Management, USFWS. Anchorage, AK.

Jones, P. 2018. Wildlife biologist. Personal communication: email. ADF&G. Bethel, AK.

Jones, P. 2019. Wildlife biologist. Personal communication: email. ADF&G. Bethel, AK.

Perry, P. 2014. Unit 18 moose management report. Chapter 20, pages 20-1 – 10-17 *in* P. Harper and L.A McCarthy, eds. Moose management report of survey and inventory activities 1 July 2011 – 30 June 2013. ADF&G. Juneau, AK.

Rearden, S. 2018. Wildlife biologist. Personal communication: email. USFWS. Bethel, AK.

YDNWR. 2015. Unpublished survey report. USFWS. Bethel, AK. 5 pp.

YKDRAC. 2017a. Transcripts of the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council proceedings. October 12 – 13, 2017. Bethel, AK. Office of Subsistence Management, USFWS. Anchorage, AK.

YKDRAC. 2017b. Transcripts of the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council proceedings. February 15 – 16, 2017. Bethel, AK. Office of Subsistence Management, USFWS. Anchorage, AK.

YKDRAC. 2019. Transcripts of the Yukon-Kuskokwim Delta Subsistence Regional Advisory Council proceedings. November 6 – 8, 2019. Bethel, AK. Office of Subsistence Management, USFWS. Anchorage, AK.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Yukon Kuskokwim Delta Subsistence Regional Advisory Council

Oppose WP20-35. The Council discussed the current moose population and management in Kuskokwim River zones 1 and 2 and opposes opening a winter hunt at this time due to conservation concerns. The Council relayed that even though they had submitted this proposal, the current biological data indicated it would be too soon after the Kuskokwim moose hunt moratorium to open up an additional season. The Council is very concerned that the moose population have an opportunity to recover fully in order to sustain the subsistence hunt into the future. The Council noted the hunt pressure in Zone 1 could dramatically increase in the winter since travel by snowmachine would greatly increase access to area. Also, since the bulls typically drop antlers by mid-December, the Council felt a winter hunt would risk accidental harvest of cow moose, further jeopardizing the recovery of moose in this area. Icy winter conditions and thin ice on rivers and lakes with warmer winter temperatures in recent years create can hazardous conditions for moose if being pursued. Overall, the Council expressed it would be best to avoid undue stress on the moose in this area until the population recovers sufficiently to sustain additional harvest.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-35: Proposal WP20-35, submitted by the Yukon Kuskokwim Delta Subsistence Regional Advisory Council, requests the addition of a winter season for moose in the Unit 18 Kuskokwim hunt area. The season would be a may-be-announced season established Dec. 1 – Jan. 31.

Introduction: 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, and with concurrence from 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.

Having lasted 5 years, the BOG ended the moratorium in 2009 when it established a registration hunt (RM615). A Sep. 1 – 10 season was established, with a bag limit of one antlered bull. The FSB added

one year to the moratorium on federal lands. In September of 2009 the first post moratorium hunt was held on state managed land. In September 2010 both state and federal lands were open to hunting. Managers established separate quotas for state and federal lands in 2011. The quota from 2011 to 2017 was about 3 times greater on state managed lands due to the fact that moose densities are greater on state land along the mainstem of the Kuskokwim River. Federal managed lands are mostly the tributaries of the Kuskokwim and at a lower density. 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 among the public and was a problem for law enforcement and hunt managers. In 2017 the hunt area was split into two zones. 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 federal managed lands to the southeast of Zone 1. State managers set the season and quota/harvest objective for Zone 1, and federal managers set the season and quota/ harvest objective for Zone 2. A joint state/federal registration permit (RM615) is used and is valid in both zones.

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 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 proportionally with the population growth, and season length in Zone 2 has been lengthened over time. Currently a fixed season of 30 days with a harvest objective is set in Zone 2. From 2009-2018 the state used a quota to manage state lands (Zone 1) in the hunt. In 2019 the state switched to a fixed season with an advertised start and end day, and a harvest objective to simplify things for the public.

Impact on Subsistence Users: This proposal could increase the opportunity to qualified subsistence users. In years, when we get good snow and ice for winter travel, hunters can access all areas that might have moose on federal lands. However, this may create confusion for hunters if all federal lands are open in the Kuskokwim hunt area if they must go back to understanding the checkerboard land ownership. This will also complicate things for managers since it might result in additional harvest in Zone 1, where it is not likely to be needed or warranted. The only federal lands that are not currently achieving their harvest objective are in Zone 2. Federal lands in Zone 1 are achieving the harvest objective and it could be detrimental to bull: cow ratios if additional harvests on federal lands in Zone 1 occur.

Impact on Other Users: If adopted, there could be a negative effect on non-federally qualified users. Hunters may over harvest moose in the Zone 1 area even if they only harvest animals on federal lands within Zone 1. Because of the checkerboard land status this could result in a decreased bag limit and/or a shorter season in Zone 1 the following year.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made a positive customary and traditional use finding for moose in Unit 18.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for Moose in Unit 18 is 200-400 animals. The season and bag limit for this portion of Unit 18 is:

		Open Season (Permit/Hunt #)	
Unit/Area	Bag Limit	Resident[a]	Nonresident
Unit 18 Kuskokwim area, that Portion easterly of a line from the mouth of the Ishkowik River to the closest point of Dall Lake then to the east Bank of the Johnson River As its entrance into Nunavakanukakslak lake (60 59.41' N. latitude, 162 22.14' W. longitude), continuing up-River along a line one-half mile South and east of, and parallel-Ing a line along the southerly Bank of the Johnson River to The confluence of the east bank Of Cooked Creek, then con-tinuing 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 border and north of	1 antlered bull	Sept. 1-Sept. 30 by registration permit only	No open season

And including the Eek River
drainage

[a] Subsistence and General Hunts.

Conservation Issues: Depending on how a winter hunt is structured, there is considerable concern of overharvest of moose on Federal lands in Zone 1 and concern over how the remaining harvest of 30-40 bull moose in Zone 2 could be effectively regulated given easy winter access and high demand for permits in the hunt area. Considerable thought would have to go into how/where permits would be available, if it could be a state or federal permit, how the season harvest would be monitored and how the season would open and close. With at least 1,400-1,500 federally qualified people interested in this hunt and given easy winter access to federal land, the remaining harvest quota could be reached very quickly. It is currently not uncommon for harvest in Zone 1 in the September hunt to surpass 50 animals in a good day of hunting. In the winter, moose are inherently more vulnerable to hunters because access, visibility, and detection of moose increases. Depending on the conditions for travel and how permits were distributed, the remaining quota could be surpassed in an unmanageable period of time.

Population and habitat surveys indicate that the moose population in Zone 2 is not nutritionally limited and continues to grow. Current management metrics indicate that additional harvest is not necessary for the health of the population. The moose population in Zone 2 can support this level of harvest because of the high bull:cow ratios.

Enforcement Issues: If zones are maintained in the winter hunt it would provide clear boundaries for law enforcement. If all federal lands within the Kuskokwim hunt area are open it will be very difficult for law enforcement to enforce where people are hunting because of the checkerboard land ownership in the hunt area.

Recommendation: ADF&G is **OPPOSED** to establishing a winter moose season on federal lands within the Kuskokwim moose hunt area. There are several administrative and biological concerns that need to be carefully considered in order to maintain the harvest structure and associated benefits established by the shared federal and state RM615 permit in September. As it is written it is unclear if federal land managers could only open federal lands within Zone 2 for this hunt. On average, both state and federally managed lands within Zone 1 achieve their harvest objective in the September hunt, and additional harvest of moose in this Zone would not be warranted in the winter.

APPENDIX 1

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

Dear Refuge Manager:

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

It is the intent of the Board that actions related to management of moose by Federal officials be coordinated, prior to implementation, with the Alaska Department of Fish and Game (ADF&G), representatives of the Office of Subsistence Management (OSM), and the Chair of the affected Council(s) to the extent possible. The 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. <u>Delegation</u>: The manager of the Yukon Delta National Wildlife Refuge is hereby delegated authority to issue emergency or temporary special actions affecting moose on Federal lands as outlined under the Scope of Delegation. Any action greater than 60 days in length (temporary special action) requires a public hearing before implementation. Special actions are governed by Federal regulation at 36 CFR 242.19 and 50 CFR 100.19.

2. <u>Authority</u>: 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 close the Sep. 1 – Sep. 31 season, open and close a season between December 1 and January 31, and determine annual quotas for moose on Federal public lands in 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 Nunavakankakslak Lake (N 60o 59.412 Latitude; W 162o 22.142 Longitude), continuing upriver along a line ½ mile south and east of, and paralleling a line along the southerly bank of the Johnson River to the confluence of the east bank of Crooked Creek, then continuing upriver to the outlet of Arhymot Lake, then following the south bank east of the Unit 18 border and then north of and including the Eek River drainage.

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

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

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

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

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

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

For management decisions on special actions, consultation is not always possible, but to the extent practicable, two-way communication will take place before decisions are implemented. You will also establish meaningful and timely opportunities for government-to-government consultation related to pre-season and post-season management actions as established in the Board's 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 the Office of Subsistence Management.

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
Subsistence Council Coordinator, Office of Subsistence Management
Chair, Yukon-Kuskokwim Delta Subsistence Regional Advisory Council
Commissioner, Alaska Department of Fish and Game
Special Assistant to the Commissioner, Alaska Department of Fish and Game
Interagency Staff Committee
Administrative Record

WP20–39 Executive Summary	
General Description	Proposal WP20-39 requests modifying the harvest limit for the December moose season in Unit 22D remainder from one moose to one bull. *Submitted by: Seward Peninsula Subsistence Regional Advisory Council.*
Proposed Regulation	**Unit 22D—Moose** *Unit 22D remainder—1 bull* — *Aug. 10–Sep. 14.* *Oct. 1–Nov. 30.* *Unit 22D remainder—1* ***bull*** ~~*moose; however, no person may take a calf or cow accompanied by a calf*~~ — *Dec. 1–31.* *Unit 22D remainder—1 antlered bull* — *Jan. 1–31.*
OSM Conclusion	**Support**
Seward Peninsula Subsistence Regional Advisory Council Recommendation	**Take no action**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Support**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-39

ISSUES

Wildlife Proposal WP20-39, submitted by the Seward Peninsula Subsistence Regional Advisory Council (Council), requests modifying the harvest limit for the December moose season in Unit 22D remainder from one moose to one bull.

Note: A similar proposal (WP20-38) was also submitted regarding the harvest limit for moose in Unit 22D remainder. The outcome of either proposal will impact the action taken on the other. Therefore, it is important to consider both of these proposals prior to taking action. A complimentary proposal (WP20-40) was additionally submitted regarding the closure of the hunt area to non-Federally qualified users. It may also be important to consider how an action on WP20-40 would impact actions taken on either WP20-39 or WP20-38.

DISCUSSION

The proponent is concerned with the harvest of cow moose in Unit 22D remainder due to a declining population trend since 2011. The proponent states that moose population surveys conducted by the Alaska Department of Fish and Game (ADF&G) showed severe declines between 2011 and 2014. The Council mentions that it was recently informed by ADF&G that low moose recruitment remains a concern in Unit 22D remainder, and that action is needed to protect this population. The Unit 22D remainder cow moose harvest has been closed, by special actions, for the last few years, and this proposal is being submitted to incorporate this change into regulation. This change would also be consistent with those made to State regulations to remove cow harvest in this hunt area.

Existing Federal Regulation

Unit 22—Moose

Unit 22D remainder—1 bull	*Aug. 10–Sep. 14.* *Oct. 1–Nov. 30.*
Unit 22D remainder—1 moose; however, no person may take a calf or cow accompanied by a calf	*Dec. 1–31.*
Unit 22D remainder—1 antlered bull	*Jan. 1–31.*

Proposed Federal Regulation

Unit 22D—Moose

Unit 22D remainder—1 bull	*Aug. 10–Sep. 14.* *Oct. 1–Nov. 30.*
Unit 22D remainder—1 ***bull*** ~~*moose; however, no person may take a calf or cow accompanied by a calf*~~	*Dec. 1–31.*
Unit 22D remainder—1 antlered bull	*Jan. 1–31.*

Existing State Regulation

Unit 22D—Moose

22D remainder	*Residents: One bull*	*Aug. 10 – Sept. 14*
	OR	
	One bull	*Oct. 1 – Nov. 30*
	OR	
	One antlered bull	*Dec. 1 – Jan. 31*
	Nonresidents	*no open season*

Extent of Federal Public Lands/Waters

Unit 22D is comprised of approximately 23% Federal public lands and consists of 12% Bureau of Land Management (BLM) managed lands, and 11% National Park Service (NPS) managed lands (**Figure 1**).

Note: Federal public lands comprise 8% of the Unit 22D remainder moose hunt area, specifically. All of these Federal public lands are managed by BLM.

Customary and Traditional Use Determinations

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

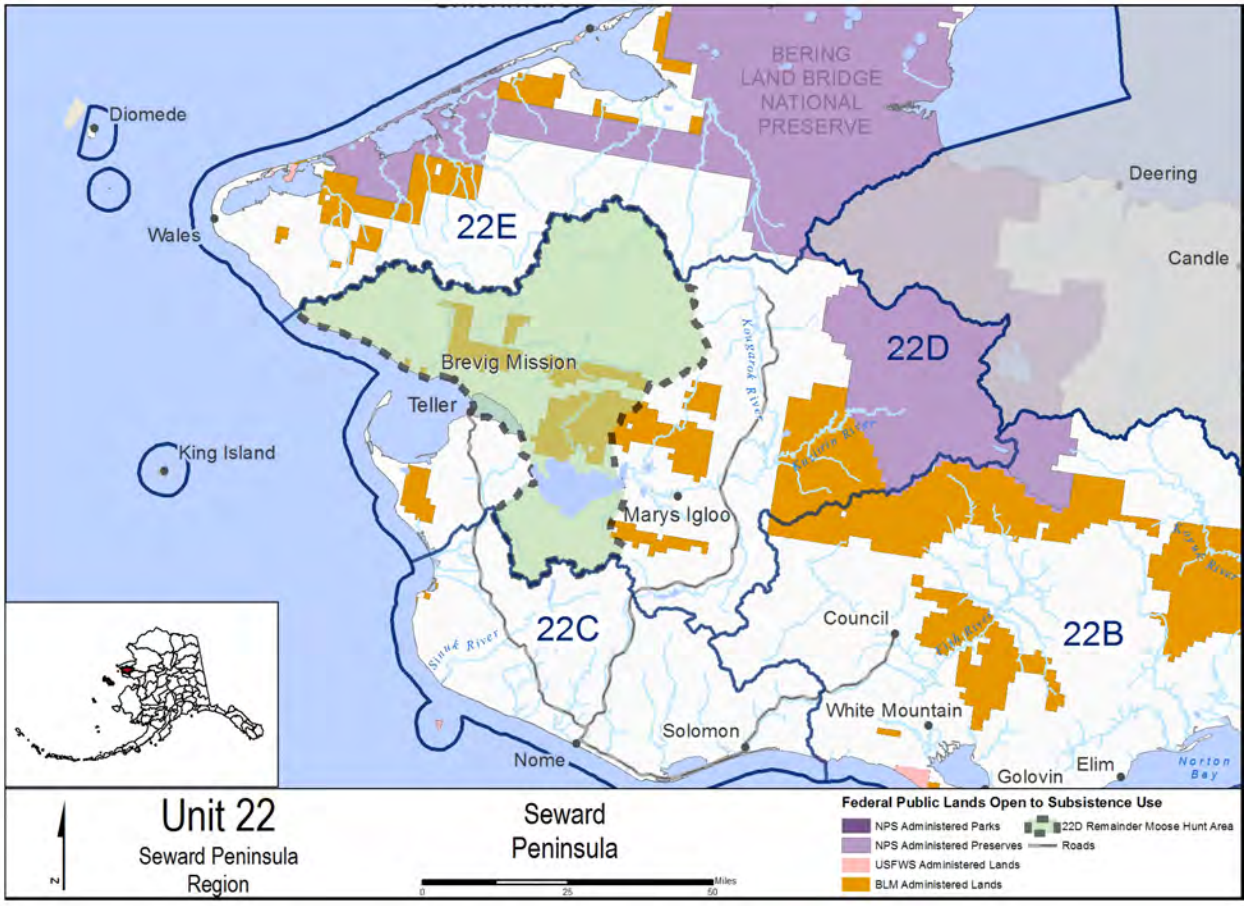


Figure 1. Unit 22D remainder moose hunt area.

Regulatory History

In 1998, the Federal Subsistence Board (Board) adopted Proposal WP98-087, which changed the harvest limit from one moose to one antlered bull in that portion of Unit 22D that lies within the Kuzitrin River drainage, just east of Unit 22D remainder, due to a declining local moose population and heavy hunting pressure. As a result of a continuing regional trend in declining moose populations, the Board also restricted the harvest in adjacent Unit 22B in 2000.

In 2001, the Board approved with modification, two Special Action Requests (WSA01-09 and WSA01-11) to close Federal public lands to the harvest of moose by non-Federally qualified users in Unit 22B west of the Darby Mountains, Unit 22D within the Kuzitrin River drainage and west of the Tisuk River drainage and Canyon Creek, and Unit 22E, shorten the seasons in all these hunt areas except for Unit 22D west of the Tisuk River drainage, and modify Unit 22E harvest limits from one moose to one bull for the 2001 fall and winter seasons. As a follow-up to these actions, the Alaska Board of Game (BOG) addressed concerns about declining moose populations in parts of Unit 22 by shortening seasons in portions of Units 22B and 22D, adding registration permit requirements in Unit 22D, dividing Unit 22D into additional hunt areas, modifying harvest limits, and closing nonresident hunts in portions of Units 22B, 22D, and 22E. The BOG decided to restrict the season in Unit 22D

remainder, despite a relatively healthier moose population. The fall season was closed from Sept. 15–30, to match other portions of Unit 22D, in order to prevent focusing hunting efforts on the American and Agiapuk River drainages when all the other areas would have been closed. These changes went into effect in regulatory year 2002/03.

In May 2002, the Board adopted Proposal WP02-34 with modification to add State registration permit requirements to the portion of Unit 22B west of the Darby Mountains, the portion of Unit 22D that lies within the Kuzitrin River drainage, and the portion of Unit 22D west of the Tisuk River drainage, revise harvest limits to bull only hunts in Units 22B, portions of 22D (Kuzitrin River drainage and west of the Tisuk River drainage), and Unit 22E, and shorten seasons in these areas. It also closed Federal public lands in Unit 22D remainder and Unit 22E to the taking of moose except by Federally qualified subsistence users. The Board's justification stated that the closure "would improve rural subsistence harvest opportunities in an area recently deemed necessary by the State to restrict the moose harvest" (OSM 2002: 15).

ADF&G issued an emergency order in 2005, changing the State fall moose hunt in Unit 22D to Sept. 1–14. In 2005, the Board approved Special Action Request WSA05-01, which shortened the hunting season for all of Unit 22D from Aug. 20–Sept. 30 to Sept. 1–14, in response to conservation concerns from harvests exceeding the joint State/Federal harvest quota for the Kuzitrin River drainage in 2003 and 2004 (OSM 2005). Overharvest occurred in 2003 and 2004, despite State and Federal efforts to reduce the harvest by closing the seasons early.

Upon consideration of Wildlife Closure Review WCR06-15 in 2006, the Council submitted Proposal WP07-38 to eliminate the closure put in place in 2002 to all non-Federally qualified users. In 2007, the Board adopted WP07-38, eliminating the closure to non-Federally qualified users in Unit 22D remainder, and aligning Federal and State hunting season dates. The Council justified the request by stating that "land closures are no longer necessary to protect the moose population because numbers have increased unit-wide and have remained stable for at least ten years; recruitment rates are up; and bull:cow ratios are consistently high despite a five-month Federal season" (OSM 2007: 468).

In 2015, the BOG modified State regulations, transitioning to a bull moose hunt within Unit 22D remainder. In addition, for regulatory years 2015/16 and 2016/17, ADF&G established a three moose harvest quota for nonresident hunters in Unit 22D remainder to prevent excessive harvest. This harvest quota was enacted due to a decline in moose populations since 2011. ADF&G issued emergency orders in regulatory years 2015/16 and 2016/17 to close this season early due to the quota being met (ADF&G 2016a).

At its March 2016 meeting, the Council submitted Proposal 28 to the BOG, requesting elimination of the nonresident moose season in Units 22E and 22D remainder until the relationship between the changing moose population distribution and growth and decline between the subunits was better understood. During discussion of the proposal, ADF&G was asked for an overview of the moose population in the area. ADF&G brought concern about the decreasing population numbers in Unit 22D to the attention of the Council, mentioning that moose in Unit 22D were last counted in 2014, and

that declines in the population were observed in both of the major survey areas. Additionally, ADF&G noted that some Unit 22D moose may have migrated to Unit 22E. Even with the possible migration taken into consideration, a significant decline in Unit 22D moose was observed during the 2014 survey (SPRAC 2016). Proposal 28 was adopted in Unit 22D remainder by the BOG prior to the 2017/18 regulatory year.

Special Action Request WSA16-07, submitted by BLM and requesting that the December cow season be closed, was presented to the Council on November 2, 2016. The Council supported WSA16-07, stating that hunters had expressed concern about the moose populations in the area. In particular, the Council Chair discussed the need to refrain from harvesting cow moose during population declines and asked ADF&G to explain the current levels of antlerless moose harvest and the potential impacts to the population. ADF&G noted that the average annual reported harvest of cow moose in Unit 22D over the last ten years totaled one moose per year, but that an antlerless harvest as low as 3% could have a substantial negative impact to the population. The Council Chair emphasized that this Special Action would only close the Federal cow moose hunting season for one month. The Board approved WSA16-07 on November 30, 2016.

In 2017, the same request was submitted as Special Action Request WSA17-06. The proponent, BLM, submitted this request because they believed that continued harvest of cow moose in Unit 22D remainder would lead to further declines in the moose population. The Board approved WSA17-06 with modification to change the harvest limit from one bull to one antlered bull for the harvest season of Dec. 1–Dec. 31, 2017. This modification was approved to prevent the accidental harvest of cows, since most larger bulls would have dropped their antlers by December. An antlered moose hunt was also preferred to reduce mid-winter harassment of non-antlered moose by hunters trying to distinguish the sex of the animal. It was stated that approval of this modification would help to ensure the long term viability of the moose population in Unit 22D remainder.

Similarly, in 2018, the same request was submitted as Special Action Request WSA18-03. The Board again approved this request with modification. The modified WSA18-03 that was approved by the Board limited harvest from one moose to one antlered bull in Unit 22D remainder for the remainder of the current wildlife regulatory cycle (through June 30, 2020). The harvest limit was modified through the remainder of the wildlife regulatory cycle to ensure that antlerless moose in Unit 22D remainder were protected until a proposal could be submitted to change Federal subsistence regulations.

Biological Background

Moose have been present in Unit 22 for a relatively short time, with very few being observed prior to 1930. The moose population on the Seward Peninsula grew and reached its peak in the mid-1980s (Nelson 1995, Gorn and Dunker 2014). This rise in the population was followed by multiple severe winters, which greatly reduced the population and overall moose density due to limited winter browse (Nelson 1995). Brown bear predation on calves is now considered the main limiting factor on the Unit 22 moose population; although no formal study has yet been conducted to confirm this (Gorn and Dunker 2014).

State management goals for moose in Unit 22 include maintaining a unit-wide combined population of 5,100–6,800 moose, and more specifically, maintaining a population of 2,000–2,500 moose in Unit 22D while maintaining a minimum bull:cow ratio of 30:100. The population goal in Unit 22D would provide for an increased and stabilized population following recent declines (Gorn and Dunker 2014).

During a moose population survey conducted in 2014, the population estimate for moose in all of Unit 22D was 1,106 observable moose, which represents a 13% annual rate of decline from 2011 (1,681 observable moose). Specifically in the Agiapuk River drainage survey area (within which, the Unit 22D remainder hunt area is located), the population estimate was 491 (0.39 moose/mi^2) observable moose (**Figure 2**). These numbers were reported as observable moose, rather than an overall population estimate, due to the lack of a sightability correction factor for these surveys. This is a 14% annual rate of decline since the 2011 survey (Gorn 2012, Dunker 2016, pers. comm.). Another population survey was planned for March of 2018 in Units 22D and 22E, but due to inclement weather, the survey did not take place (Seppi 2018, pers. comm.).

Fall composition surveys indicate a negative change in the composition within Unit 22D remainder. Composition surveys in the Agiapuk River Drainage were conducted in 2011 for the first time since 2003, and found 38 bulls:100 cows, which is within State management goals (Gorn 2012, Dunker 2019 pers. comm.). In 2013, efforts to complete composition surveys were hampered by poor weather conditions. The limited data obtained from these attempts indicated that the bull:cow ratio had likely declined since the 2011 surveys (Dunker 2016, pers. comm.). This was confirmed during the most recent composition surveys in the area, which were completed in fall of 2016 and 2018. Results showed a bull:cow ratio of 23 and 18 bulls:100 cows, respectively, both of which are below the State management objective of 30 bulls: 100 cows (Dunker 2017, pers. comm.).

Weight measurements were collected on short-yearling (10-month old) moose in Unit 22D in April 2007–2009. Annual average weights ranged 372–393 pounds. Snowfall was greater than normal levels in both 2008 and 2009, but did not have a significant impact on average short-yearling weights. Research indicates that short-yearling weights of less than 385 pounds are considered an indication that moose are resource limited, but browse does not seem to be limiting factor in this area (Gorn and Dunker 2014). A spring recruitment survey was completed by ADF&G in April of 2018 for Unit 22D remainder. This survey provided a 12% estimate of recruitment, which suggests that recruitment is poor and the population is likely still in need of rebuilding efforts at this time (ADF&G 2018a).

Habitat

There is limited habitat data for Unit 22D. Although winter browse was seen as a limiting factor when moose density/numbers were at their highest during the mid-1980s, current moose populations have been managed based on what winter browse can easily support throughout Unit 22D. Browse is no longer viewed as a limiting factor to moose in this unit, and brown bear predation on calves is now seen as the most significant factor influencing moose numbers (Gorn and Dunker 2014).

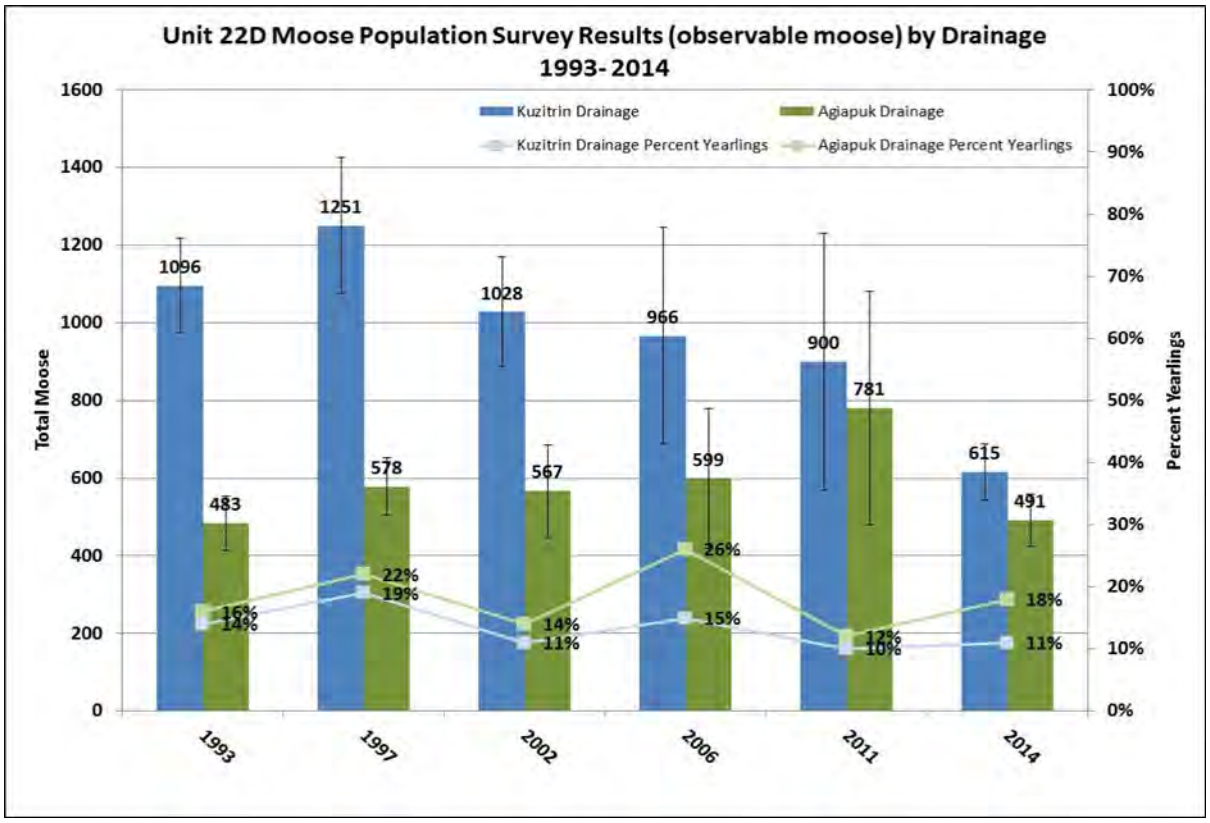


Figure 2. Unit 22D moose population survey results (Figure from Dunker 2016, pers. comm.).

Cultural Knowledge and Traditional Practices

The Seward Peninsula has been inhabited by humans for at least 12,000 years. The Inupiaq, Central Yup'ik, and Siberian Yupik-speaking peoples of the Bering Strait region have a deeply rooted practice of subsistence hunting, fishing, and gathering of wild resources (Ray 1984). Until the establishment of mission settlements and later, government schools, many of these groups were semi-nomadic, moving with the seasons based on the availability of wild resources. Gold was discovered in Anvil Creek in 1898, precipitating a gold rush, settlement by outsiders, and re-distribution of the local population. Major epidemics including influenza in 1918 further reshaped populations on the Seward Peninsula (Ray 1984).

The western boundary of unit 22D remainder is contiguous with the villages of Teller and Brevig Mission; both communities hunt moose within this area (Mikow et al. 2018). The present location of Teller was established in 1900 when the Bluestone Placer Mine was created 15 miles to the south. In the 2010 (U.S. Census), Teller had 229 year-round, permanent residents (U.S. Census 2010). Brevig Mission is named after the Lutheran minister who established a reindeer herd at the current town site in 1900. During the most recent census, there were 388 year-round permanent residents of Brevig Mission (U.S. Census 2010).

Moose did not start migrating into the Seward Peninsula until the 1940s, and while caribou were hunted traditionally, their numbers declined in the region in the mid-1800s (Dau 2000). Introduced reindeer were the economic base for Brevig Mission until the 1970s, a source of food and income which has since declined (Finstad 2007). Historically, people in the Seward Peninsula area hunted a variety of species, but as moose moved into the region in the mid-20th century, harvest of these animals grew.

Between May 2015 and May 2016, the most recent study period for which big game subsistence data is available for the area, 85% of Brevig Mission households and 55% of Teller households used moose (Mikow et al. 2018). The percentage of households using moose in each community in 2015-2016 was greater compared to a previous study period, 2011–2012, during which 43.3% of Brevig Mission and 30.5% of Teller households used moose (Mikow et al. 2014).

For the 2015-2016 study period, Brevig Mission households harvested 33 pounds of edible moose per capita, with 90% of the harvest occurring within unit 22D remainder. Teller households harvested 32 pounds of edible moose per capita, 27% of which were harvested from 22D remainder. For Teller, a higher percentage of households used moose than caribou, but that situation was reversed for Brevig Mission. The fall moose hunting season was most important for both communities. In Brevig mission, 85% of moose were taken in the fall, while in Teller 100% were taken in that season (Mikow et al. 2018).

Harvest History

Reported harvest remains well below levels seen in the 1980s, in part, due to more stringent hunting regulations in Unit 22D. According to the ADF&G harvest report website, 178 (133 male, 45 female) moose were harvested throughout Unit 22D in 1986, with 39.9% hunter success throughout the subunit (ADF&G 2018b). Conversely, 61 moose were harvested in Unit 22D in 2018, with 28% hunter success throughout the subunit (ADF&G 2018b, 2019). Average annual reported harvest from 2005 to 2018 was 66 moose (**Table 1**). The majority of moose taken over these years have been bulls. Residents of Unit 22 accounted for 73% of the total harvest between 2005 and 2018 (**Table 1**). In Unit 22D remainder, specifically, the average annual reported moose harvest by State residents between 2007 and 2017 was 17 moose (Dunker 2018, pers. comm.). Unit 22 residents, most of which were residents of Nome, accounted for 74% of the total reported harvest between 2013 and 2018 in Unit 22D remainder (**Table 2**).

Table 1. Reported moose harvest in Unit 22D for 2005–2018. Local resident harvest refers to harvest by residents of Unit 22 (ADF&G 2016b, ADF&G 2017, ADF&G 2018b, ADF&G 2019).

Year	Species	Local Resident Harvest	Nonlocal Resident Harvest	Total Resident Harvest	Unknown Residency Harvest	Nonresident Harvest	Total Harvest	Male	Female	Unknown
2005	Moose	47	4	51	0	6	57	56	0	1
2006	Moose	47	11	58	0	8	66	65	1	0
2007	Moose	52	14	66	1	5	72	70	2	0
2008	Moose	42	10	52	1	7	60	57	1	2
2009	Moose	54	15	69	0	7	76	74	1	1
2010	Moose	39	12	51	3	4	58	55	2	1
2011	Moose	50	19	69	1	9	79	76	2	1
2012	Moose	50	12	62	1	6	69	66	2	1
2013	Moose	45	10	55	1	3	59	58	1	0
2014	Moose	43	11	54	2	8	64	61	2	1
2015	Moose	54	12	66	1	5	72	69	0	3
2016	Moose	52	8	60	0	3	63	63	0	0
2017	Moose	59	12	71	0	0	71	69	0	2
2018	Moose	47	14	61	0	0	61	61	0	0
Average:		**49**	**12**	**60**	**1**	**5**	**66**	**64**	**1**	**1**
Total:		**679**	**164**	**843**	**11**	**71**	**925**	**899**	**14**	**12**

Table 2. Unit 22D remainder moose harvest, 2013–2018, according to ADF&G Unit 22D GM000 harvest reports (ADF&G 2019). Local harvest refers to harvest by residents of Unit 22.

		Local harvest		Non-local harvest	
Year	Total Harvest	Number of moose	% of total	Number of moose	% of total
2013	12	7	58%	5	42%
2014	16	11	69%	5	31%
2015	22	17	77%	5	23%
2016	22	16	73%	6	27%
2017	35	28	80%	7	20%
2018	33	25	76%	8	24%

Effects of the Proposal

If this proposal is adopted, it would limit subsistence opportunity for Federally qualified subsistence users in Unit 22D remainder, but it would also help to ensure that users have the moose resource available for future generations. Adoption of this Proposal would eliminate cow harvest, which, due to low moose densities in the area and a declining population that is below State management goals, could provide benefits to the moose population in the unit.

OSM CONCLUSION

Support Proposal WP20-39.

Justification

The moose population in Unit 22D remainder is currently below State management goals and declined at a rate of 14% annually between 2011 and 2014. In addition, the current estimated annual harvest is above sustainable levels. Cow hunts are typically used to reduce increasing populations that are above sustainable levels. Due to this declining population, the State has removed antlerless hunts from their regulations in Unit 22 and eliminated non-resident harvest opportunity in the area. Although eliminating the cow moose season may limit short-term subsistence opportunity for Federally qualified subsistence users, it will help to assure the long term viability of this moose population.

LITERATURE CITED

ADF&G. 2016a. State Closes Nonresident Moose Hunt in Remainder of Unit 22D. Emergency Order 05-05-16. Division of Wildlife Conservation. Nome, AK.

ADF&G. 2016b. General harvest reports. https://secure.wildlife.alaska.gov/index.cfm. Retrieved: October 26, 2016.

ADF&G. 2017. General harvest reports. https://secure.wildlife.alaska.gov/index.cfm. Retrieved: November 20, 2017.

ADF&G. 2018a. Wildlife Special Action WSA 18-03: Temporary Special Action Request. Letter of Comment to the Federal Subsistence Board. October 5, 2018.

ADF&G. 2018b. General harvest reports. https://secure.wildlife.alaska.gov/index.cfm. Retrieved: August 30, 2018.

ADF&G. 2019. General harvest reports. https://secure.wildlife.alaska.gov/index.cfm. Retrieved: March 1, 2019.

Braem, N.M., E.H. Mikow, and M.L. Kostick, eds. 2014. Chukchi Seas and Norton Sound observation network: harvest and use of wildlife resources in 9 communities in Arctic Alaska, 2012–2014. ADF&G Division of Subsistence Technical Paper No. 403. Fairbanks, AK. 797 pages.

Dau, J. 2000. Managing reindeer and wildlife on Alaska's Seward Peninsula. Polar Research 19(1), 57-62.

Dunker, W. 2016. Wildlife biologist/Area biologist. Personal communication: email. ADF&G. Nome, AK.

Dunker, W. 2017. Wildlife biologist/Area biologist. Personal communication: email. ADF&G. Nome, AK.

Dunker, W. 2018. Wildlife biologist/Area biologist. Personal communication: email. ADF&G. Nome, AK.

Dunker, W. 2019. Wildlife biologist/Area biologist. Personal communication: email. ADF&G. Nome, AK.

Finstad, G. L., Kielland, K. K., and W.S. Schneider, W. S. 2007. Reindeer herding in transition: historical and modern day challenges for Alaskan reindeer herders. Nomadic Peoples, 10(2): 31–49.

Gorn, T. 2012. Unit 22 moose management report. Pages 534–559 in P. Harper, editor. Moose management report of survey and inventory activities 1 July 2009–30 June 2011. ADF&G, Species Management Report, ADF&G/DWC/SMR-2012-5, Juneau, AK.

Gorn, T. and W. R. Dunker. 2014. Unit 22 moose management report. Pages 31-1 through 31-38 in P. Harper and Laura A. McCarthy, editors. Moose management report of survey and inventory activities 1 July 2011–30 June 2013. ADF&G, Species Management Report ADF&G/DWC/SMR-2014-6, Juneau, AK.

Mikow, E. H., Gonzalez, D., and M.L. Kostick. 2018. Subsistence Wildlife Harvests in Brevig Mission, Teller, and White Mountain, Alaska , 2015 – 2016. ADF&G Division of Subsistence Special Publication No. 2018-03. Fairbanks, AK. 42 pages.

Mikow, E., Braem, N. M., and M. Kostick, M. 2014. Subsistence Wildlife Harvests in Brevig Mission, Deering, Noatak, and Teller, Alaska, 2011-2012. ADF&G Division of Subsistence Special Publication No. 2014-02. Fairbanks, AK. 47 pages.

Nelson, R.R. 1995. Unit 22 moose survey-inventory progress report. Pages 405-419 in M.V. Hicks, editor. Management report of survey-inventory activities 1 July 1993 – 30 June 1995. Federal aid in wildlife restoration progress report, Project W-24-2, W-24-3, Study 1.0. Juneau, AK.

OSM. 2002. Staff Analysis WP02-34. Pages 12-26 in Federal Subsistence Board Meeting Materials May 13-15, 2002. Office of Subsistence Management, USFWS. Anchorage, AK. 676 pp.

OSM. 2005. Staff Analysis WSA05-01. Office of Subsistence Management, USFWS. Anchorage, AK.

OSM. 2007. Staff Analysis WP07-37. Pages 467-475 in Federal Subsistence Board Meeting Materials April 30-May 2, 2007. Office of Subsistence Management, USFWS. Anchorage, AK. 643 pp.

Ray, D.J. 1984. Bering Strait Eskimo. Pages 285–302 *in* W.C Sturtevant, ed). The handbook of North American Indians, Volume 5: Arctic. Smithsonian Institution, Washington D.C.

Seppi, B. 2018. Wildlife biologist. Personal communication: phone. BLM. Nome, AK.

SPRAC. 2016. Transcripts of the Seward Peninsula Subsistence Regional Advisory Council proceedings, March 09, 2016 in Anchorage, Alaska. Office of Subsistence Management, USFWS. Anchorage, AK.

Stern, O., E.L. Arobio, L.L. Naylor, and W.C. Thomas. 1980. Eskimos, Reindeer, and Land. University of Alaska Fairbanks – School of Agriculture and Land Resources Management Bulletin. 59: 93 pp.

U.S. Census Bureau. 2010. https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml. Retrieved: June 3, 2019.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Seward Peninsula Subsistence Regional Advisory Council

Take No Action on WP20-39. The Council voted unanimously to Take no Action on WP20-39 due to action taken on WP20-38, which provided a comprehensive approach to moose management in Unit 22D, remainder that would both protect the population and allow for subsistence use.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-39: This proposal, submitted by the Seward Peninsula Subsistence Regional Advisory Council, would revise harvest limits for the winter moose season in Unit 22D, remainder

Introduction: The proposal would change the bag limit for moose in Unit 22D Remainder from one moose to one antlered bull Dec. 1-Dec. 31.

Impact on Subsistence User: The opportunity to harvest cow moose from Unit 22D Remainder would be eliminated.

Impact on Other Users: Non-resident hunting in the area is currently closed; the proposed regulations would only apply to federally qualified subsistence users hunting on federal public lands under federal regulations. Nonfederally qualified users would not be affected.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made positive customary and traditional use findings for moose in Unit 22.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for

customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS Moose in Unit 22 is 250-300 animals.

The season and bag limit for Unit 22D Remainder is:

		Open Season (Permit/Hunt #)	
Unit/Area	Bag Limit	Resident[a]	Nonresident
22D remainder:	*One bull*	*Aug. 10 – Sept. 14*	*No Open Season*
OR	*One bull*	*Oct. 1 – Nov. 30*	*No Open Season*
OR	*One antlered bull*	*Dec. 1 – Jan. 31*	*No Open Season*

[a] Subsistence and General Hunts.

Conservation Issues: A GSPE moose population survey was last completed in 2014, at which time the observable moose estimate for GMU 22D Remainder was 491 moose (90% CI: 422-560), with 18% short yearlings. This represents a 14% annual rate of decline between 2011 and 2014. A recruitment survey completed throughout Unit 22D in the spring of 2018 estimated a recruitment rate of 11%. The population in Unit 22D remainder is likely stable or declining.

Antlerless moose hunts administered by the state require annual reauthorizing. In 2015, the Northern Norton Sound Fish and Game Advisory Committee did not reauthorize the antlerless hunt. The Board of Game eliminated the antlerless moose hunt by changing the bag limit during the Dec. 1- Dec. 31 season from “any moose” to “antlered bull”.

Enforcement Issues: There are no enforcement issues associated with this proposal.

Recommendation: The department **SUPPORTS** this proposal. The continued harvest of antlerless moose from this area may result in additional declines in abundance and is not recommended at this time.

WP20–48 Executive Summary	
General Description	Proposal WP20-48 requests alignment of Federal and State regulations for the Fortymile Caribou Herd and expanding the delegated authority of the BLM Eastern Interior Field Office manager. *Submitted by: Bureau of Land Management, Eastern Interior Field Office.*
Proposed Regulation	**Unit 20E–Caribou** *Unit 20E—~~1~~* ***up to 3*** *caribou,* ***to be announced, by*** *a joint State/Federal registration permit.* ***Fall season between Aug. 1 and Sept. 30, to be announced.*** *~~During the Aug. 10-Sep. 30 season, the harvest is restricted to 1 bull. The harvest quota for the period Aug. 10-29 in Units 20E, 20F, and 25C is 100 caribou. During the Nov. 1-Mar. 31 season, area closures or hunt restrictions may be announced when Nelchina caribou are present in a mix of more than 1 Nelchina caribou to 15 Fortymile caribou, except when the number of caribou present is low enough that fewer than 50 Nelchina caribou will be harvested regardless of the mixing ratio for the two herds~~* ~~*Aug. 10-Sept. 30*~~ ~~*Nov. 1-Mar. 31*~~. ***Winter season between Oct. 21 and Mar. 31, to be announced.*** **Unit 20F--Caribou** *Unit 20F east of the Dalton Highway and south of the Yukon River—~~1~~* ***up to 3*** *caribou,* ***to be announced, by*** *a joint State/Federal registration permit.* ***Fall season between Aug. 1 and Sept. 30, to be announced.*** *~~During the Aug. 10 - Sept. 30 season, the harvest is restricted to 1 bull. The harvest quota for the period Aug. 10 - 29 in Units 20E, 20F, and 25C, is 100 caribou.~~* ~~*Nov. 1-Mar. 31.*~~ ***Winter season between Oct. 21 and Mar. 31, to be announced.***

WP20–48 Executive Summary	
	Unit 25C—Caribou *Unit 25C—~~1~~* ***up to 3*** *caribou,* ***to be announced, by*** *a joint Federal/State registration permit.* ~~*Aug. 10-Sept. 30*~~ ***Fall season between Aug. 1 and Sept. 30, to be announced.*** ~~*During the Aug. 10 - Sept. 30 season the harvest is restricted to 1 bull. The harvest quota between Aug. 10 - 29 in Units 20E, 20F, and 25C is 100 caribou.*~~ ~~*Nov. 1-Mar. 31.*~~ ***Winter season between Oct. 21 and Mar. 31, to be announced.*** This language would be issued to the in-season manager (BLM Eastern Interior Field Office Manager) via a delegation of authority letter and added to the table at the back of the Federal regulations handy-dandy booklet: **For Units 25C, 20E, 20F – Caribou: Open and close seasons and set harvest limits, including any sex restrictions**.
OSM Conclusion	**Support**
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Support**
Written Public Comments	**None**

STAFF ANALYSIS
WP20-48

ISSUES

Wildlife Proposal WP20-48, submitted by the Bureau of Land Management (BLM), Eastern Interior Field Office, requests alignment of Federal and State regulations for the Fortymile Caribou Herd and expanding the delegated authority of the BLM Eastern Interior Field Office manager.

DISCUSSION

Harvest of Fortymile caribou in Units 20E, 25C, and a portion of Unit 20F is managed through a joint State/Federal registration permit. The proponent states Federal regulations in these units are currently more restrictive than State regulations resulting in confusion among hunters. The proponent's intent is to align and adapt Federal regulations with State regulations, which can change frequently, to increase opportunity for Federally qualified subsistence users and reduce regulatory complexity and user confusion. The proponent states this proposal would also provide the flexibility and responsiveness needed to manage the rapidly increasing Fortymile Caribou Herd (FCH), which may be reaching carrying capacity.

The BLM Eastern Interior Field Office manager currently has delegated authority to modify or restrict harvest limits and season dates for caribou in Unit 20E and 25C. This proposal requests adding authority to set sex restrictions in these units and delegating authority to modify harvest limits, season dates, and set sex restrictions for a portion of Unit 20F.

Existing Federal Regulation

Unit 20E−Caribou

Unit 20E—1 caribou; a joint State/Federal registration permit is required.	*Aug. 10-Sept. 30*
During the Aug. 10-Sep. 30 season, the harvest is restricted to 1 bull. The harvest quota for the period Aug. 10-29 in Units 20E, 20F, and 25C is 100 caribou. During the Nov. 1-Mar. 31 season, area closures or hunt restrictions may be announced when Nelchina caribou are present in a mix of more than 1 Nelchina caribou to 15 Fortymile caribou, except when the number of caribou present is low enough that fewer than 50 Nelchina caribou will be harvested regardless of the mixing ratio for the two herds.	*Nov. 1-Mar. 31.*

Unit 20F--Caribou

Unit 20F east of the Dalton Highway and south of the Yukon River—1 caribou; a joint State/Federal registration permit is required.	*Aug. 10-Sept. 30* *Nov. 1-Mar. 31.*
During the Aug. 10 - Sept. 30 season, the harvest is restricted to 1 bull. The harvest quota for the period Aug. 10 - 29 in Units 20E, 20F, and 25C, is 100 caribou.	

Unit 25C—Caribou

Unit 25C—1 caribou; a joint Federal/State registration permit is required.	*Aug. 10-Sept. 30*
During the Aug. 10 - Sept. 30 season, the harvest is restricted to 1 bull. The harvest quota between Aug. 10 - 29 in Units 20E, 20F, and 25C is 100 caribou.	*Nov. 1-Mar. 31.*

Proposed Federal Regulation

Unit 20E−Caribou

Unit 20E—~~1~~ ***up to 3*** *caribou,* ***to be announced, by*** *a joint State/Federal registration permit.*	*~~Aug. 10-Sept. 30~~* ***Fall season between Aug. 1 and Sept. 30, to be announced.***
~~During the Aug. 10-Sep. 30 season, the harvest is restricted to 1 bull. The harvest quota for the period Aug. 10-29 in Units 20E, 20F, and 25C is 100 caribou. During the Nov. 1-Mar. 31 season, area closures or hunt restrictions may be announced when Nelchina caribou are present in a mix of more than 1 Nelchina caribou to 15 Fortymile caribou, except when the number of caribou present is low enough that fewer than 50 Nelchina caribou will be harvested regardless of the mixing ratio for the two herds~~	*~~Nov. 1-Mar. 31~~.* ***Winter season between Oct. 21 and Mar. 31, to be announced.***

Unit 20F--Caribou

Unit 20F east of the Dalton Highway and south of the Yukon River~~—1~~ ***up to 3*** *caribou,* ***to be announced, by*** *a joint State/Federal registration permit.*	*~~Aug. 10-Sept. 30~~* ***Fall season between Aug. 1 and Sept. 30, to be announced.***
~~During the Aug. 10 - Sept. 30 season, the harvest is restricted to 1 bull. The harvest quota for the period Aug. 10 - 29 in Units 20E, 20F, and 25C, is 100 caribou.~~	*~~Nov. 1-Mar. 31.~~* ***Winter season between Oct. 21 and Mar. 31, to be announced.***

Unit 25C—Caribou

Unit 25C—~~1~~ ***up to 3*** *caribou,* ***to be announced, by*** *a joint Federal/State registration permit.*	*~~Aug. 10-Sept. 30~~* ***Fall season between Aug. 1 and Sept. 30, to be announced.***
~~During the Aug. 10 - Sept. 30 season the harvest is restricted to 1 bull. The harvest quota between Aug. 10 - 29 in Units 20E, 20F, and 25C is 100 caribou.~~	*~~Nov. 1-Mar. 31.~~* ***Winter season between Oct. 21 and Mar. 31, to be announced.***

This language would be issued to the in-season manager (BLM Eastern Interior Field Office Manager) via a delegation of authority letter and added to the table at the back of the Federal regulations handy-dandy booklet:

For Units 25C, 20E, 20F – Caribou: Open and close seasons and set harvest limits, including any sex restrictions.

Existing State Regulation

Note: State regulations for the FCH change annually within the sideboards of the codified regulations. The codified regulations are included in this analysis because the proponent requests aligning Federal regulations with the State's codified regulation.

Codified Regulations (5 AAC 85.025)

Unit 20E−Caribou

Residents – 1 caribou per lifetime by youth drawing permit only; up to 30 total permits may be issued	*Aug. 1-Aug. 21*
OR	
Residents – up to 3 caribou by registration permit only	*Aug. 1-Sep. 30*
OR	*Oct. 21-Mar. 31*
Residents – 1 caribou by registration permit only, during a season for up to three days that may be announced by emergency order within a portion of the area during the period Oct. 20-Nov. 30.	*Season to be announced by emergency order*
OR	
Residents – 1 caribou by targeted permit only, during a season that may be announced by emergency order within a portion of the area during Dec. 1-Mar. 31	*Season to be announced by emergency order.*

Nonresidents – 1 caribou per lifetime by youth drawing permit only; up to 30 total permits may be issued	*Aug. 1-Aug. 21*
OR	
Nonresidents – 1 bull by registration permit only.	*Aug. 10-Sep. 30*

Unit 20F--Caribou

Units 20(B) and 20F, those portions south of the Yukon River, and north and east of a line formed by the Richardson Highway from the Unit 20(D) boundary to its intersection with the Steese Highway, north along the Steese Highway to its intersection with the Elliot Highway, then northwest along the Elliot Highway to its intersection with the Dalton Highway, then north along the Dalton Highway to the Yukon River.	
Residents – 1 caribou per lifetime by youth drawing permit only; up to 30 total permits may be issued	*Aug. 1-Aug. 21*
OR	
Residents – up to 3 caribou by registration permit only	*Aug. 1-Sep. 30*
OR	*Oct. 21-Mar. 31*
Residents – 1 caribou by targeted permit only, during a season that may be announced by emergency order within a portion of the area during Dec. 1-Mar. 31	*Season to be announced by emergency order*
Nonresidents – 1 caribou per lifetime by youth drawing permit only; up to 30 total permits may be issued	*Aug. 1-Aug. 21*
OR	
Nonresidents – 1 bull by registration permit only.	*Aug. 10-Sep. 30*

Unit 25C--Caribou

Residents – 1 caribou per lifetime by youth drawing permit only; up to 30 total permits may be issued	*Aug. 1-Aug. 21*
OR	
Residents – up to 3 caribou by registration permit only	*Aug. 1-Sep. 30*
OR	*Oct. 21-Mar. 31*
Residents – 1 caribou by targeted permit only, during a season that may be announced by emergency order within a portion of the area during Dec. 1-Mar. 31	*Season to be announced by emergency order*
Nonresidents – 1 caribou per lifetime by youth drawing permit only; up to 30 total permits may be issued	*Aug. 1-Aug. 21*
OR	
Nonresidents – 1 bull by registration permit only.	*Aug. 10-Sep. 30*

2019/20 Regulations

Unit 20E−Caribou

Residents – 1 caribou per lifetime, youth hunt by permit only	*YC831**	*Aug. 1-Aug. 21*
OR		
Residents – 1 caribou by permit. May not possess RM865 at the same time as RC860.	*RC860*	*Aug. 11-Sep. 30*
OR		
Residents – 1 caribou by permit	*RC867*	*Oct. 27-Mar. 31*
Residents – 1 caribou by permit	*AC999*	*May be announced*
Nonresidents – 1 caribou per lifetime, youth hunt by permit only	*YC831**	*Aug. 1-Aug. 21*
OR		
Nonresidents – 1 bull by permit. May not possess RM865 at the same time as RC860.	*RC860*	*Aug. 11-Sep. 30*

Unit 20F--Caribou

Unit 20F east of the Dalton Highway and south of the Yukon River		
Residents – 1 caribou by permit.	*RC860*	*Aug. 11-Sep. 30*
OR		
Residents – 1 caribou by permit	*RC867*	*Oct. 27-Mar. 31*
Nonresidents – 1 bull by permit	*RC860*	*Aug. 11-Sep. 30*

Unit 25C--Caribou

Residents – 1 caribou per lifetime, youth hunt by permit only	*YC831**	*Aug. 1-Aug. 21*
OR		
Residents – 1 caribou by permit.	*RC860*	*Aug. 11-Sep. 30*
OR		
Residents – 1 caribou by permit	*RC867*	*Oct. 27-Mar. 31*
Residents – 1 caribou by permit	*AC999*	*May be announced*
Nonresidents – 1 caribou per lifetime, youth hunt by permit only	*YC831**	*Aug. 1-Aug. 21*
OR		
Nonresidents – 1 bull by permit.	*RC860*	*Aug. 11-Sep. 30*

** The youth hunt is only open in portions of Units 20E and 25C*

Extent of Federal Public Lands/Waters

Unit 20E is comprised of 27% Federal public lands and consist of 20% National Park Service (NPS) and 7% BLM managed lands.

Unit 20F east of the Dalton highway and south of the Yukon River (Unit 20F SE) is comprised of 6% Federal public lands, which consist of 5.7% U.S. Fish and Wildlife Service (USFWS) and 0.3% BLM managed lands.

Unit 25C is comprised of 73% Federal public lands and consist of 63% BLM, 9% NPS, and 2% USFWS managed lands.

Customary and Traditional Use Determinations

Residents of Units 20D, 20E, 20F, 25, 12 (north of Wrangell-St. Elias National Preserve), Eureka, Livengood, Manley, and Minto have a customary and traditional use determination for caribou in Unit 20E and 25C.

Residents of Units 20F, 25D, and Manley Hot Springs have a customary and traditional use determination for caribou in Unit 20F.

Regulatory History

Since the inception of the Federal Subsistence Management Program in 1990, Unit 20E and 25C caribou hunting regulations have targeted the FCH and often coincided whereas Unit 20F SE regulations targeted the White Mountain Herd until 2012 when the FCH expanded its range into that hunt area.

In 1990, Federal regulations were adopted from State regulations. Unit 20E consisted of two hunt areas. Both had seasons from Aug. 10-Sept. 30 and Dec. 1-Feb. 28 with a one caribou harvest limit. Unit 20F remainder (of which Unit 20F SE was then a part), had a caribou season from Aug. 10-Sept. 30 with a one bull harvest limit. Unit 25C had caribou seasons from Aug. 10-Sept. 20 and Feb. 15-Mar. 15 with a one bull harvest limit.

In 1994, the Federal Subsistence Board (Board) adopted Proposal P94-73 with modification to create a unified regulation for the Fortymile caribou herd in Units 20E and 25C southeast of the Steese Highway. Specifically, the Board combined the Unit 20E hunt areas, changing the harvest limit to one bull by Federal registration permit. The Board separated Unit 25C into two hunt areas: Unit 25C southeast and Unit 25C northwest of the Steese highway. Caribou seasons and harvest limits for the Unit 25C southeast hunt area were directed at the FCH and mirrored those for Unit 20E. The Board also determined that harvest quotas for the FCH would be announced annually in coordination with the Alaska Department of Fish and Game (ADF&G) to help recover the caribou population.

Also in 1994, the Board adopted Proposal P94-74 to close the caribou season in Unit 20F south of the Yukon River to protect the White Mountain Caribou Herd. This change modified hunt area descriptors, resulting in Unit 20F SE becoming part of Unit 20F south of the Yukon River in 1994.

In 1995, the FCH Harvest Management Coalition (Coalition) formed to develop recommendations for managing the herd. Representatives from seven Fish and Game Advisory Committees (ACs), the Eastern Interior Alaska Subsistence Regional Advisory Council (Eastern Interior Council), the Yukon Fish and Wildlife Management Board, the Yukon government, and Tr'ondek Hwech'in (First Nation) comprise the Coalition. Staff from BLM, NPS, USFWS, Office of Subsistence Management (OSM), and ADF&G provide technical support. The Coalition completed a Fortymile Caribou Herd Management Plan in 1995, which guided FCH management from 1995-2000 (HMC 2012). The plan recommended establishing a harvest quota of 150 bulls per year (HMC 2012).

Also in 1995, the Board adopted Proposal P95-56 with modification to change Unit 20E winter season dates from Dec. 1-Feb. 28 to Nov. 15-Feb. 28 to provide additional subsistence harvest opportunity. The Board and the Alaska Board of Game (BOG) also established a harvest quota of 150 caribou as recommended by the FCH Management Plan (HMC 2012). This specific quota was not reflected in Unit 25C southeast Federal regulations.

In 1996, the Board adopted Proposal P96-60 with modification to open a season in Unit 20F south of the Yukon River to provide additional subsistence harvest opportunity. Season dates were Dec. 1-Dec. 31 with a one caribou harvest limit.

In 1999, the BOG changed the fall harvest allocations of the FCH for Units 20D (no Federal lands), 20E, and 25C. Units 20D, 20E, and 25C received allocations of 15 bulls, 55 bulls and 30 bulls, respectively, for a total fall harvest allocation of 100 bulls. The combined fall and winter State/Federal harvest quota remained 150 bulls.

In 1999, the Board adopted Proposal P99-55 with modification to specify fall harvest quotas for Unit 20E (55 bulls) and 25C southeast (30 bulls) to align with the recently adopted State regulations and to abide by the FCH Management Plan. The Board delegated authority to the BLM Eastern Interior field office manager to announce season closures after consultation with the NPS and ADF&G.

From 1999-2001, the Coalition updated the FCH Management Plan in response to a growing herd. The plan recommended increasing harvest quotas to expand harvest opportunities. The BOG and the Board both endorsed the plan, adopting higher harvest quotas (HMC 2012). The fall State/Federal harvest quota increased to 320 caribou in Unit 20E and 225 caribou in Unit 25C remainder. The combined harvest quotas for the winter season in these units was 210 caribou.

In 2001, the Board adopted Proposals WP01-38 with modification and WP01-40 to liberalize caribou hunting regulations in Units 20E and 25C due to increases in the FCH. Unit 25C southeast became part of Unit 25C remainder. The Board extended the winter season in Units 20E and 25C remainder from Nov. 15-Feb. 28 to Nov. 1-Feb. 28 and changed the harvest limit from one bull to one caribou. The Board also increased harvest quotas as described above.

Also in 2001, the Board adopted Proposal WP01-37, modifying caribou hunting regulations in Unit 20F to align with recently adopted State regulations, reduce user confusion, and provide additional subsistence harvest opportunity. Unit 20F south of the Yukon River became Unit 20F, east of the Dalton Highway and south of the Yukon River (Unit 20F SE). The season was Aug. 10-Sept. 20 and Nov. 1-Mar. 31 with a one caribou harvest limit. A State registration permit was required during the winter season.

In 2002, the Board adopted Proposal WP02-42 with modification to increase harvest quotas in Units 20E and 25C remainder to align with State harvest quotas and increase opportunity for Federally qualified subsistence users as the FCH population was increasing. The combined State/Federal harvest quotas in Unit 20E and 25C remainder increased to 900 caribou and 600 caribou, respectively. The Board also specified that area closures or hunt restrictions may be announced for Unit 20E during the winter season when Nelchina caribou are present in a mix greater than 1 Nelchina caribou:15 Fortymile caribou except when less than 50 Nelchina caribou would be harvested regardless of the mixing ratio. This was to prevent overharvest from the Nelchina Caribou Herd.

In 2004, the Board adopted Proposal WP04-79, specifying that cow caribou may be taken only from Nov. 1-Mar. 31 in Unit 20F SE to promote calf production and herd growth in the White Mountain Caribou Herd and to better align Federal and State regulations.

In 2010, the BOG adopted Proposal 14 to implement recommendations from the Coalition to mitigate safety issues associated with heavy roadside harvests. This included changing the opening date of the fall season from Aug. 10 to Aug. 29 to allow the herd to disperse away from roads, and changing the fall harvest limit to bulls-only to force hunters to more carefully identify an animal and its surrounding before shooting (HMC 2012).

Also in 2010, the Board adopted Proposal WP10-105 with modification to delegate authority to the BLM Eastern Interior field office manager to modify or restrict harvest limits, season dates, and methods and means for caribou in Units 20E and 25C via delegation of authority letter only (stricken from unit specific regulations). The Board also intended for the BLM in-season manager to consult with ADF&G, OSM, USFWS, NPS, and the Chairs of the affected Subsistence Regional Advisory Councils prior to taking any actions. Delegating authority enabled State and Federal in-season managers to work together to reduce heavy roadside harvest as the FCH population was stable but not increasing. The Board also specified that harvest in Units 20E and 25C remainder would be restricted to one bull during the fall season and that harvest between Aug. 10 and Aug. 29 would not exceed 100 caribou. The Board intended these harvest restrictions to help grow the FCH population and to ensure the overall harvest quota was not met before the State hunting season opened.

In 2012, the Board adopted Proposal WP12-74, aligning caribou seasons, harvest limits, permit requirements, and harvest quotas in Units 20E, 20F SE, and 25C, resulting in Unit 25C becoming a single hunt area. Unit 20F SE had historically been managed for the White Mountains Caribou Herd, but the FCH had expanded its range into the area. Season dates were Aug. 10-Sept. 30 and Nov. 1-Mar. 31 with a one caribou harvest limit, although during the Aug. 10-Sept. 30 season, harvest was

restricted to one bull. The Board required a joint State/Federal registration permit in all three of the hunt areas, and specified the harvest quota from Aug. 10-29 as 100 caribou. However, Unit 20E maintained restrictions concerning the Nelchina caribou herd. These regulation changes provided more flexibility to managers, increased harvest opportunity for Federally qualified subsistence users, and supported efforts of the FCH Management Coalition, which also updated its harvest plan in 2012, effective 2012-2018 (HMC 2012).

In 2013, the BOG adopted Proposal 177 as amended to establish a targeted hunt (limited registration hunt) and a youth permit hunt for the FCH (Gross 2015). The intent of the targeted hunt was to allow a few hunters to harvest caribou along the Steese or Taylor highways when large numbers of caribou are present and the unlimited registration permit hunt (RC867) closes because the harvest quota may be exceeded (Gross 2015). The BOG established the youth hunt to provide opportunity for youth hunters in accordance with the BOG's legal mandates (Gross 2015).

In 2018, the BOG adopted Proposal 166 with ADF&G's modification to modify the hunt structure for the Fortymile herd, including longer seasons and higher harvest limits. ADF&G recommended modifying the State's codified regulations by changing the opening date for the youth hunt and the resident fall registration permit hunt from Aug. 10 to Aug. 1, changing the opening date for the resident winter registration permit hunt from Dec. 1 to Oct. 21, changing the resident harvest limit from one caribou to up to three caribou, and changing the closing date for the nonresident hunt from Sept. 20 to Sept. 30 (ADF&G 2018a). These changes allow ADF&G the flexibility to annually adjust seasons and harvest limits for each zone within the season dates and harvest limits specified in the codified regulations.

Current Events Involving the Species

At the Eastern Interior Council's winter 2019 meeting, the BLM Eastern Interior Field Office (the proponent for WP20-48) expressed intentions of also submitting a special action request for the FCH for the 2019/20 regulatory year (EIRAC 2019). The special action request would be similar to this proposal with the overall intention of aligning Federal and State regulations and expanding in-season management flexibility. Council members and BLM staff thoroughly discussed changes to Federal regulations for the FCH, and the Council voted to support the special action request and WP20-48 as presented by BLM staff during its meeting (EIRAC 2019).

The BLM Eastern Interior Field Office submitted Temporary Wildlife Special Action WSA19-06 in May 2019. During a teleconference in July 2019, the Board voted unanimously to approve WSA19-06 as it provides management flexibility to Federal managers, allowing in-season alignment of State and Federal regulations for the complex management of the FCH. The Board also noted support by the Eastern Interior Council and the State of Alaska.

Biological Background

The Coalition identified the following management objectives for the FCH (HMC 2012):

- Increase the population by approximately 2-3% annually between 2012 and 2018
- Increase the harvest to 1,000-4,000 annually between 2012 and 2018
- Achieve a population of 50,000-100,000 caribou
- Achieve harvest of 1,000-15,000 caribou
- Manage Alaska harvest to provide at least 14 days of hunting during each of the fall and winter seasons to ensure reasonable opportunity for State and Federally qualified subsistence hunters
- Manage Alaska harvest to provide at least 7 days of hunting during the fall season for nonresident hunters

State management objectives for the FCH include (Gross 2015):

- Provide conditions for the FCH to grow at an annual rate of 5-10%, until population indices indicate the herd is becoming nutritionally stressed, to provide increased caribou hunting and viewing.
- Manage for a herd size of 50,000-100,000 caribou, unless nutrition indices indicate a lower sustainable limit.
- Manage the herd to sustain an annual harvest of 1,000-15,000 caribou.
- Maintain an October bull:cow ratio of at least 35 bulls:100 cows.

The FCH's range and distribution have expanded and contracted over time (Gross 2015). Generally, the FCH ranges across Units 20 and 25C in eastern interior Alaska as well as west-central Yukon Territories (**Map 1**). During the 1920s, the FCH's range encompassed approximately 85,000 mi^2 but declined to approximately 35,000 mi^2 by the mid-1950s (Skoog 1956). The high 1920s estimate could have included some Nelchina and Porcupine herd caribou (Valkenburg et al. 1994). Since the 1970s, the FCH's range has remained approximately 19,300 mi^2 (Gross 2015). However, since 2001, the herd has been expanding its range, possibly because of increased herd size. In 2012, the FCH expanded into the White Mountains of Unit 20F SE, which was part of its historic range. The White Mountains herd also resides in Unit 20F, and managers anticipate that the FCH will eventually absorb the White Mountains Herd (HMC 2012). The FCH also mixes with the Nelchina herd during winter in Unit 20E (**Map 1**).

Similar to other caribou herds in Alaska, the FCH's population has fluctuated over time (Gross 2015). During the 1920s, the FCH was the largest caribou herd in Alaska with an estimated population of 260,000-500,000 caribou (Gross 2015, Boertje et al. 2012). These coarse estimates may have counted some Nelchina caribou, although "the FCH was undoubtedly considerably larger in the 1920s than since that time" (Valkenburg et al. 1994, p. 17). The FCH likely attained such high and unsustainable abundance due to the unusual scarcity of wolves during that time (possibly because of diseases introduced by sled dogs) (Boertje et al. 2012). The FCH then declined during the 1930s to <20,000 caribou, likely because of reduced nutrition from overabundance and emigration (Skoog 1956, Boertje et al. 2012). By the 1950s, the herd had recovered to 50,000 caribou, remaining relatively stable

throughout the 1960s. A Federal predator control program that began in 1947 likely aided herd recovery (Gross 2015).

By 1973, the FCH had declined to an estimated 5,740-8,610 caribou, likely due to high harvests, unfavorable weather, and wolf predation, resulting in contraction of its historical range. The FCH population began increasing after 1976, likely due to favorable weather conditions, reduced harvests, and a natural decline in wolf numbers (Valkenburg et al. 1994, Gross 2015). The FCH grew slowly during the 1980s, reaching about 20,000 caribou in 1990 (HMC 2012). The herd remained stable for several years due to low calf survival, and then continued growing from 1997-present (**Figure 1**) (Gross 2015, ADF&G 2018a). The substantial population increases since 1997 are attributed to intensive private wolf trapping efforts, nonlethal predator management, favorable weather conditions, and conservative harvest rates (<2% of herd size annually) (HMC 2012, Boertje et al. 2012). However, Boertje et al. (2017) concluded too few wolves were affected by wolf control efforts to have a measurable effect on FCH abundance.

ADF&G attempts annual photocensus counts of the FCH during the summer when caribou tend to be tightly aggregated. However, photocensus counts are not possible in some years due to weather, smoke from wildfires, loosely aggregated caribou, or caribou occupying areas below treeline, which obscures counting (Gross 2015, ADF&G 2019b). The most recent FCH population estimate (2017) was 71,425 caribou, which is well within management objectives and represents a 20,000 caribou increase from the last photocensus in 2010 (**Figure 1**) (Gross 2015, ADF&G 2018a). ADF&G suspects the FCH population remained stable in 2018 due to low reproduction and slightly above average calf mortality (EIRAC 2019).

ADF&G also conducts fall composition surveys annually to estimate calf:cow and bull:cow ratios. Between 1985 and 2018, calf:cow ratios averaged 30 calves:100 cows, ranging from 16-41 calves:100 cows (**Figure 2**). Over the same time period, bull:cow ratios averaged 44 bulls:100 cows, ranging from 27-59 bulls:100 cows (**Figure 2**) (Gross 2015, ADF&G 2019b). Bull:cow ratios met State management objectives in all years except 1989 and 2014. However, Gross (2015) attributes the lower bull:cow ratio in 2014 to uneven distribution of bulls in the herd rather than an actual change in their proportion.

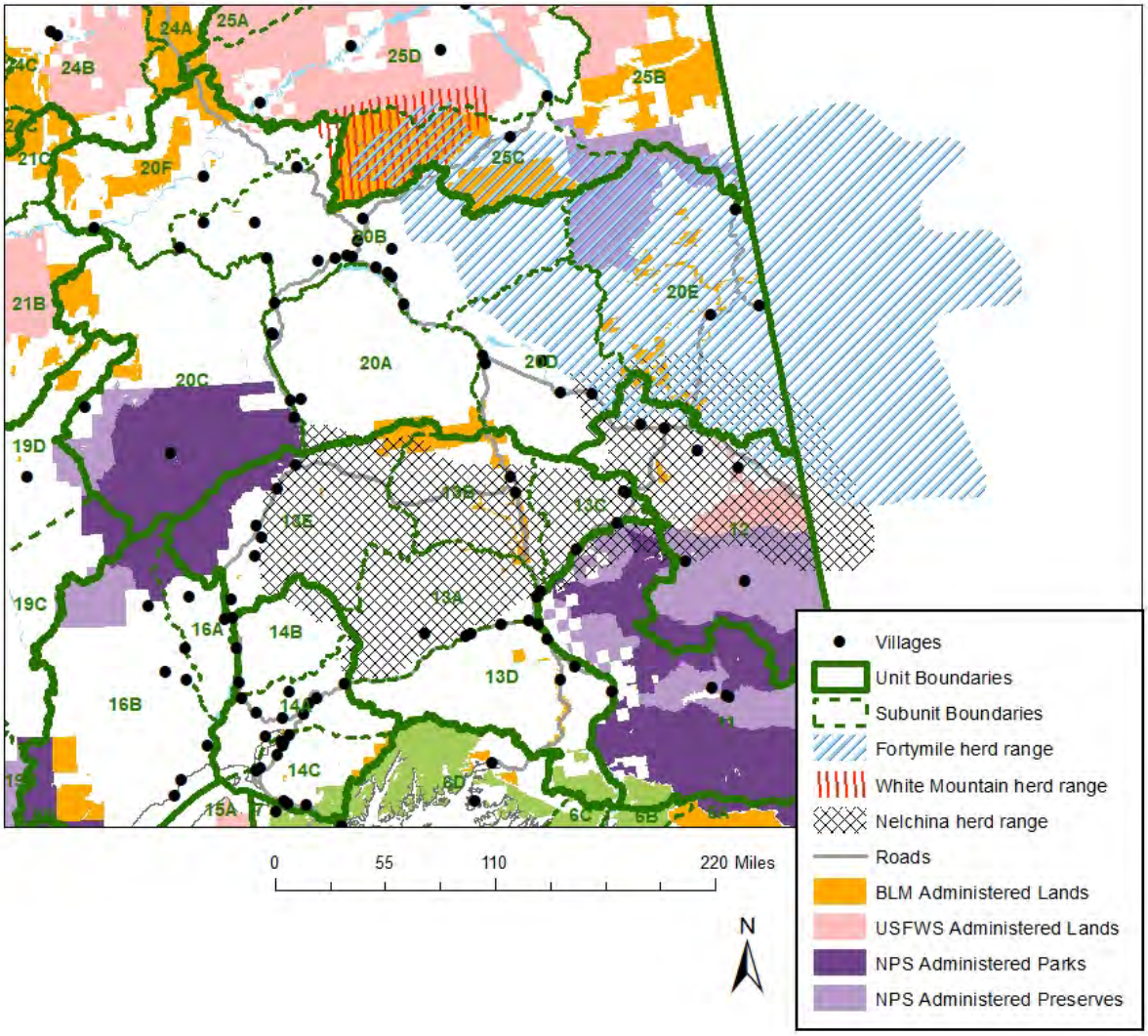
Parturition (birth) rates, particularly those of 3-year-old cows, provide a useful index to assess herd nutrition (Boertje et al. 2012, 2016, Gross 2015). Caribou usually first give birth at 3-years of age, which is influenced by their weight and previous years' nutrition (ADF&G 2019b). Thus, the fewer parturient 3-year-old cows, the more nutritionally stressed the caribou herd is likely to be. Boertje et al. (2012) determined a 5-year moving average of 3-year-old cow parturition rates of <55% as a threshold for indicating nutritional stress, potential overgrazing, and justification for liberalizing harvests. However, liberalizing harvest because of low parturition rates is only justifiable when a caribou herd is increasing (Boertje et al. 2012). Annual fluctuations in parturition rates may also be explained by changes in distribution. However, Boertje et al. (2012) also cautions that low parturition rates could occasionally result from extended adverse weather rather than overgrazing.

ADF&G measures parturition rates by tracking known-aged radio-collared cows (ADF&G 2018b). Between 1997 and 2018, the 5-year moving average of 3-year-old cow parturition rates (parturition rate) in the FCH has declined substantially (**Figure 3**). Peaking at 94% in 2000, the FCH parturition rate declined to 66% in 2005, then remained fairly stable until 2011. Since 2011, the parturition rate has hovered around the 55% threshold, dipping below it in 2016 and 2018, indicating nutritional stress is affecting the FCH (**Figure 3**) (Gross 2015, ADF&G 2019b).

Additionally, Boertje et al. (2012) note changes in the FCH's distribution between 1990 and 2010, suggesting the FCH may be overgrazing its core summer habitat. (The FCH forage mostly in tundra in the summer and in taiga in the winter). For example, during the summer of 2008, the FCH moved into spruce-moss taiga rather than onto its usual upland tundra. They also note the FCH's rapid range expansion may indicate localized overgrazing of previously used habitats. Widespread overgrazing of summer range may be the single factor most likely to cause a pronounced and prolonged decline in caribou herd nutrition and abundance (Bergerud et al. 2008 as cited in Boertje et al. 2012). Conversely, as of 2004, the condition of the FCH's winter range appeared in excellent condition based on analysis of fecal samples, and was likely not limiting growth of the FCH (Gross 2015).

Several studies describe wolf predation as the primary factor limiting herd growth from 1996-2000 (Boertje and Gardner 1998, 1999, 2000; Gardner 2001 as cited in Gross 2015), and Gross (2015) stated it continues to influence the FCH. Between 2004 and 2017, ADF&G conducted wolf control in Units 12, 20B, 20D, 20E, and 25C to benefit the FCH (ADF&G 2019b, Gross 2015). During this time, 1800 wolves were removed from the area, although the estimated wolf population remained relatively stable at 235-451 wolves (380 wolves in 2004 and 391 wolves in 2017) (ADF&G 2019b). ADF&G suspended the program in 2018 to evaluate the effects of predator control on the FCH and wolves in the area (ADF&G 2019b). Boertje et al. (2017) found wolf predation to be a predominant cause of FCH mortality, but concluded that herd size is likely a function of favorable nutrition and weather.

Possible land disposal by the Alaska Department of Natural Resources for residential and commercial development within key habitat and hunt areas of the FCH have raised concerns for the health of the FCH and its habitat. The Coalition recommended removing these sites from consideration (HMC 2012).



Map 1. Approximate ranges of the Fortymile, Nelchina, and White Mountain caribou herds. The ranges of caribou herds contract and expand over time. Since 2012, the Fortymile herd has also occupied portions of Unit 20F.

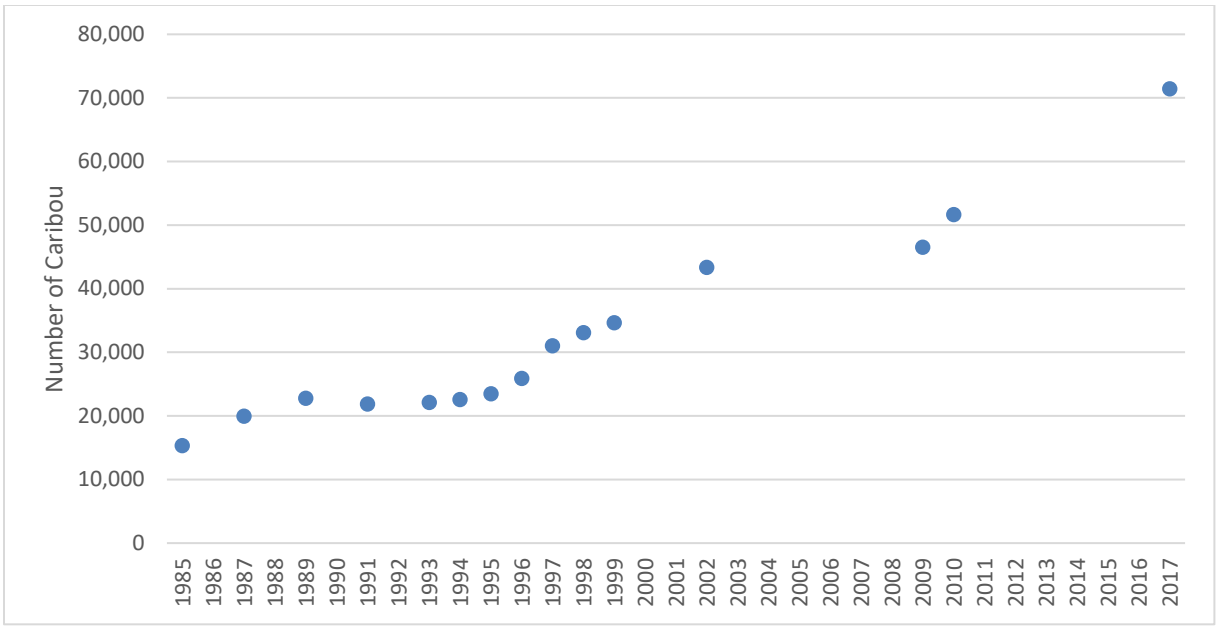


Figure 1. Population estimates for the Fortymile Caribou Herd (Gross 2015, ADF&G 2018a). Estimates are minimum counts from aerial photocensuses.

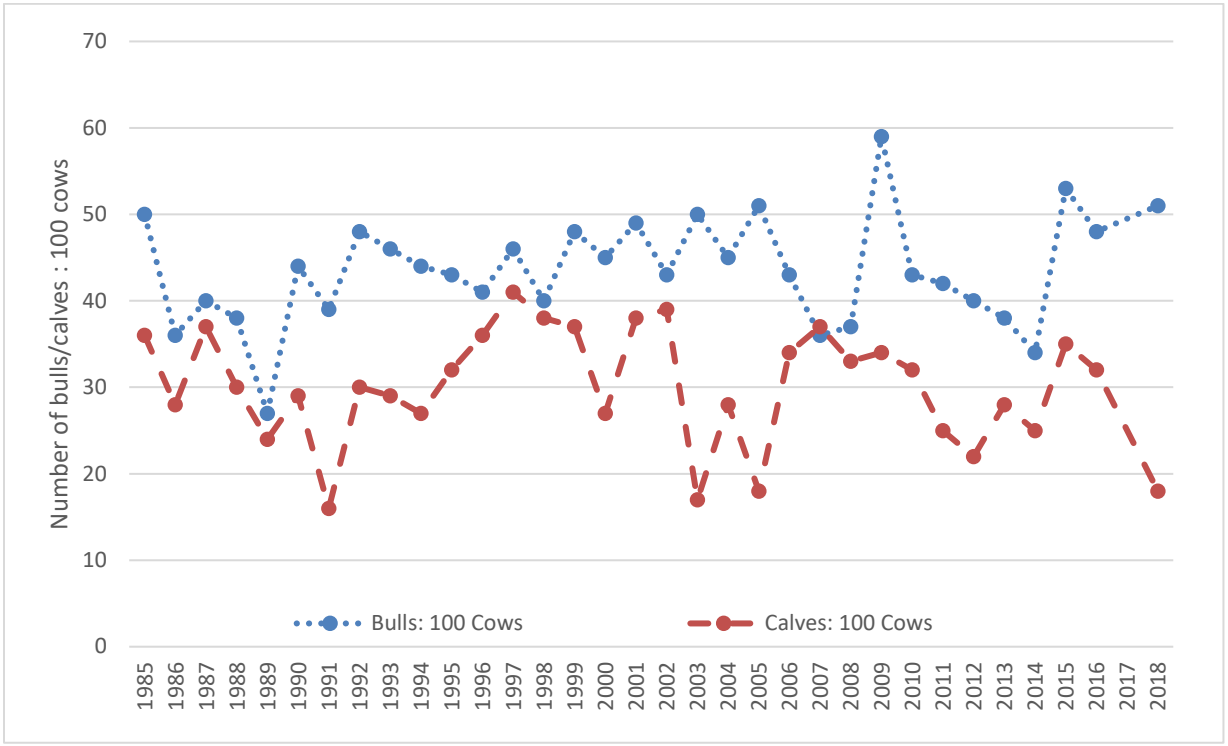


Figure 2. Bull:cow and calf:cow ratios for the Fortymile Caribou Herd (Gross 2015, ADF&G 2019b).

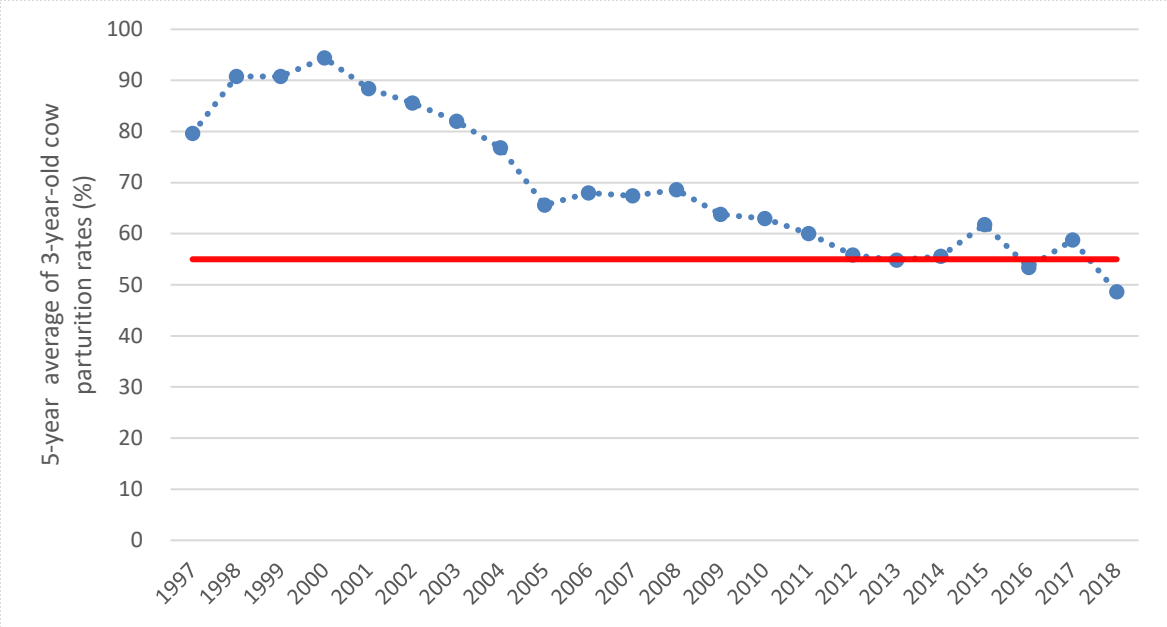


Figure 3. 5-year moving average of 3-year-old cow parturition rates for the Fortymile caribou herd. Rates <55% are considered the threshold indicating that nutritional stress may be occurring within the herd (Gross 2015, ADF&G 2019b).

Cultural Knowledge and Traditional Practices

Only rural residents of the wildlife management units and/or communities described in **Table 1** are eligible to harvest caribou in Units 20E, 20F, and/or 25C during Federal seasons. About 5,300 people live in these areas (**Table 2**).

These villages are culturally affiliated with Koyukon, Gwich'in, Han, Tanacross, and Tanana Athabascans. For centuries, caribou comprised a large part of the harvest of wild resources for food (Hosley 1981). Historically, large numbers of migratory caribou were available from the Porcupine, Fortymile, and other caribou herds (such as, Macomb, Nelchina, Chisana, Mentasta, White Mountain, and smaller herds in Unit 20F). Communities established more recently were originally supply sites for construction of the Alaska Highway, such as, Northway Junction and Tok; mining operations, such as, Eagle City and Chicken; and telegraph line maintenance, such as Manley (Hosley 1981).

Subsistence users search for caribou in areas they can access based on means available to them, such as, on foot or using highway vehicles, off-road vehicles, boats, or airplanes. Subsistence users harvest caribou year round. Years when herds migrate near villages, harvests of caribou by residents of these villages increase. When caribou do not migrate locally, caribou harvests decrease, and people sometimes travel great distances searching for caribou.

The focus on recent community hunting patterns on Federal public lands in Units 20E, 20F, and 25C is based on readily available sources. For example, subsistence users accessing caribou search areas by way of the Taylor Highway in Unit 20E can access Federal public lands, for example, in the Fortymile Wild and Scenic River conservation unit. It is important to understand that the collapse of the FCH

population between 1950 and 1970 had an enormous effect on the ability of many villages to harvest caribou. Many people have been unable to find caribou in proximity to their villages for decades (Van Lanen et al. 2012 and Halpin 1987).

However, as herd migrations has become increasingly unpredictable, fewer subsistence users report traveling long distances to harvest caribou as in the past (Caulfield 1983, Godduhn and Kostick 2016, Van Lanen et al. 2012). For example, in Northway, caribou were absent from the immediate vicinity for decades following declines that occurred around 1935. Northway's access to caribou was extremely limited until the Alaska Highway was improved and local residents acquired cars and trucks. Some travelled north on the Taylor Highway (in Unit 20E) in search of caribou in the 1950s and 1960s. Generally, Northway residents no longer go up the Taylor Highway in pursuit of caribou due to the large number of nonlocal hunters and Northway residents' low hunting success. Northway residents have said their use of caribou has declined for several reasons. Annual harvest limits have decreased from three to one caribou annually, and competition with nonlocal harvesters has increased. Consequently, Northway residents report having grown accustomed to eating moose (Godduhn and Kostick 2016). Northway residents' comments during recent research included "Keep guided hunts away from Native communities. Limit or ban them because they take all the resources. Local only hunts. Lots of outsiders hunting" (Godduhn and Kostick 2016:108).

Tetlin residents have observed increasing hunting pressure in the vicinity of their community (in Unit 12). In the 1980s, inadequate transportation and a limited period during which caribou were accessible along the Taylor Highway (in Unit 20E) discouraged most people in Tetlin from hunting there. Residents of Tetlin primarily search for caribou in nearby areas (in Unit 12) when and if Mentasta or Nelchina herds migrate into the area (Halpin 1987).

Fewer Dot Lake residents hunt for caribou today because of difficulty accessing the Macomb Plateau Controlled Use Area (in Unit 20D) due to restrictions on motorized access. These State-managed lands are closed to any motorized vehicle use for hunting. The Macomb Plateau, adjacent to the community, has been the focus of caribou hunting for Dot Lake. Fewer Dot Lake residents have been searching for caribou along the Taylor Highway (in Unit 20E) because of crowding on the road system making it unsafe (Holen et al. 2012).

Most hunting by Tok residents is done largely along the Taylor Highway (Unit 20E) and Alaska Highway. Tok residents have expressed concern about the number of nonlocal hunters coming to the area to hunt for moose and caribou, and residents from Anchorage and Fairbanks enjoying easy road access to local hunting areas and competing with local hunters (Holen et al. 2012).

Healy Lake residents access hunting areas including up the Volkmar River into the Yukon Charley Rivers National Preserve (Unit 20E). Only small numbers of Fortymile caribou have migrated through the Healy Lake area recently (Holen et al 2012). Healy Lake is not on the road system.

Tanana residents search for several small local herds in areas including the Tanana-Allakaket Trail, Ptarmigan Creek, and Tozitna River (Unit 20F BLM lands) (Case and Halpin 1990). Residents have

commented that too many hunters use airplanes, radios, and air boats in areas where Tanana residents hunt (Brown et al. 2004). Tanana is also not on the road system.

Gwich'in villages focused on the Porcupine caribou herd following the decline of the FCH. Since the 1970s, however, the Porcupine herd has seldom entered the Yukon Flats (in Units 25B and 25D). Porcupine caribou are more accessible to Arctic Village and Venetie residents in areas such as the Upper Chandalar River (Unit 25A). In Beaver, Stevens Village, and Birch Creek, residents no longer search for caribou and generally harvest only occasionally and opportunistically while searching for other resources. The Porcupine herd has started crossing the Porcupine River farther upriver, above Old Crow and into Canada, than in the past. The overall declining harvest of Porcupine caribou by Gwich'in is due to increased fuel costs and inconsistent migration patterns making caribou harder to find. The area along the Steese Highway (Unit 25C) continues to be the focus of some caribou hunting by these villages (Van Lanen 2012). Circle, at the end of the Steese Highway, is the only Gwich'in community on the road system.

Information provided by Gwich'in indicate Fortymile caribou habitat quality has diminished. For example: "In the early 1980s, the areas south and west of the community of Venetie had become 'too brushy' for caribou feeding habitat" (Caulfield 1983:195). "Wildfires had destroyed caribou browse and had caused caribou to shift migration patterns out of the area" (Nelson 1973:113). Additionally, traditional laws instruct hunters to allow the first group of caribou to pass unbothered in order to ensure that greater numbers of caribou follow the lead group, along the same path (Van Lanen 2012).

Villages have documented their efforts to harvest caribou in household surveys conducted with the Division of Subsistence, ADF&G, as shown in **Table 3** and **Table 4** (ADF&G 2019). For the region as a whole, the information shows that subsistence users continue to rely on caribou. Consistently, households that successfully harvest caribou share their harvests with unsuccessful households (Caulfield 1983, Godduhn and Kostick 2016, Holen et al 2012, Van Lanen et al. 2012).

Table 1. Rural residents eligible to harvest caribou in Units 20E, 20F, and/or 25C.

Communities with customary and traditional use determinations for caribou in Units 20E, 20F, and/or 25C	Unit 20E	Unit 20F	Unit 25C
Unit 20D—Dot Lake, Dot Lake Village, Dry Creek, Delta Junction, Fort Greely, Healy Lake	X		X
Unit 20E—Chicken, Eagle City, and Eagle Village	X		X
Unit 20F— Rampart and Tanana	X	X	X
Unit 25A—Arctic Village	X		X
Unit 25B—no communities	X		X
Unit 25C—Central	X		X
Unit 25D—Beaver, Birch Creek, Chalkyitsik, Circle, Fort Yukon, Stevens Village, and Venetie	X	X	X
Unit 12 north—Northway, Northway Junction, Tanacross, Tetlin, and Tok	X		X
Eureka, Livengood, Minto	X		X
Manley	X	X	X

Table 2. Population of communities eligible to harvest caribou in Units 20E, 20F, and/or 25C, based on the 2010 U.S. Census (Source: ADCCED 2013)

Unit of residence	Community	2010 Number of people	2010 Number of house-holds		Unit of residence	Community	2010 Number of people	2010 Number of house-holds
12	Northway	71	27		20E	Chicken	7	5
	Northway Junction	54	20			Eagle City	86	41
	Tanacross	136	53			Eagle Village	67	31
	Tetlin	127	43		20F	Rampart	24	10
	Tok	1,258	532			Tanana	246	100
20B	Livengood	13	7		25A	Arctic Village	152	65
	Manley	89	41		25C	Central	96	53
	Minto	210	65		25D	Beaver	84	36
20D	Delta Junction	958	377			Birch Creek	33	17
	Dot Lake	13	7			Chalkyitsik	69	24
	Dot Lake Village	62	19			Circle	104	40
	Dry Creek	94				Fort Yukon	583	246
	Fort Greely	539	236			Stevens Village	78	26
	Healy Lake	13	7			Venetie	166	61
					Total		**5,338**	**2,189**

Table 3. Percentages of households using, attempting to harvest, and successfully harvesting caribou in communities eligible to harvest caribou in Units 20E, 20F, and/or Unit 25C, based on household harvest surveys (Source: ADF&G 2019).

Unit of Residence	Community	Study Year	Percentage of households using caribou	Percentage of households attemping to harvest caribou	Percentage of households harvesting caribou
20D	Dot Lake	1987	67%	40%	20%
	Dot Lake	2004	6%	13%	0%
	Dot Lake	2011	14%	7%	7%
	Dry Creek	2011	81%	22%	19%
	Healy Lake	2011	100%	33%	33%
20E	Eagle	2004	61%	61%	14%
20F	Rampart	2014	14%	0%	0%
	Tanana	1987	30%	22%	12%
	Tanana	1996	12%	8%	3%
	Tanana	1997	8%	3%	0%
	Tanana	1998	24%	4%	0%
	Tanana	1999	10%	5%	5%
	Tanana	2002	7%	11%	3%
	Tanana	2014	9%	5%	5%
25D	Stevens Village	2014	0%	0%	0%
	Fort Yukon	1987	73%	13%	9%
12 north	Northway	1987	64%	49%	20%
	Northway	2004	32%	32%	32%
	Northway	2014	35%	24%	13%
	Tanacross	1987	63%	52%	19%
	Tanacross	2004	41%	43%	35%
	Tetlin	1987	10%	15%	5%
	Tetlin	2004	55%	45%	32%
	Tok	1987	60%	42%	25%
	Tok	2004	20%	43%	17%
	Tok	2011	55%	44%	35%
20B	Manley	2004	6%	0%	0%
	Manley	2012	24%	0%	0%
	Minto	2004	0%	0%	0%
	Minto	2012	15%	0%	0%

Table 4. Estimated harvest of caribou in communities eligible to harvest caribou in Units 20E, 20F, and/or Unit 25C, based on household surveys (CI95%, lower harvest estimate is the lower bound of the estimate or the reported harvest, whichever is larger) (Source: ADF&G 2019).

Unit of Residence	Community	Study Year	Estimated Harvest of Caribou	Lower Harvest Estimate	Upper Harvest Estimate	Per Person Lbs Harvested
20D	Dot Lake	1987	4	3	6	8
	Dot Lake	2004	0	0	0	0
	Dot Lake	2011	6	4	14	16
	Dry Creek	2011	10	9	13	14
	Healy Lake	2011	3	2	9	52
20E	Eagle	2004	19	19	22	15
20F	Rampart	2014	0	0	0	0
	Tanana	1987	40	40	40	11
	Tanana	1996	3	2	6	1
	Tanana	1997	0	0	0	0
	Tanana	1998	0	0	0	0
	Tanana	1999	14	8	27	7
	Tanana	2002	4	4	6	2
	Tanana	2014	4	3	7	3
25D	Stevens Village	2014	0	0	0	0
	Fort Yukon	1987	156	49	262	25
12 north	Northway	1987	32	16	51	13
	Northway	2004	41	31	52	16
	Northway	2014	13	10	18	9
	Tanacross	1987	8	6	11	11
	Tanacross	2004	18	16	21	12
	Tetlin	1987	1	1	3	2
	Tetlin	2004	20	16	27	15
	Tok	1987	113	60	165	14
	Tok	2004	82	55	110	9
	Tok	2011	319	233	405	32
20B	Manley	2004	0	0	0	0
	Manley	2012	0	0	0	0
	Minto	2004	0	0	0	0
	Minto	2012	0	0	0	0

Harvest History

The FCH is a very important herd for both consumptive and non-consumptive uses in Interior Alaska due to its road accessibility, and experiences high hunting pressure (Boertje et al. 2012, EIRAC 2019). The high public use and accessibility of this herd has resulted in a complex suite of regulations and harvest management strategies designed to manage harvest, herd growth, hunter opportunity, and safety. Due to this complexity and the need for annual adjustments in season lengths and harvest limits, Federal and State in-season managers have authority to modify or restrict season dates and harvest limits, providing management flexibility. The FCH hunt has traditionally been split into fall and winter hunts, which allows some nonresident harvest and for some communities to take advantage of the proximity of caribou during the winter season (HMC 2012).

From the mid-1970s through the 1980s, FCH hunting regulations were designed to benefit local hunters and to prevent harvest from limiting herd growth (HMC 2012). To that end, ADF&G deliberately timed hunting seasons to avoid periods when road crossings were likely, shifting hunters away from roads and onto trail and river systems (HMC 2012). After the Federal government assumed management of the Federal subsistence program in 1990, many people became frustrated with the sometimes conflicting dual sets of regulations and because the FCH was not growing. This led to the formation of the Coalition and development of cooperative management plans, which are endorsed by both the BOG and the Board (HMC 2012).

Since 1995, management plans developed by the Coalition have guided FCH harvest, which is primarily managed through fall and winter registration permit hunts and harvest quotas. From 1996-2000, the 1995 FCH Management Plan directed FCH harvest, which was limited to a quota of 150 bulls under a joint state-federal registration permit. This low quota was below sustainable levels to promote herd growth and intended to garner support for a nonlethal wolf control program (HMC 2012).

In both the 2001 and 2006 Harvest Plans, the Coalition recommended increasing the harvest quota from 150 bulls to 2-3% of the estimated FCH population, which was still considered conservative and allowed for continued herd growth (HMC 2012). These plans also allocated 65% of the harvest quota to Alaska and 35% to Canada, specifying that unused allocations would be re-allocated to the other country (HMC 2012). Alaska's allocation was further divided with 75% for the fall hunt and 25% for the winter hunt. The BOG and Board adopted these recommendations. However, since 2001, no harvest occurred in Canada (HMC 2012).

Since 2004, one fall and one winter registration permit has been used for all FCH hunts, reducing user confusion and eliminating issues of multiple permits being issued to individuals wanting to hunt Fortymile caribou in more than one area (HMC 2012). From 2005-2009, Fortymile caribou became increasingly available along roads, resulting in harvest quotas being met or exceeded in 1-10 days. These short seasons precipitated crowding of hunters along roadways, raising concerns about excessive wounding loss, "flock-shooting," hunter safety, and the overall quality of the hunt (HMC 2012). In response to these concerns, the Coalition recommended delaying opening the fall season in roaded

areas, giving the herd time to disperse away from roads. The Coalition also recommended changing the fall harvest limit to bulls-only to force hunters to identify an animal more carefully before shooting.

The Coalition revised its plan again in 2012, effective 2012-2018 (HMC 2012). The 2012 Harvest Plan outlines different strategies for the FCH depending on population size. When the FCH population is below 70,000, the Coalition recommends a 3% harvest rate with bulls-only harvest during the fall season and either sex harvest during the winter season, but only 25% of total annual harvest being cows. When the FCH population exceeds 70,000 caribou, the Coalition recommends a 4% harvest rate with 3% of Alaska's allocation being bulls-only in the fall and either sex in the winter with a maximum of 19% of total annual harvest being cows. The remaining 1% of Alaska's allocation of the FCH population would be bulls-only during the fall hunt. As Yukon, Canada is still not harvesting any Fortymile caribou, a 15% variation within Alaska's harvest quota for a single year will be tolerated (HMC 2012).

The 2012 Harvest Plan recommends maintaining a Federal subsistence priority by opening the Federal fall and winter seasons earlier than State seasons (HMC 2012). It recommends managing heavy hunting pressure along roadways when large numbers of caribou are present through temporary closures and openings in specified zones or through limited registration (targeted) hunts. Management tools include establishing subzones, temporary openings, delayed openings, patterned openings (e.g. Sundays through Wednesdays), distributing limited permits on a first-come, first-served basis, and establishing multiple permit periods for different hunt dates, allowing hunters to enter certain areas at specified times (HMC 2012). The Coalition has drafted an updated Harvest Management Plan, but it is not yet finalized (EIRAC 2019).

ADF&G manages State hunts for the FCH in four zones that contain portions of Units 20 and 25 (**Map 2)**. These zones are intended to distribute harvest, so that hunters across the FCH's range are afforded hunting opportunity (HMC 2012, Gross 2015). Zones are primarily based on historical harvest, herd migrations, and access (HMC 2012). Zone 1 is accessed via Chena Hot Spring Road and the Steese Highway. Zone 2 is accessed by plane or by boating up the Goodpaster or Salcha Rivers. Zone 3 is accessed via the Taylor Highway or the Fortymile River and contains a no-hunt corridor within 100 feet of the Top of the World Highway and between mileposts 75.3 and 117.2 of the Taylor Highway. Zone 4 is accessed via the Elliot and Dalton Highways and was added in 2012 because of the expansion of the FCH range into the White Mountains of Unit 20F SE where White Mountain Caribou are also present (HMC 2012).

ADF&G issues emergency orders to close and reopen State-managed hunting areas in response to caribou distribution and expected harvest and hunting pressure. Each zone has a harvest quota (recommended by the 2012 FCH Harvest Plan) and is closed when its harvest quota is met. Zone 4 includes separate harvest quotas for the FCH and the White Mountains herd (HMC 2012). Hunters must report harvest within 3 days of harvest and can call the Fortymile hotline for updated information on zone openings and closures (ADF&G 2019a). ADF&G further monitors harvest through hunters check stations and registration permit reports (Gross 2015). The State's codified regulations provide sideboards for setting complex annual seasons and harvest limits in the various zones. The codified

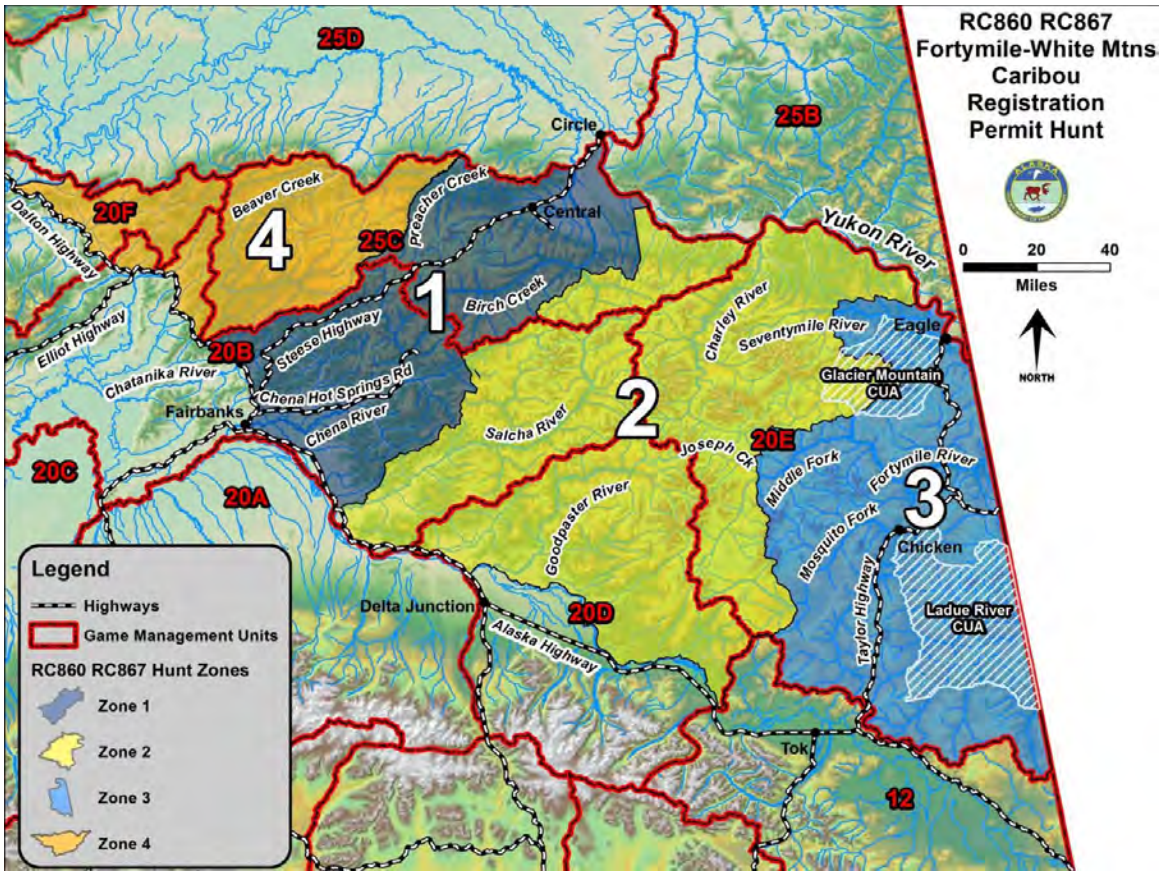
regulations allow regulations to be adjusted annually according to changing hunt conditions, herd size and distribution (ADF&G 2019b).

The vast majority of FCH harvest occurs in Alaska by registration permit (**Figure 4**). Unreported and illegal harvest of the FCH is minimal and estimated at 10 caribou/year (Gross 2015, ADF&G 2019b). Since 2000, harvest has generally increased as the FCH population and therefore harvest quotas have increased. Quotas increased from 150 bulls in the mid-1990s to over 2,000 caribou in 2018 (EIRAC 2019). Correspondingly, total FCH harvest ranged from 146 bulls in 1996 to 2,421 caribou in 2018 (**Figure 4**) (ADF&G 2019b, Gardner 2003).

Nonlocal residents harvest the majority of FCH caribou. ADF&G defines local residents as residents of Unit 12 north of Wrangell-St. Elias National Park, Unit 20D, Unit 20E, and Unit 25C (Gross 2015). Between 2002 and 2017, local residents, nonlocal residents, and nonresidents accounted for 11%, 80%, and 9% of the FCH harvest, respectively (**Figure 5**) (Gross 2015, 2019 pers. comm.). Over the same time period, total FCH hunter numbers ranged from 2,088-4,680 hunters per year (**Figure 5**). The vast majority of the harvest occurs during the opening two weeks of the fall season. Harvest during the winter season is more evenly distributed throughout the season (Gross 2015).

As the FCH population now exceeds 70,000, the Coalition recommends a 4% harvest rate to allow for increased harvest opportunity and for the herd to continue growing at a reduced rate (ADF&G 2019b). ADF&G intends to slow herd growth while it's at the mid-point of its population objective (ADF&G 2019b). While the current intention is to continue herd growth but at a slower rate, harvest quotas of 4,000 or more caribou would likely be necessary to achieve herd stabilization or reduction (EIRAC 2019). Achieving such high harvests may require allowing very high harvests along roadways, which could turn into a challenging management scenario (EIRAC 2019).

Boertje et al. (2012) suggest 6.1% may be a sustainable harvest rate for the FCH with moderate and declining nutrition, which is comparable to a 6% sustainable harvest rate for the Nelchina caribou herd with lower and increasing nutrition. Boertje et al. (2017) suggest substantially increasing harvest to curtail herd growth when caribou herds approach carrying capacity because, once ungulates overshoot carrying capacity, long-lasting negative effects on sustainable yield can occur.



Map 2. Zones used by ADF&G to manage State caribou hunts for the Fortymile caribou herd (map from ADF&G 2018a).

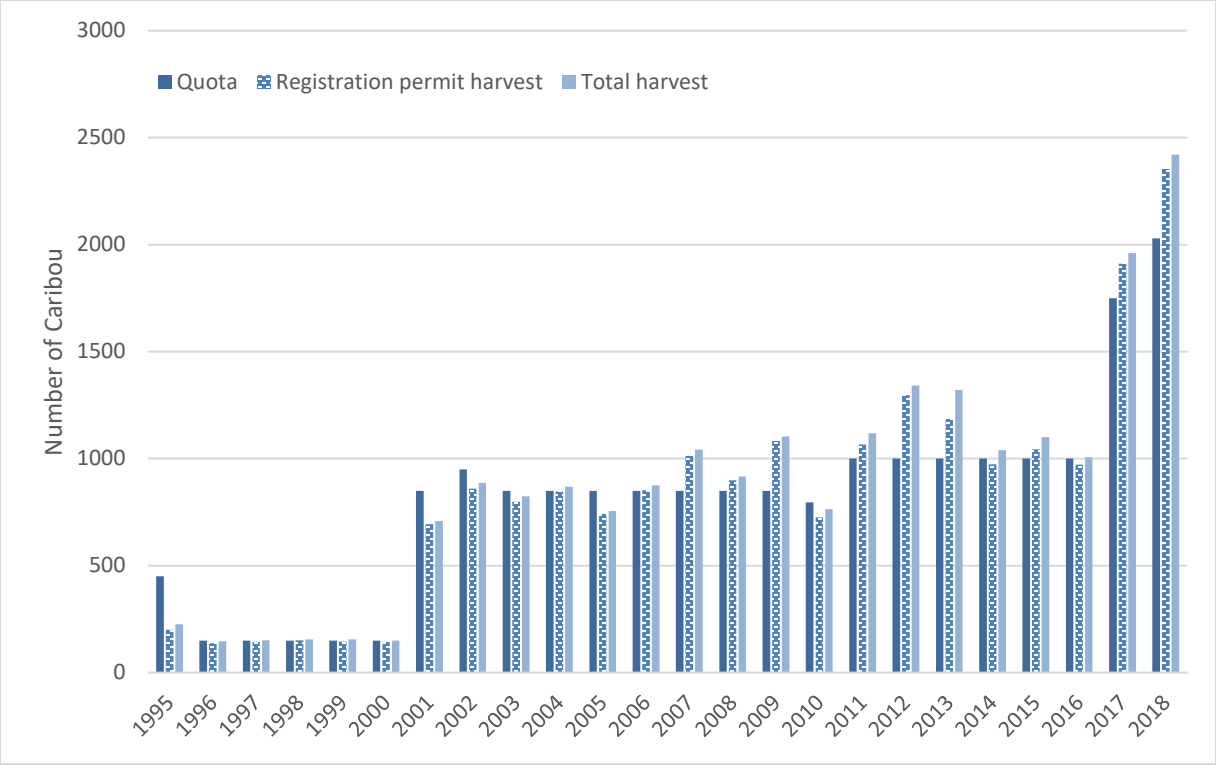


Figure 4. Fortymile caribou harvest. The quota from 1995-2000 was 150 bulls. The quotas in all other years includes both sexes. Total harvest includes all reported harvest in Alaska, Yukon harvest, and estimated illegal/unreported harvest (ADF&G 2019b, Gross 2015, Garner 2003).

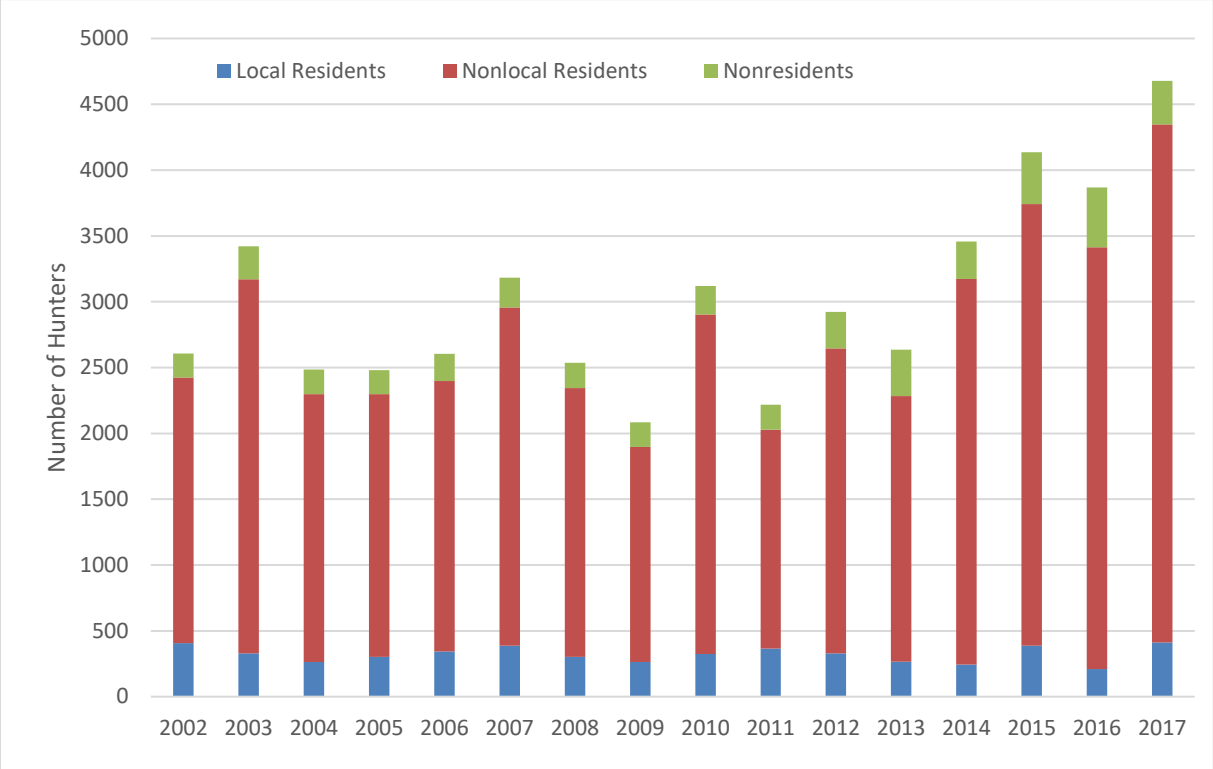


Figure 5. Number of Fortymile caribou hunters by residency (Gross 2015, 2019 pers. comm.).

Effects of the Proposal

If WP20-48 is adopted, Federal and State codified hunting regulations for the FCH will be aligned, which will reduce user confusion and preclude Federal regulations from being more restrictive than State regulations. Additionally, the authority delegated to the Federal in-season manager will be expanded, providing the flexibility required to annually adjust season dates and harvest limits in response to changing herd and hunt conditions and in coordination with State managers. Aligning State and Federal regulations for the FCH may be especially prudent due to the complexity of harvest management for this herd (e.g. hunt zones, harvest quotas, emergency closures and openings, heavy hunting pressure). Additionally, harvest management and regulations are guided by the Coalition's FCH Harvest Plans, which both the Board and the BOG endorsed. One of the recommendations in the 2012 plan is for State and Federal managers to continue cooperatively managing FCH hunts (HMC 2012).

Furthermore, Federal regulations are currently more restrictive than State regulations, which violates the rural subsistence priority mandated by ANILCA and results in possible law enforcement concerns. For example, in Sept. 2018, the State and Federal harvest limits were one caribou and one bull, respectively. When the State closed its season, the Federal season remained open. Therefore, if Federally qualified subsistence users harvested a cow caribou (as permitted under State but not Federal regulations) on Federal public lands after the State season closed, they could have received a ticket (EIRAC 2019). Additionally, the State winter season opened Oct. 21, whereas the Federal winter season did not open until Nov. 1.

While the Eastern Interior Council voted unanimously to support this proposal at their 2019 winter meeting, Council members also expressed many concerns about FCH management and regulations with the intent of informing management and regulatory decisions. One concern was changing the opening date of the Federal fall season from Aug. 10 to Aug. 1 (EIRAC 2019). Their primary concern was that a State youth hunt occurs in early Aug., and they did not think a Federal season should interfere with the youth hunt. A Council member also expressed concern about meat care during early August as temperatures can be very warm, causing meat to spoil quickly.

Council members also expressed concerns about changing the opening date of the Federal winter season from November 1 to October 21 due to potential wanton waste from bulls being in rut and therefore unpalatable. A Council member from Central stated he found 6-7 bulls last October with just their heads missing because the caribou were too stinky from the rut. However, the Council also discussed opening the October season to cow harvest, which would help control herd growth and would avoid the rut issue (EIRAC 2019). Additionally, the ADF&G area biologist stated he spoke with many hunters last season who harvested Fortymile caribou in late October, and none said the meat was unusable. Furthermore, the Coalition recommended an opening date of October 21 because it mirrors the winter season opening date for the Nelchina herd whose bulls are mostly palatable again by late October (EIRAC 2019). Council members continued to express reservations about the early winter season opener due to the potential for inexperienced hunters to improperly process an animal, ruining its meat.

However, whether or not the Federal fall and winter seasons for the FCH open on Aug. 1 or Oct. 21, respectively is up to the Federal in-season manager who has delegated authority to announce season openings and closures. Aligning Federal season dates with State codified regulations provides flexibility for in-season managers to manage harvest such as (for example) announcing a cow only season during late October to curtail herd growth or delaying opening the fall season until the State youth hunt ends. A Federal subsistence priority could be maintained by keeping Federal seasons open after State seasons close by emergency order because harvest quotas have been met (EIRAC 2019).

Council members were also concerned about liberalizing regulations and increasing harvest quotas because of heavy harvest pressure along the Steese and Taylor highways, which results in dangerous situations and discourages Federally qualified subsistence users from hunting. Additionally, Council members cautioned against liberalizing regulations too quickly as this could result in severe and unpopular restrictions in the future (EIRAC 2019).

Furthermore, Council members pointed out that nutritional stress may encourage the FCH to expand its range into areas the herd used historically. An expanded range could allow the herd to continue growing and potentially avoid the heavy hunting pressure along the highways that could result from liberalizing harvests (EIRAC 2019). However, the Council acknowledged population crashes in other caribou herds (e.g. Western Arctic, Central, Mulchatna) and a desire to prevent the FCH population from crashing. One Council member pointed out the Mulchatna herd crashed even though its range expanded substantially (EIRAC 2019).

While the FCH is at the mid-point of management objectives, it may have already reached or exceeded carrying capacity based on nutritional indices and peak numbers in the 1960s. The low parturition rates, changes in FCH distributions, and increasing populations suggest nutritional stress and overgrazing are affecting the FCH, recommending liberalizing harvest regulations. Boertje et al. (2017) encourages managers to increase harvest to curtail growth before the FCH reaches carrying capacity. If caribou populations exceed carrying capacity, their populations can crash with long-lasting decreases in sustained yield (Boertje et al. 2017).

Assuming these trends in declining nutrition continue, ADF&G anticipates substantial increases in harvest during the 2019/20 season (EIRAC 2019). ADF&G announced 2019/20 season dates and harvest limits for the upcoming season after it received results from spring parturition surveys and calf birth weights. Changes from 2018/19 regulations include a resident harvest limit of one caribou during August rather than one bull and opening the winter season on October 27 rather than on October 21. Adopting this proposal does not guarantee more liberal harvest regulations, but rather expands the season and harvest limit sideboards to match State codified regulations and expands the authority delegated to the in-season manager to annually adjust seasons and harvest limits as needed (in consultation with ADF&G, OSM, USFWS, NPS, and the Council Chair).

OSM CONCLUSION

Support Proposal WP20-48.

Justification

Harvest management for the FCH is complex and primarily guided by the Coalition's Harvest Plans, which are endorsed by the BOG and the Board. Delegating authority to the Federal in-season manager to modify season dates and harvest limits, including sex restrictions (**Appendix 1**) provides management flexibility to respond to annually changing herd and hunt conditions as recommended by the harvest plans and in coordination with State regulations. Aligning State codified and Federal regulations reduces user confusion and precludes Federal regulations from being more restrictive than State regulations. Rural priority for Federally qualified subsistence users could be maintained if Federal seasons remain open after State seasons close; however, this will occur at the discretion of the Federal in-season manager.

LITERATURE CITED

ADCCED (Alaska Department of Commerce, Community, and Economic Development). 2013. Community Information. Online database accessed April 22, 2013. http://www.commerce.state.ak.us/cra/DCRAExternal/community.

ADF&G. 2018. Alaska Board of Game meeting information. Central/Southwest Region: Feb. 16-23, 2018. RC4: Tab 8. http://www.adfg.alaska.gov/static/regulations/regprocess/gameboard/pdfs/2017-2018/csw/tab8.pdf. Accessed April 4, 2019.

ADF&G. 2018b. Meeting audio. Alaska Board of Game meeting information. Central/Southwest Region: Feb. 16-23, 2018. http://www.adfg.alaska.gov/static/regulations/regprocess/gameboard/swf/2017-2018/20180216_febcsw/index.html?mediaBasePath=/Meeting%2002-23-18%20BOG%20%28Feb-27-18%2010-22-03%20AM%29. Accessed May 13, 2019.

ADF&G. 2019a. Caribou Hunting in Alaska. Hunting Fortymile-White Mountains Caribou. Alaska Department of Fish and Game. http://www.adfg.alaska.gov/index.cfm?adfg=caribouhunting.40mile. Accessed May 10, 2019.

ADF&G. 2019b. Annual Report to the Alaska Board of Game on Intensive Management for Fortymile Caribou with Wolf Predation Control in the Upper Yukon–Tanana Predation Control Area of Game Management Units 12, 20B, 20D, 20E and 25C. Alaska Department of Fish and Game, Division of Wildlife Conservation. http://www.adfg.alaska.gov/static/research/programs/intensivemanagement/pdfs/2019_uytpcp_intensive_management_annual_report.pdf. Accessed May 13, 2019.

ADF&G. 2019c. Community Subsistence Information System. Online database, accessed May 20, 2019. ADF&G Division of Subsistence. Anchorage, AK.

Boertje, R.D., C.L. Gardner, K.A. Kellie, and B.D. Taras. 2012. Fortymile caribou herd: Increasing numbers, declining nutrition, and expanding range. Alaska Department of Fish and Game, Wildlife Technical Bulletin 14, ADF&G/DWC/WTB-2012-14, Juneau.

Boertje, R.D., C.L. Gardner, M.M. Ellis, T.W. Bentzen, J.A. Gross. 2017. Demography of an Increasing Caribou Herd with Restricted Wolf Control. The Journal of Wildlife Management. 81(3): 429-448. DOI: 10.1002/jwmg.21209

Brown, C.L., R. Walker, and S.B. Vanek. 2004. The 2002-2003 harvest of moose, caribou, and bear in Middle Yukon and Koyukuk River communities. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 280. Fairbanks, AK.

Case, M., and L. Halpin. 1990. Contemporary wild resource use patterns in Tanana, Alaska, 1987. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 178. Fairbanks, AK.

Caulfield, R. 1983. Subsistence land use in Upper Yukon Porcupine communities, Alaska: *Dinjii Nats'aa Nan Kak Adagwaandaii*. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 16. Fairbanks, AK.

EIRAC. 2019. Transcripts of the Eastern Interior Alaska Subsistence Regional Advisory Council proceedings. March 5-6, 2019. Fairbanks, AK. Office of Subsistence Management, USFWS. Anchorage, AK.

Gardner, C.L. 2003. Units 20 and 25 caribou management report. Pages 160–189 *in* C. Healy, editor. Caribou management report of survey and inventory activities 1 July 2000–30 June 2002. Alaska Department of Fish and Game. Juneau, Alaska.

Godduhn, A.R., M.L. Kostick. 2016. Harvest and use of wild resources in Northway, Alaska, 2014, with special attention to nonsalmon fish. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 421. Fairbanks, AK.

Gross, J.A. 2015. Units 20B, 20C, 20D, 20E, and 25C caribou. Chapter 12, 12-1 through 12-34 [*In*] P. Harper and L.A. McCarthy, editors. Caribou management report of survey and inventory activities. 1 July 2012-30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-4, Juneau.

Gross, J.A. 2019. Wildlife Biologist. Personal Communication: e-mail. Alaska Department of Fish and Game. Tok, AK.

Halpin, L. 1987. Living off the land: contemporary subsistence in Tetlin, Alaska. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 149. Fairbanks, AK.

Harvest Management Coalition (HMC). 2012. Fortymile caribou herd harvest plan 2012-2018. Alaska Department of Fish and Game, Fairbanks, Alaska.

Holen, D., S.M. Hazell, and D.S. Koster, editors. 2012. Subsistence harvests and uses of wild resources by communities in the eastern interior of Alaska, 2011. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 372. Anchorage, AK.

Hosley, E.H. 1981. Intercultural relations and cultural change in the Alaska Plateau. Pages 546–555 in J. Helm, editor. Handbook of North American Indians, Vol. 6, Subarctic. Smithsonian Institution, Washington, D.C.

Marcotte, J.R. 1992. Wild fish and game harvest and use by residents of five Upper Tanana communities, Alaska, 1987-88. Alaska Department of Fish and Game Division of Subsistence Technical Paper No. 168. Fairbanks, AK.

Skoog, R.O. 1956. Range, movements, populations, and food habits of the Steese-Fortymile caribou herd. Thesis, University of Alaska Fairbanks.

Valkenburg, P., D.G. Kelleyhouse, J.L. Davis, J.M. Ver Hoef. 1994. Case history of the Fortymile Caribou Herd, 1920-1990. Rangifer. 14(1) pp. 11-22.

Van Lanen, J.M., C. Stevens, C.L. Brown, K.B. Maracle, and D.S. Koster. 2012. Subsistence land mammal harvests and uses, Yukon Flats, Alaska: 2008–2010 harvest report and ethnographic update. Alaska Department of Fish and Game Division of Subsistence Technical Paper No.377. Anchorage, AK.

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Eastern Interior Alaska Subsistence Regional Advisory Council

Support WP20-48. The Council said that it is extremely important to keep the herd's population sustainable, and conservation concerns exist. The conservation concern is actually over-population, which might adversely affect the herd and, therefore, hunting opportunities for subsistence users. The Council's position on this proposal is supported by substantial evidence such as biological and traditional ecological knowledge. Reports from area managers indicated low parturition rates for three-year-old cows, showing that there is stress on the herd and that it might be out-growing its habitat, which could lead to a population crash.

The Council does not support bull caribou harvest in October when the bulls are in rut and encourages managers to open the season on November 1. The Council also noted that the proposal would be beneficial to Federally qualified subsistence users and would create more ways to manage the herd, so it doesn't crash, thereby allowing it to be a very consistent, reliable resource for subsistence users, creating more hunting opportunities.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-48: This proposal, submitted by the Bureau of Land Management (BLM) Eastern Interior Field Office, would align Federal Fortymile Caribou Herd regulations with State regulations and reduce complexity and confusion between State and Federal Regulations.

Introduction: Harvest of caribou in Units 20E, 25C, and 20F (Fortymile and White Mountains herds) is managed through a joint State/Federal registration permit. Due to changes in State regulations in 2018 to allow higher harvests, Federal caribou seasons in Unit 20E, 20F, and 25C are currently more restrictive than State seasons, resulting in confusion among hunters. This proposal would allow Federal regulations to be adapted to align with State regulations, increasing opportunity for Federally qualified subsistence users, and reducing complexity and confusion. It would also provide the flexibility and responsiveness needed to manage the Fortymile caribou herd in the face of rapid population increases and concerns that the herd is reaching carrying capacity. The BLM Eastern Interior Field Office manager currently has delegated authority to modify or restrict harvest limits and season dates for caribou in Unit 20E and 25C, and has closed (in consultation with ADF&G, the chair of the Eastern Interior Regional Subsistence Advisory Council, and the Yukon-Charley National Preserve superintendent) seasons to meet harvest quotas in some years. This

proposal will result in added authority to set sex restrictions in units 25C, 20E and add authority to modify harvest limits, season dates, and set sex restrictions for Unit 20F.

Impact on Subsistence Users: This proposal would increase opportunity for Federally qualified subsistence users and would reduce complexity and confusion.

Impact on Other Users: If adopted this proposal would have no impacts on other users.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has made a positive customary and traditional use finding for Fortymile caribou.

Amounts Reasonably Necessary for Subsistence: Alaska state law requires the Board of Game to determine the amount of the harvestable portion of a game population that is reasonably necessary for customary and traditional uses. This is an ANS. The board does this by reviewing extensive harvest data from all Alaskans, collected either by ADF&G or from other sources.

ANS provides the board with guidelines on typical numbers of animals harvested for customary and traditional uses under normal conditions. Hunting regulations can be re-examined if harvests for customary and traditional uses consistently fall below ANS. This may be for many reasons: hunting regulations, changes in animal abundance or distribution, or changes in human use patterns, just to name a few.

The ANS for the Fortymile Caribou Herd is 350–400 animals.

The season and bag limit for Fortymile Caribou is:

		Open Season (Registration Permit)	
Unit/Area	Bag Limit	Resident[a]	Nonresident
20B, 20D, 20E, 20F	Res–Up to 3 Caribou	Aug. 1–Sept 30;	Aug. 10–Sept 30
25C	Non Res–1 bull	Oct. 21–March 31	

[a] Subsistence and General Hunts.

Special instructions: None.

Conservation Issues: There are no conservation issues with this proposal.

Enforcement Issues: This proposal would reduce complexity and confusion between state and federal Fortymile Caribou regulations, potentially reducing enforcement issues due to current complexity.

Recommendation: ADF&G **SUPPORTS** this proposal which would align state and federal regulations thus reducing confusion.

Appendix 1

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**. 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 the Office of Subsistence Management.

Sincerely,

Anthony Christianson
Chair

Enclosures

cc: Federal Subsistence Board
Assistant Regional Director, Office of Subsistence Management
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Wildlife Division Supervisor, Office of Subsistence Management
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Commissioner, Alaska Department of Fish and Game
Special Assistant to the Commissioner, Alaska Department of Fish and Game
Interagency Staff Committee
Administrative Record

WP20–51 Executive Summary	
General Description	Proposal WP20-51 asks the Federal Subsistence Board to recognize customary and traditional uses of sheep in Unit 12 by rural residents of the community of Slana. *Submitted by: Bob Medinger of Slana, Alaska.*
Proposed Regulation	**Customary and Traditional Use Determination—Sheep** *Unit 12* *Rural residents of Unit 12, Chistochina, Dot Lake, Healy Lake, Mentasta Lake,* ***and Slana***
OSM Conclusion	**Support**
Southcentral Alaska Subsistence Regional Advisory Council Recommendation	**Support**
Eastern Interior Alaska Subsistence Regional Advisory Council Recommendation	**Support**
Interagency Staff Committee Comments	The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.
ADF&G Comments	**Neutral**
Written Public Comments	**1 Oppose**

STAFF ANALYSIS
WP20-51

ISSUES

Proposal WP20-51, submitted by Bob Medinger of Slana, Alaska, asks the Federal Subsistence Board (Board) to recognize the customary and traditional uses of sheep in Unit 12 by rural residents of the community of Slana.

DISCUSSION

The proponent states that Slana residents hunt for sheep along the Nabesna Road. Slana is situated where the Nabesna Road intersects with the Tok Cutoff of the Glenn Highway. Travelling along the Nabesna Road, after approximately 25 miles, the road crosses the Unit 11/12 boundary. The proponent states Slana residents are hunting for sheep in Unit 12 under State regulations. The Board approved an elder hunt for sheep in Unit 12. Slana residents would like to participate in this hunt, but they can't because their customary and traditional uses of sheep in Unit 12 have not been recognized by the Board.

When asked by staff, Mr. Medinger explained that Slana consists of people living in the Slana area including on both sides of the Nabesna Road and the Glenn Highway Tok Cutoff (Medinger 2019, pers. comm.).

The definition of the boundary between Unit 11 and 12 on the Nabesna Road is the boundary between the Copper River drainage (in Unit 11) and the Tanana River drainage (in Unit 12) at Milepost 25.2 on the Nabesna Road. According to The Milepost magazine, Mile 25.2 on the Nabesna Road is just before the Little Jack Creek culvert, where the creek flows under the road (Valencia 2019:324; **Figure 1**).

Customary and traditional uses of sheep by rural residents of Slana have already been recognized by the Board, in Unit 11. Consequently, the focus of this analysis is expanding the existing customary and traditional use determination for Slana to the proposed management unit, Unit 12.

Existing Federal Regulation

Customary and Traditional Use Determination—Sheep

Unit 12	*Rural residents of Unit 12, Chistochina, Dot Lake, Healy Lake, and Mentasta Lake.*

Note: Unit 12 communities: Northway, Northway Junction, Tanacross, Tetlin, Tok, and Nabesna.Proposed Federal Regulation

Customary and Traditional Use Determination—Sheep

Unit 12	*Rural residents of Unit 12, Chistochina, Dot Lake, Healy Lake, Mentasta Lake, and* ***Slana****.*

Extent of Federal Public Lands

Unit 12 is comprised of approximately 60% Federal public lands and consists of approximately 48% National Park Service, 11% U.S. Fish and Wildlife Service, and 1% Bureau of Land Management lands. Federal public lands are within Wrangell-St. Elias National Park and Preserve and Tetlin National Wildlife Refuge (although sheep are not observed in the Refuge).

There are special requirements for National Park Service Lands. Under the guidelines of the Alaska National Interest Conservation Act, National Park Service regulations identify qualified local rural subsistence users in National Parks and Monuments: (1) by identifying resident zone communities, which include a significant concentration of people who have customarily and traditionally used subsistence resources on park lands; and (2) by identifying and issuing subsistence use permits to individuals residing outside of these resident zone communities who have a personal or family history of subsistence uses.

Regulatory History

At the beginning of the Federal Subsistence Management Program in Alaska in 1992, the Board adopted a customary and traditional use determination of "no subsistence priority" in the Tok Management Area of Unit 12, and *no rural residents* were eligible to hunt sheep under Federal subsistence regulations. In the remainder of Unit 12, the Board did not adopt a customary and tradition use determination, so *all rural residents* were eligible to harvest sheep under Federal regulations (72 FR 22961, May 29, 1992).

In 1997, the Board received many proposals requesting changes to customary and traditional use determinations for sheep in Units 11, 12, and 13. These proposals were combined in Proposal P97-25, and proposals affecting Unit 12 are described in **Table 1**. The Board adopted the Southcentral Alaska Subsistence Regional Advisory Council recommendation to include rural residents of only Unit 12 as eligible to harvest sheep in the remainder area of Unit 12, based on positive evidence of strong ties between Unit 12 residents and the remainder area of Unit 12 (FSB 1997: 58, OSM 1997:159; 62 FR 29021, May 29, 1997).

In the 1997 analysis, Nabesna Road and Slana were defined as two distinct areas for the purposes of recognizing customary and traditional uses. Additionally, Slana, Slana Homestead North, and Slana Homestead South were defined as three separate areas, and each were analyzed separately. Slana was described as one of "several smaller communities with some Native presence (Gakona, Nabesna Road, Slana, Paxson, and Mentasta)." Slana Homestead North and Slana Homestead South were described as "overwhelmingly non-Native households connected only by roads (Lake Louise, Slana North, Slana South, McCarthy Road, West Glenn and East Glenn Highway)" (OSM 1997:168).

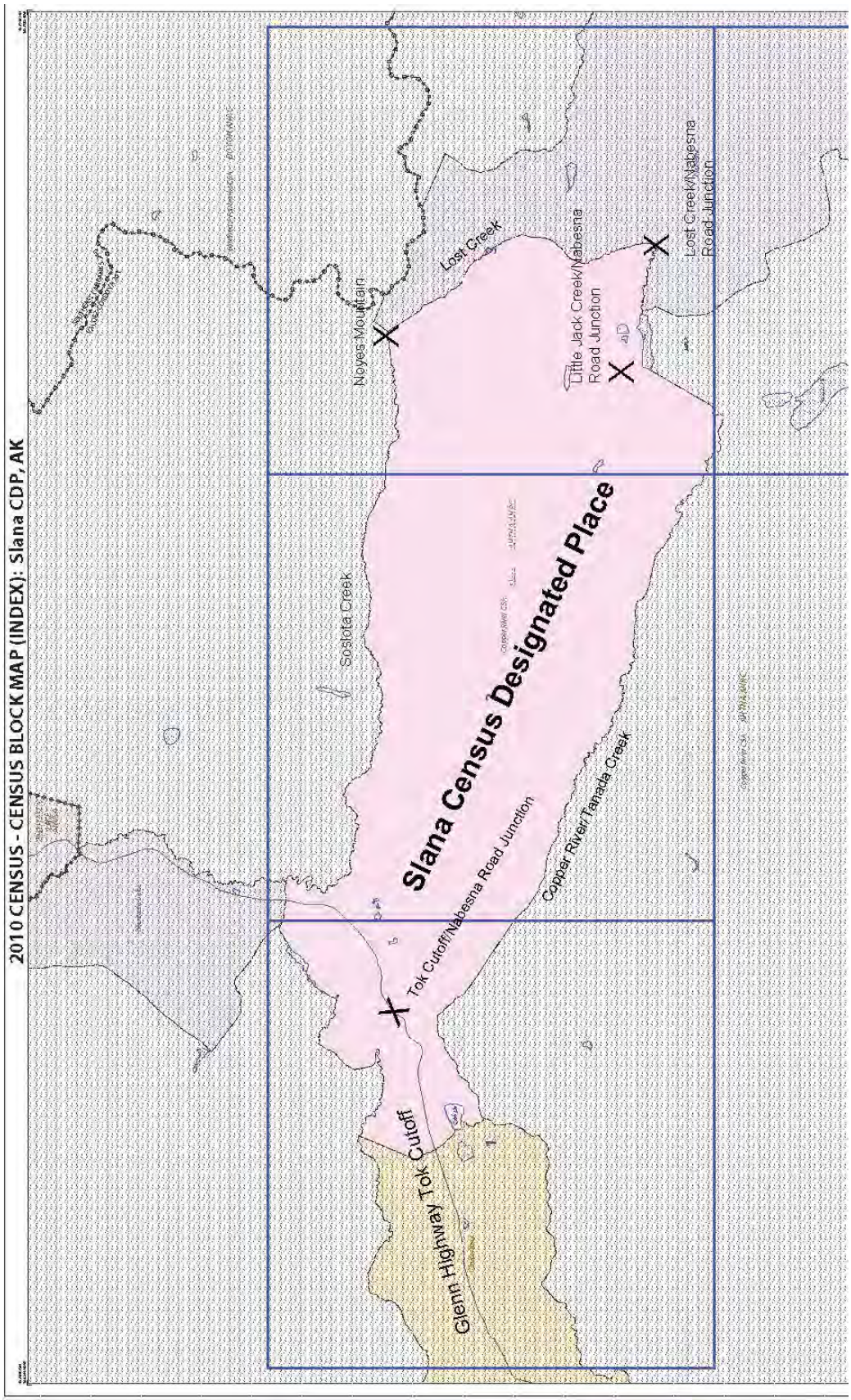

Figure 1. Map of Slana Census Designated Place (source: U.S. Census 2019b).

In 1998, the Healy Lake Traditional Council submitted Proposal P98-100 seeking to add rural residents of Unit 12 and Chistochina, Mentasta Lake, and Healy Lake to the customary and traditional use determination for sheep in Unit 12. The Eastern Interior Alaska Council and Southcentral Alaska Council supported the proposal with modification to add rural residents of adjacent Units 11, 12, 13C, 20D, and 20E. The Board adopted the proposal with modification to include rural residents of only Unit 12 and Chistochina, Dot Lake, Healy Lake, and Mentasta Lake. The Board said that there was insufficient evidence available during its deliberations to support including other rural residents. The Board clarified that rural residents of the community of Dot Lake would include rural residents of the village of Dot Lake and Dot Lake Junction (OSM 1998: 7; 63 FR 35338, June 29, 1998).

Community Characteristics

Slana is situated where the Nabesna Road intersects with the Tok Cutoff of the Glenn Highway, at the junction of the Slana and Copper rivers, and borders the northwest corner of Wrangell-St. Elias National Park and Preserve. An Ahtna village and fish camp site existed here, named *Stl'aa Caegge* in Ahtna. The Valdez Trail and a telegraph line were built along the route of the modern-day Richardson Highway and

Table 1. Proposals to include Slana in the customary and traditional use determination for sheep in Unit 12, with Southcentral and Eastern Interior Alaska Regional Advisory Councils and Interagency Staff Committee recommendations to the Federal Subsistence Board

Proposal No./Proponent	Proposed C&T	Council Recommendations	Interagency Staff Committee Recommendation
25A—Michael R. Henton, Bob and Barbara DePaso, Douglas Hoskin (C002), Wrangell-St. Elias National Park Subsistence Resource Commission (C007)	Unit 12 Tok Management Area—Residents of Tok	SC: Oppose EI: Support with modification to include residents of Units 11, 12, 13 and Dot Lake Village.	Reject
25C—Copper River Native Association	Unit 12 Remainder—Residents of Chistochina and Mentasta	SC: Support with modification to include residents of Unit 12 EI: Support with modification to include residents of Units 11, 12, 13 and Dot Lake Village.	Adopt as modified by Southcentral Alaska Council.
25D—Upper Tanana/Fortymile Fish & Game Advisory Committee	Unit 12—Residents of Units 11 and 12	SC: Oppose EI: Support with modification to include residents of Units 11, 12, 13 and Dot Lake Village.	Reject
25E—Slana Alaskans Unite (C005), Sue Entsminger (C010)	Unit 12—Consistent with Units 11, 13C, 20D, and 20E	SC: Oppose EI: Support with modification to include residents of Units 11, 12, 13 and Dot Lake Village.	Reject

brought people into the Slana area. A trading post and roadhouse were built in 1914. The Nabesna Gold Mine, located in Nabesna at what is now the end of the Nabesna Road, 46 miles from its junction with the Tok Cutoff, was open from 1923 through the 1940s and at its peak employed 60 people. The road to the mine opened to summer vehicle traffic in 1946. The Glenn Highway Tok Cutoff was built in the early 1940s connecting Slana to the Alaska Highway System (LaVine et al. 2013). Significant numbers of homesteaders arrived in the 1980s after two tracts of land on the north side of the Nabesna Road near Slana were opened for non-agricultural homesteading, one of the last homesteading opportunities provided by the Federal government in the United States (BLM 2016). They consist of 119 five-acre homesites (personal dwellings), 30 headquarter sites (for businesses), and eight trade and manufacturing sites (up to 80 acres for trade and manufacturing purposes for business needs). Many homesteads are not road connected.

LaVine and others (2013) identified three resident areas in the Slana area. First was the Roadhouse, around which the oldest road-based community was built. Second was the Nabesna Road settled by mine workers and more recently guides. Third was a homesteading community, described above.

LaVine and others continue:

In 1983 Stratton and Georgette (1984) found 43 residents living in Slana year-round with an additional 37 residents living in the Nabesna Road area. According to Hunt, by the early 1990s the total population had increased to approximately 150 people (1991:179); however, McMillan and Cuccarese (1988) found a combined population of 333 when all area communities and recently settled homesteads were surveyed in 1988—Slana (49), Nabesna Road (37), Slana Homestead South (186), and Slana Homestead North (61). None but Slana were a CDP [Census Designated Place] at the time. By 2000, Nabesna Road became its own CDP and Slana Homestead South was wrapped into the Slana CDP. Slana Homestead North remains outside of any CDP (LaVine et al. 2013: 77).

The 2010 U.S. Census identified 147 people living in 77 households within the boundary of the Slana Census Designated Place (CDP) (2019a and 2019b, **Figure 1**). The Slana CDP eastern boundary begins at the junction of the Nabesna Road and Lost Creek. It includes either side of the Nabesna Road to its junction with the Tok Cutoff highway. It continues on both sides, north and south, of the Tok Cutoff highway. Its northern boundary is the junction of the highway with Carlson Creek. Its southern boundary is the junction of the highway and the Cobb Lake turn off. There is a post office and store. Tok is approximately 65 road miles northeast of Slana.

For the purposes of this analysis, Slana consists of rural residents within the Slana CDP plus homesteaders north of the Nabesna Road that are north of the Slana CDP boundary.

Eight Factors for Determining Customary and Traditional Use

Customary and traditional uses in a community or area is generally exemplified through the eight factors: (1) a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area; (2) a pattern of use recurring in specific seasons for many years; (3) a pattern of use consisting of methods and means of harvest which are characterized by efficiency and economy of

effort and cost, conditioned by local characteristics; (4) the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area; (5) 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; (6) a pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation; (7) a pattern of use in which the harvest is shared or distributed within a definable community of persons; and (8) 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 the community or area.

The Board makes customary and traditional use determinations based on a holistic application of these 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.

As mentioned previously, the customary and traditional uses of sheep by rural residents of Slana have already been recognized by the Board in Unit 11. Consequently, the focus of this analysis is expanding the existing customary and traditional use determination for Slana residents to the proposed management unit, Unit 12.

Between 1964 and 1983, residents of Slana searched for sheep in a wide area including the Gold Hill/Nabesna Glacier area (south of Nabesna in Unit 12), the Sikonsina Pass area (situated south of the Tok River in Unit 12), and the Nutzotin Mountains in Unit 12. In 1984, few new homesteaders lived in the area; opportunities to homestead had only recently opened (ADF&G 1985 and Stratton and Georgette 1984).

Slana residents have documented their harvests of sheep during household harvest surveys. Slana residents reported harvesting an estimated 11 sheep (CI 95% 7–17) in 1982, 2 sheep in 1987 (CI 95% 2–4), and none in 2010. However, 16% of households reported using sheep that was shared with them during the 2010 study year, and a small number of households reported attempting to harvest sheep. Their search area in 2010 was northeast of the Nabesna Road in Unit 11, bordering Unit 12 (LaVine 2019, pers. comm.). Additionally, Slana Homestead North and South residents reported harvesting 2 sheep in 1987 (ADF&G 2019a and LaVine et al. 2013).

Between 1985 and 2017 cumulative, based on the ADF&G and OSM reporting systems, Slana hunters reported harvesting 30 sheep in Unit 12. Over this time period, Slana residents averaged 4.8 hunters

and 0.9 sheep per year in Unit 12. Other sheep harvests by Slana residents occurred mainly in Unit 11 (ADF&G 2019b and OSM 2019).

Effects of the Proposal

If this proposal is adopted, residents of Slana will be eligible to harvest sheep during Federal sheep hunts in Unit 12.

If this proposal is not adopted, residents of Slana will continue to be ineligible to participate in Unit 12 sheep hunts under Federal regulations, including the Federal Unit 12 elder sheep hunt.

OSM CONCLUSION

Support Proposal WP20-51.

Justification

Residents of Slana exemplify customary and traditional uses of sheep in Unit 12. Residents of Slana have harvested sheep in Unit 12 since at least 1982, as documented in household surveys and the State and Federal harvest reporting systems (ADF&G 1985; ADF&G 2019a, 2019b; and OSM 2019). The geographic extent of Slana has been described in various ways by different sources. The area description used in a 1997 for a proposal seeking recognition of Slana's customary and traditional uses of sheep did not include Slana Homestead North or Slana Homestead South (OSM 1997). In 2010 for the purposes of the U.S. Census, the Slana Census Designated Place (CDP) included households on either side of the Tok Cutoff highway, encompassing the population of the Slana area, and households on either side of the Nabesna Road up to Lost Creek (U.S. Census 2019b, **Figure 1**). Slana is defined here as the Slana CDP, plus homesteaders north of the Nabesna Road who are north of the Slana CDP boundary (**Figure 1**).

LITERATURE

ADF&G (Alaska Department of Fish and Game). 1985. Alaska habitat management guide. Southcentral region: reference maps. Alaska Department of Fish and Game Division of Habitat, Juneau.

ADF&G. 2019a. Community Subsistence Information System. Online database, accessed May 29. Alaska Department of Fish and Game Division of Subsistence, Anchorage.

ADF&G. 2019b. Harvest General Reports. Online database, accessed May 30. Alaska Department of Fish and Game Division of Wildlife Conservation, Anchorage.

BLM (Bureau of Land Management). 2016. History of Alaska Homesteading: the Last Chapter in America's Homestead Experience Brochure. Anchorage, AK. 12 pages https://www.blm.gov/documents/alaska/public-room/brochure/history-alaska-homesteading-last-chapter-americas-homestead.

FSB (Federal Subsistence Board). 1997. Transcripts of Federal Subsistence Board proceedings. April 7. Fish and Wildlife Service Office of Subsistence Management. Anchorage.

Hunt, W.R. 1991. Mountain wilderness: historic resource study for Wrangell-St. Elias National Park and Preserve. National Park Service, Alaska Region. Anchorage.

LaVine, R., M. Kukkonen, B. Jones, and G. Zimpelman. 2013. Subsistence harvests and uses of wild resources in Copper Center, Slana/Nabesna Road, Mentasta Lake, and Mentasta Pass, Alaska, 2010. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 380. Anchorage.

LaVine, R. 2019. Anthropologist. Personal communication: by email. U.S. Fish and Wildlife Service, Office of Subsistence Management, Anchorage.

McMillan, P.O., and S.V. Cuccarese. 1988. Alaska over-the-horizon backscatter radar system: characteristics of contemporary subsistence use patterns in the Copper River Basin and Upper Tanana Area. Volume I: synthesis. Draft report. Prepared for Hart Crowser, Inc. Arctic Environmental Information and Data Center, University of Alaska Anchorage in cooperation with the Alaska Department of Fish and Game and U.S. National Park Service, Anchorage.

OSM (Office of Subsistence Management). 1997. Staff analysis P97-25. Pages (Southcentral) 140–205 in Federal Subsistence Board Meeting Materials. April 7–11. Fish and Wildlife Service. Anchorage. 1,034 pages.

OSM. 1998. Staff analysis P98-100. Pages (Eastern Interior) 76–90 in Federal Subsistence Board Meeting Materials. May 4–8. U.S. Fish and Wildlife Service Office of Subsistence Management. Anchorage, AK. 1,449 pages.

OSM. 2019. Federal Subsistence Permit System. Online database, accessed May 31, 2019. Fish and Wildlife Service Office of Subsistence Management, Anchorage.

Stratton, L., and S. Georgette. 1984. Use of fish and game by communities in the Copper River Basin, Alaska: a report on a 1983 household survey. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 107. Anchorage. 224 pages.

U.S. Census. 2019a. https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml, accessed May 29.

U.S. Census. 2019b. CDP maps—https://www2.census.gov/geo/maps/dc10map/GUBlock/st02_ak/place/ (use Chrome), accessed May 29.

Valencia, Kris, editor. 2019. The Milepost 2019: Alaska travel planner. MCC Magazines, Augusta, GA

SUBSISTENCE REGIONAL ADVISORY COUNCIL RECOMMENDATIONS

Southcentral Alaska Subsistence Regional Advisory Council

Support WP20-51. The Council believes that use of the resource has been demonstrated and the rural residents of Unit 12 have been using the resource for some time.

Eastern Interior Alaska Subsistence Regional Advisory Council

Support WP20-51. The Council said that the proposal will benefit subsistence users of Slana that hunt in Unit 11 and want to go and hunt in Unit 12 on National Park Service lands. The Council also mentioned support for the proposal from the Wrangell-St. Elias Subsistence Resource Commission.

INTERAGENCY STAFF COMMITTEE COMMENTS

The Interagency Staff Committee found the staff analysis to be a thorough and accurate evaluation of the proposal and that it provides sufficient basis for the Regional Advisory Council recommendation and Federal Subsistence Board action on the proposal.

ALASKA DEPARTMENT OF FISH AND GAME COMMENTS

Wildlife Proposal WP20-51: This proposal, submitted by Bob Medinger, would add a customary and traditional use determination for Slana residents for Unit 12 sheep.

Introduction: Slana residents currently have a federal subsistence customary and traditional use determination for Unit 11 sheep but not for Unit 12 sheep. Slana is located near the intersection of the Nabesna Road and the Tok Cutoff Highway, and areas along the Nabesna Road include portions of Units 11 and 12 in addition to a small portion within Unit 13C. Except for the federal subsistence elder hunt within Wrangell-St. Elias National Park and Preserve and the state youth sheep hunt, the Unit 12 federal and state sheep hunt regulations are identical.

Impact on Subsistence Users: This proposal would allow Slana residents to hunt sheep in Unit 12 under federal subsistence hunting regulations.

Impact on Other Users: The proposed change will likely result in little additional harvest; therefore, it is unlikely to have a significant impact on other users.

Opportunity Provided by State:

State customary and traditional use findings: The Alaska Board of Game has not made a made a customary and traditional use finding for sheep in Unit 12 outside of the Tok Management Area.

Amounts Reasonably Necessary for Subsistence: Not applicable.

The state seasons and bag limits for sheep within the portion of Unit 12 that would be impacted by this proposal are:

		Open Season (Permit/Hunt #)	
Unit/Area	Bag Limit	Resident	Nonresident
Unit 12 remainder	One ram with full-curl horn or larger.	Youth hunt only.	Aug. 1–5 (HT)
	One ram with full-curl horn or larger every four regulatory years.	.	Aug. 1–5 (HT) Youth hunt only
	One ram with full-curl horn or larger.		Aug. 10–Sept. 20 (HT)
	One ram with full-curl horn or larger every four regulatory years.		Aug. 10–Sept. 20 (HT)

Source: ADF&G. 2019. 2019–2020 Alaska hunting regulations, number 60. Effective July 1, 2019–June 30, 2020. Alaska Department of Fish and Game, Division of Wildlife Conservation, Juneau, AK.

Special instructions: None

Conservation Issues: No biological concerns were identified with this proposal since it is not expected to markedly increase or change current harvest levels.

Enforcement Issues: No enforcement concerns were identified with this proposal.

Recommendation: The Department of Fish and Game is **NEUTRAL** on eligibility requirements for the federal subsistence program.

WRITTEN PUBLIC COMMENTS

June 5, 2019

Federal Subsistence Board
ATTN: Theo Matuskowitz
Office of Subsistence Management
1011 E. Tudor Road
Anchorage, AK 99503-6199

Dear Mr. Matuskowitz:

Customary and Traditional Committee is hereby pleased to submit comments on 2020-2022 Federal Wildlife Proposals.

We oppose WP20-19 which intends to change Federal Joint Elder/Youth permit hunt (FS1103) regulation on Unit 11 federal public lands. We also oppose changing (FS1204) Unit 12 Joint Elder/Youth Hunt regulation on Unit 12 federal public lands.

An Ahtna Elder proposed this joint elder and youth hunt for sheep in Unit 11 on federal public lands so that Ahtna's customary and traditional use and practice of harvesting, preserving and uses of sheep would be carried on. We, the Ahtna People wish to respect our late Elder from Tazlina Village to continue this sheep hunt in GMU 11 and GMU 12 to pass down C&T knowledge to the younger generation.

We support WP20-50, a housekeeping proposal to clean up description in Unit 12 unencumbered federal lands. Public members will have a precise description of federal lands that is surrounded by State lands. Federal subsistence hunters will have a better understanding where federal public lands are within Game Management Unit 12.

We oppose WP20-51 to allow the community of Slana to have a positive customary and traditional use (C&T) determination for sheep in Unit 12.

The community of Slana should prove in their own words that they have customary and traditional uses of sheep in GMU 12. The Ahtna People had to prove to the state and federal management systems that we have customary and traditional uses of fish and wildlife. We believe that C&T uses by all communities should be in sync with Ahtna customary and traditional uses of fish and wildlife in order to gain positive C&T use of the resources.

We support WCR20-42 to keep Unit 12 Caribou Wildlife Closure to the Non-federal qualified hunters. Only the federally qualified subsistence users should be able to continue to hunt Chisana caribou herd. The population of the Chisana caribou herd cannot sustain a hunt to include Non-federally qualified hunters. Keep the Unit 12 Caribou wildlife closure status quo.

Sincerely,
Gloria Stickwan
for Linda Pete

Linda Pete, Chair

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