EASTERN INTERIOR FEDERAL SUBSISTENCE REGIONAL ADVISORY COUNCIL MEETING PUBLIC MEETING VOLUME II Pike's Landing Fairbanks, Alaska March 4, 2020 9:00 a.m. COUNCIL MEMBERS PRESENT: Sue Entsminger, Chair Andy Bassich Andrew Firmin William Glanz Timothy McManus Donald Woodruff Robert Wright Charles Jagow Regional Council Coordinator, Zach Stevenson Recorded and transcribed by: Computer Matrix Court Reporters, LLC 135 Christensen Drive, Suite 2 Anchorage, AK 99501 907-243-0668/sahile@gci.net

Page 200 PROCEEDINGS 1 2 3 (Fairbanks, Alaska - 3/4/2020) 4 5 6 (On record) 7 MADAME CHAIR ENTSMINGER: Good morning. 8 Welcome to the Eastern Interior RAC second meeting or 9 second day meeting. I would like to have the people 10 online -- everyone let us know who's online now. 11 12 MR. SCHAEFFER: Good morning. This is 13 Damon Schaeffer with NANA Regional Corporation in 14 Kotzebue. 15 16 MS. WORKER: Good morning. This is 17 Suzanne Worker with the Office of Subsistence 18 Management. 19 20 MR. BURCH: Morning. This is Mark 21 Burch with the Department of Fish and Game. 22 23 MS LENART: This is Beth Lenart with the Alaska Department of Fish and Game. 24 25 26 MR. CHAKOWSKI: Nathan Chakowski with 27 the Alaska Department of Fish and Game. 28 29 MADAME CHAIR ENTSMINGER: Anyone else 30 online. 31 32 MR. WILLIAMS: Good morning. Paul 33 Williams, Jr., certified Gwich'in teacher from 34 Cruikshank School in Beaver, Alaska. Just meeting with 35 my student, Marcy. 36 37 MADAME CHAIR ENTSMINGER: Could you 38 state your name again, please. 39 40 MR. FIRMIN: Paul Williams, Jr. 41 42 MADAME CHAIR ENTSMINGER: Oh. 43 44 MR. WILLIAMS: Paul Williams, Jr. I am 45 a Gwich'in certified..... 46 47 MADAME CHAIR ENTSMINGER: Oh. 48 49 MR. WILLIAMS: ....teacher here in the 50

Page 201 Yukon Flats School District, Beaver, Alaska. We're 1 2 listening in with my students this morning. And I have 3 a comment later. 4 5 Thank you. 6 7 MADAME CHAIR ENTSMINGER: Okay. Good 8 morning, Paul. 9 10 And those in the audience -- well, 11 first is there anyone else online. 12 13 (No comments) 14 15 MADAME CHAIR ENTSMINGER: We'll move to 16 any new people in the audience, if you could introduce 17 yourself. 18 19 MR. ROWE: I am Eric Rowe from Tanana 20 Chiefs Conference. 21 22 MS. PINE: Barb Pine from the Upper 23 Tanana Fortymile Fish and Game Committee. 24 25 MR. JOHN: Gerald John from Arctic 26 Village. 27 28 MADAME CHAIR ENTSMINGER: Anyone else. 29 I see Jennifer back there. I was -- I recognize 30 Jennifer Yuhas. 31 32 MS. YUHAS: I'm Jennifer Yuhas, just a 33 member of the public. 34 35 MADAME CHAIR ENTSMINGER: Okay. All 36 right. And thank you, everyone. 37 38 Okay. Yesterday we were on proposal 39 82. And since then I've got two more blue cards. So I'm going to call up Gerald John from Arctic Village. 40 41 42 Gerald. 43 44 And the mic's already on so have a seat 45 there by the mic. And welcome. 46 47 MR. JOHN: Yep. Good morning. Good 48 morning. Where should I start. I'm from Arctic 49 Village as everybody knows. I've been a subsistence 50

Page 202 1 hunter all my life. 2 3 One thing I want to say about Red Sheep 4 Creek is that there are allotments up there, there's 5 possibly three allotments and each allotment contains 6 160 acres. I have had stories from my elders saying 7 that there are at least three people buried up there. 8 We do not know where these burial sites are, but they're probably most likely grown over. One thing 9 10 that I don't like is that if you have like one of your 11 family members passed away and someone going over there and walking all over your family's grave or, you know, 12 13 if you have a piece of allotment, 160 acres, and if you 14 -- and if you have it, right, and if I go there and 15 shoot an animal, I'm -- that's against the law because it's -- I'm shooting an animal on your land, right. 16 17 That's one thing that I don't understand is if there is 18 personal land up there, allotments, I don't know --19 understand why they want to open it. 20 21 Another thing is the burials, there's 22 three separate people that are buried up there. Again 23 we don't know where they're at, but, yeah, there's a lot of traditional value up there that we still use. 24 25 Like a lot of our older hunters, our older guides, they don't really fill out these tags. Again -- which is 26 really important because it -- you know, let's say that 27 my community shot or harvested 10 sheep and we don't 28 29 have nothing to show for it, you know. We could 30 harvest sheep and, you know, some of the older guys 31 they don't understand paperwork sometimes or, you know, 32 phones where -- how can I put it, they -- they never done it all their lives like, you know, they never had 33 to fill out a tag just to go out and hunt on their own 34 35 land. But a lot of the older people, they don't really 36 do that and that's what we're really trying to push 37 them on. 38 39 But, yeah, it's kind of -- a lot of 40 traditional values up there. I hear stories from our 41 elders saying that we even built fences around entire 42 mountains just to at least get a sheep. If you could 43 picture it back in the day when there's no guns or 44 anything like that, you know, you got to feed yourself. 45 And Alaskan have went to extraordinary lengths just to 46 feed our families. There are times where I heard stories where Red Sheep Creek fed a couple of villages 47 48 where there was no caribou or moose around. And what they -- the story from what I heard from an elder was 49 50

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there was no animals around and but there was sheep. 1 2 And what they did is they just went around this whole 3 mountain and they just generally going up and up and up and there's nowhere for these sheep to go. So, yeah, 4 5 they just somehow got them, but if you could imagine 6 what they had to do, you know, with no guns, you know, 7 three feet of snow, four feet. But, yeah, my -- just 8 don't like it that -- what they're trying to do. But we do go up there a lot, it's just that we don't, you 9 10 know, show it on paper. 11 12 And gas prices are ridiculous up there, 13 you know. I don't think any other, you know, people 14 from other towns would spend \$15,000 just one way just 15 to get there. As we all know some people spend up to \$24,000 just to go sheep hunting and don't get nothing. 16 17 And that's the same case for us, you know, we're not 18 really, you know, professionals at it, you know, we all 19 have mistakes. But, yeah, I want to say that there's a 20 lot of traditional value up there and we still practice 21 it. Recently we did just build a -- couple years ago 22 we did build a fence, a demo fence up in Arctic, on the 23 outskirts of town just to do -- just to show people, people that come into town, will show them that we 24 25 actually still, you know, practice these values. And 26 there's still a lot of values that we do practice up 27 there, a lot of tradition. 28 29 A lot of times we spend a lot of time 30 out on the land, you know. Right now it's what, 30 below. I quarantee you there's people out there on the 31 32 land right now, not just Arctic Village, but every 33 other town there are people out there on the land. And 34 it's a big part of rural Alaska is being out on the 35 land for us. Even being here in town just for, you 36 know, five, six days and, you know, I want to -- I want 37 to go out into the woods, you know, where -- where I feel, you know, alive like. And that's how most people 38 feel when they -- you know, when you're going up there 39 40 and you see these majestic, you know, big mountains, 41 this mountain range that stretches for hundreds and 42 hundreds of miles. Yeah, I just wanted to put that out 43 there that, you know, we do have traditional values and 44 sacred places up there. 45 I have another story where we did 46 47 harvest sheep, we went by plane. And when we were 48 coming back and I'm looking down out the window and I see another plane that is tipped over -- no, that -- a 49 50

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plane that's not even supposed to be -- be there. 1 You 2 know, the pilot took a chance and, you know, he tried 3 to land and he end up flipping his plane. Again Arctic 4 Village -- you know, they asked Arctic Village to come 5 up and help him, you know, tow the -- tow the airplane back and -- which we did. But, yeah, you know, my 6 7 question is why are people landing places where there's 8 no landing strips. We all know about Super Cubs where 9 you just need 60 feet to land, you know, and to take 10 off. 11 12 Yeah, I just wanted to put that out 13 there to everybody that I have seen planes come in and 14 try to land in some of the roughest spots and end up, 15 you know, ruining their rides. There's a couple of times where me and my brothers were climbing -- trying 16 17 to summit a mountain and a plane came by and, you know, 18 just flying around, you know, go over this way, come 19 back. And by the time the plane seen us, you know, it 20 was already too late, the ram was already running up 21 the mountain. And, you know, we were waving -- we were 22 waving at the plane and by the time the plane saw us or 23 spotted us it just took off and never came back. 24 25 You know, these are things that you 26 guys got to look into where, you know, planes just totally just fly 10, maybe 50 feet over your animal. 27 And they don't know if people like me that are there. 28 29 I have heard stories where planes, you know, float 30 planes just come into random lakes and, you know, 31 harvest a moose and only take the antlers. I have 32 heard stories of elders, not from Arctic but from downriver, where they literally just follow airplanes 33 34 now because they know that they won't take the whole 35 animal. 36 37 There's some stories where they just 38 killed the animal, took the horn and just left the whole carcass, not even -- the skin is still on there. 39 And that just makes me wonder about, you know, what 40 41 they do with the sheep, you know, do they, you know, 42 just take the horns and, you know, leave the big part of the carcass there. I know that we put in the plans 43 44 where, you know, people if they don't want meat they 45 could give it to the residents. They have to probably 46 step that up a little bit because, you know, who knows, you know, they could just be out there, you know, 47 48 harvesting animals just for the horns. But there are 49 people here at this table that would gladly accept, you 50

Page 205 1 know, a whole carcass of a sheep. 2 3 There's another story, I wanted to 4 harvest a sheep. We have Elders Nutrition Program 5 throughout every village and I donated my sheep to the villages and it got split up, you know, the whole sheep 6 7 got split up between I think seven villages. And about 8 four years later a guy came up to me and asked me hey, you're Gerald, right. And I was like, yeah, yeah, I'm 9 10 Gerald. And, you know, he gave me -- shook my hand and 11 gave me a hug, you know, hey, my -- my grandma never ate sheep meat for almost 40 years and I want to say 12 13 thank you. And, you know, just that kind of respect 14 and that kind of gratitude, you know, it goes a long 15 ways for us people. 16 17 But, yeah, that's all I want to say and 18 I hope you guys make the right choice and I hope you 19 guys really think about, you know, the people that are 20 in the airplanes. So there's -- just wanted to put 21 that out there about a couple stories. 22 23 But, yeah, I just want to say thank you 24 for giving me your time. 25 26 MADAME CHAIR ENTSMINGER: Gerald, maybe somebody has a question. 27 28 29 Any questions of Gerald. 30 31 MR. FIRMIN: I had one. 32 33 MADAME CHAIR ENTSMINGER: Andrew. 34 35 MR. FIRMIN: Thank you, Gerald, for 36 your testimony. I was just going to ask you though about outside of the sheep -- the Arctic Village Sheep 37 38 -- Red Sheep Creek, the management area there, the 39 people can go up there with a snowmachine and take 40 three sheep in the wintertime on a State permit outside 41 -- outside of the Red Sheep Creek area. 42 43 MR. JOHN: Yeah. 44 45 MR. FIRMIN: Would you be in support of changing that to one sheep or doing antler destruction 46 47 if it's up there in the wintertime so they got to leave 48 the horns there or something like that? 49 50

Page 206 1 MR. JOHN: Yeah, I would be in favor of 2 doing that. 3 4 MR. FIRMIN: Okay. 5 6 MR. JOHN: Like again there's -- if 7 you're getting three sheep and there's, you know, a 8 couple of females or ewes in there, you know, you're taking away the population, you know, just like moose. 9 10 But, yeah, I'm in support of it. 11 12 MR. WRIGHT: Madame Chair. 13 14 MADAME CHAIR ENTSMINGER: Robert. 15 16 MR. WRIGHT: Is that going to be the 17 one where it's only going to be one curl -- one ram for 18 every four years? 19 20 MR. FIRMIN: Well, currently the -- the 21 regulation is three sheep by permit in the remainder of the 25A in the wintertime. That's the hunt where the 22 23 people are running up with snowmachines and running 24 them down and shooting any three sheep I believe. So that was just -- another thought was to not only to not 25 26 -- just to change that regulation to either an antler 27 destruction or to make it only one sheep instead of any 28 three. And that would only be on the State season so 29 the Federal season for local people would be you can 30 still get any three. 31 32 MR. JOHN: Yeah, sounds good. Sounds 33 reasonable. 34 35 MADAME CHAIR ENTSMINGER: Any other 36 questions. 37 38 (No comments) 39 40 MADAME CHAIR ENTSMINGER: Gerald, I 41 just wanted to tell you that I'm an avid sheep hunter 42 like you and things that you just mentioned I've seen, I've been many times in my 45 years of hunting sheep 43 44 had -- not many, but it's happened where planes fly 45 over, even a helicopter. And that's why the State come up with that probably three years ago, no surveying 46 47 sheep during sheep season. And I'm hoping that it's 48 helped a great deal. I don't see it as much since that 49 occurred. 50

Page 207 And then I wanted to tell you in my 1 2 area my son and I are guides and we take sheep hunters 3 out. We're a very tiny operation, we take a few sheep with nonresident hunters and share the meat with the 4 5 village. And the late Katie John loved it. She sounds 6 just like your people where she was hungry for sheep 7 meat because she actually grew up on sheep meat. 8 9 And that's the kind of thing that I 10 want to work on with this Council is we have -- there 11 was developed a program in 2011 to have a requirement that people have to take this hunter ed thing and learn 12 13 about the people and the land status that -- where it's 14 at. Would you support that kind of thing where they 15 need to have -- the State could require that they have 16 to have this training before they can even hunt in 17 these areas? 18 19 MR. JOHN: Yes, that would -- that 20 would really help us. Another thing to look for is 21 probably trash, you know. I never experienced any trash like build up, but, you know, there's probably 22 23 some places that are like that. So that's the one 24 thing to look out for. 25 26 MADAME CHAIR ENTSMINGER: Yeah, your 27 people have testified before us for many years and they 28 have said just that. 29 30 MR. JOHN: Yeah. 31 32 MADAME CHAIR ENTSMINGER: Any other 33 questions of Gerald. 34 35 (No comments) 36 37 MADAME CHAIR ENTSMINGER: Thank you for 38 coming. 39 40 MR. JOHN: All right. Thank you. 41 42 MADAME CHAIR ENTSMINGER: Uh-huh. 43 44 MR. JOHN: Have a good day. 45 46 MADAME CHAIR ENTSMINGER: Yeah. The 47 next one is Jennifer Yuhas. 48 49 MS. YUHAS: Thank you, Madame Chair.

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For the record my name is Jennifer Yuhas and I am now 1 2 just a member of the general public. And thank you to Andy Bassich for inviting me back to come and testify 3 this morning. Yesterday I knew that the RAC was in 4 5 town and I used to come before you for several years 6 representing an official position and I thought well, 7 I'll just pop by and see everybody. And it was -- I 8 hadn't looked at the agenda, it was after 5:00 and lo and behold everybody's talking about Red Sheep Creek 9 10 again. 11 12 (Laughter) 13 14 MS. YUHAS: Andy and I started talking 15 about how people's memories are very short. And in 16 2011 I actually was the person who wrote the 17 requirement for the ethics and orientation class. And 18 the Board of Game passed that. And the regulatory 19 process was a little bit askew because the Board of 20 Game was going to meet three weeks before or the Board 21 of -- the Federal Subsistence Board was, excuse me, 22 going to meet three weeks before the Board of Game. So 23 when I brought it to the Federal Subsistence Board they 24 said well, it hasn't been passed on the State side so 25 we'll wait. It got passed on the State side three 26 weeks later as predicted and so I came back the next year and said hey, look they passed the ethics and 27 28 orientation class, are you guys ready. And we almost 29 got there, there was support from the RAC, there was 30 support from local folks and I'm just a member of the public so I can say the -- at the time the Alaska head 31 32 of Fish and Wildlife Service decided to go a different direction. He wasn't reputed to be the most 33 34 hardworking person ever in that position and said well, 35 you haven't already written the class. And we said 36 right, because remember last year I said we would have 37 to write the class with the people so that we could incorporate some local knowledge, that class might not 38 be written for five years. Well, a decade later since 39 40 the Federal side never passed that, no class was 41 written, no collaboration was made. 42 43 I don't know how many of you like to 44 play board games, I like them a lot. That can be a 45 little annoying when we're playing them. I'm sure a 46 few people in the room and maybe even on the 47 teleconference would say it can be annoying other ways, but I like to read the rules. So if you're playing 48 chess the guy with the pointy hat goes diagonal, the 49 50

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little castle goes back and forth. And that's the way 1 2 you're allowed to move the piece. Well, when the issue 3 first came up when I was in an official position and it had been coming up for 20 years before that, there was 4 5 no conservation concern and the Board and the RAC are 6 bound to the conservation concern. It seemed like 7 people wanted to have a quick fix and to say well, I 8 know we're not really supposed to do it that way, but I just want to do something for the local people. And I 9 10 brought up several adequate ways to address that. 11 12 At the time the argument was made with 13 one of the members of the Board that we know there's 14 not a conservation concern, but the area's just really 15 special to the people so we want to close it, said okay, if that's the argument and it's not conservation 16 17 there are methods available to you. At the time we 18 still hadn't done all of the conveyances. We heard at 19 the 2011 Federal Subsistence Board that the allotments 20 are over here and where are the sheep and where do 21 people hunt sheep, well, the sheep are all up here and there could be trespass, but if this is the area that's 22 23 sacred that people want to keep other people out of, 2.4 you could petition for a swap and it would take about 25 five years. But it seemed as though people who wanted 26 a quick fix could say well, we're not really supposed to do it that way, but let's just do it that way 27 because it'll make people happy for now. It doesn't 28 29 address what's within the purview of the RAC and the 30 Federal Subsistence Board. There are other methods to 31 keep people out if that's the goal, but it's not here 32 in this venue. Closing the area to sheep hunting for 33 the limited season doesn't keep people out as we heard 34 in 2013. There are people going through the area for 35 hiking, for other opportunities, through the area to a 36 different place where they can hunt sheep and making this regulation in opposition to what is within the 37 purview of the RAC and the Board doesn't keep people 38 39 out. There's another place to do that. 40 And I know that analogies fall short, 41 42 but I'm going to make one. If you come into town and you -- and we go to McDonald's because it's time to go 43 44 to dinner and you say well, I want spaghetti. And I know these things can seem a little ridiculous, but it 45 46 really does paint the picture and they say we don't 47 serve that here. If you want to go across town to 48 Geraldo's which I recommend if you're in town, best 49 spaghetti in town, that's where you can have spaghetti. 50

Page 210 Showing up at McDonald's every year and saying I still 1 2 want spaghetti and I'm going to come here until I get 3 it, somebody might pour a bunch of ketchup over some 4 fries and say here's your spaghetti, but it's not 5 spaghetti. And that's what we've been doing with this 6 issue, if we really want to make a difference and have 7 some collaboration we have to work within the bounds of 8 ANILCA, within the bounds of the creation and original 9 EIS of the Board and the RACS and what's within their 10 purview for conservation. If we want to preserve 11 culture and keep an area sacred and keep people out of 12 it, we have to work across town in a different venue. And I'm sorry it is that way, we all want to do 13 something that feels good. I thought coming up with an 14 15 ethics and orientation class that would not be allowed 16 to issue a permit until we had worked with the local 17 people and incorporated local wisdom would do that, but 18 it wasn't adopted by the Board. 19 20 So I hope that some of that testimony 21 on the history can add to your discussion and I have 22 brought the transcripts and the original proposal to 23 add to your record. 24 25 MADAME CHAIR ENTSMINGER: Council 26 members, any questions. 27 28 MR. FIRMIN: Thank you, Jennifer. I'm 29 totally going to use that one, pouring ketchup on 30 french fries and telling them it's spaghetti. 31 32 MADAME CHAIR ENTSMINGER: That's a good 33 one. 34 35 MR. FIRMIN: And that's like I -- I 36 agree with you, that's -- that was what I was saying 37 yesterday, I'm not getting in the van until you show me 38 the candy. So.... 39 40 (Laughter) 41 42 MR. FIRMIN: .....you know, the class 43 has got to get made first, you know, show me the tacos 44 before I get in the truck, man. And once the class is 45 made maybe something could be -- something can be, you 46 know, changed or we can come to some conclusion here. 47 48 MS. YUHAS: Madame Chair. 49 50

Page 211 MADAME CHAIR ENTSMINGER: Yeah, go 1 2 ahead. 3 4 MS. YUHAS: Madame Chair, the way that 5 was drafted was to pass the opening contingent on the 6 Board of Game and they did theirs. And so if it's not 7 passed to open it, then nobody's going to develop the class, the written -- it has to be passed to open 8 9 contingent on the class so that you can hunt after 10 you've had -- just like the other examples that we gave at the time there's some -- you have to take a class to 11 duck hunt in Juneau on the -- on the one Refuge, you 12 13 have to take a class to bear bait in some areas, and 14 until it's passed to be open with the class that's the action that has to be taken. Nobody's going to start 15 16 working on it. Here we are a decade later and I 17 thought we would have already had some collaboration 18 with the local area, but it didn't pass so there isn't. 19 20 MR. BASSICH: Madame Chair. 21 22 MADAME CHAIR ENTSMINGER: Andy. 23 24 MR. BASSICH: So I'm trying to follow along here. So the State passed with the contingency 25 that the course had to be developed and it did not --26 27 it did not move forward through the Federal. So at 28 this point in time is it still on the records, do we 29 know is that still on the records from the State? 30 31 MS. YUHAS: (Nods affirmatively) 32 33 MR. BASSICH: Okay. With that -- with 34 that caveat. So it's a matter of going to the Federal 35 Subsistence Board at this point in time and asking them to move forward and help to develop the course, is that 36 37 clear? 38 39 MADAME CHAIR ENTSMINGER: Well, now I'm 40 confused. 41 42 MR. BASSICH: Allowing -- well, 43 allowing to.... 44 45 MADAME CHAIR ENTSMINGER: You're 46 saying.... 47 48 MR. BASSICH: .....for that course to 49 happen. 50

Page 212 MADAME CHAIR ENTSMINGER: .....the 1 2 Federal Board -- I thought I heard you say that the sheep hunting had to be open first. So now I'm 3 confused because that's not -- you're saying that the 4 5 hunter education .... 6 7 MS. YUHAS: (Nods affirmatively) 8 9 MADAME CHAIR ENTSMINGER: She's nodding 10 her head incidentally, I don't know if the court 11 reporter.... 12 13 REPORTER: I got it. 14 15 MADAME CHAIR ENTSMINGER: I thought you 16 said that the Federal Board has to pass an open season 17 to develop it. Yeah, so..... 18 19 MS. YUHAS: Madame Chair. So in 2011 20 we wrote the Federal proposal to say opening it 21 contingent upon the Board of Game passing the 22 requirement for the class. And they -- they said we'll 23 wait and see if they do it. Well, they did it. So 24 they said there's a requirement for the class. So, yes, opening it, but people still couldn't hunt until 25 26 they'd gone through the class see. So we said 27 contingent on the State -- on the Federal side 28 contingent upon the Board of Game passing the proposal 29 I wrote. Board of Game passed it. So..... 30 31 MADAME CHAIR ENTSMINGER: But they didn't write it. 32 33 34 MS. YUHAS: .....so they're not going 35 to until it's open to be able to have the class. It's -- it's in the 2011 proposals. 36 37 38 MR. BASSICH: So the.... 39 40 MADAME CHAIR ENTSMINGER: Go ahead. 41 42 MR. BASSICH: Okay. So the bottom line on this just to try and simplify this is at this point 43 44 in time the action that would have to happen is the 45 Federal Board would have to have the opening which then 46 would allow for the class to be developed. And then 47 the hunts once that.... 48 49 MADAME CHAIR ENTSMINGER: That's what I 50

Page 213 1 thought. 2 3 MR. BASSICH: ....once a person takes 4 that class after it's been developed then they would be 5 able to go and hunt that area. And then it would be a 6 matter at that point in time really of trying to decide 7 what type of a hunt you want to have there. But --8 right.... 9 10 MADAME CHAIR ENTSMINGER: I.... 11 12 MR. BASSICH: .....whether.... 13 14 MS. YUHAS: (Nods affirmatively) 15 16 MADAME CHAIR ENTSMINGER: .....that's 17 how I understood it. 18 19 MR. BASSICH: .....we were going to do 20 a permit or a draw hunt or whatever. 21 22 MADAME CHAIR ENTSMINGER: Yeah. The 23 Federal Board isn't developing or passing to -- for a class, the State did..... 24 25 26 MS. YUHAS: Already did. 27 28 MADAME CHAIR ENTSMINGER: .....and then 29 the Federal Board has to open it for a class..... 30 31 MR. BASSICH: Correct. 32 33 MADAME CHAIR ENTSMINGER: .....because 34 you don't need a class if nobody can hunt there. 35 36 MR. BASSICH: Correct. I'm just trying 37 to simplify it so we know what actions need to happen 38 and in what order if this is to move forward. 39 40 Thank you, Jennifer. 41 42 MR. FIRMIN: Madame Chair. 43 44 MADAME CHAIR ENTSMINGER: Andrew. 45 46 MR. FIRMIN: Again and I think that was 47 where it stalled it up again ..... 48 49 MADAME CHAIR ENTSMINGER: Uh-huh. 50

Page 214 MR. FIRMIN: .....because nobody showed 1 2 me the candy before they said get in the truck. And that's not going to work for me and not for anybody in 3 Arctic Village. And that's kind of where it held up 4 5 and that was where the discussion maybe needs to shift 6 away from sheep hunters and shift to all visitors that 7 visit the sheep management area to take this course for 8 an education on trespass and, you know, customary uses 9 and respect for the people that own the property in --10 within there and what they may encounter while they 11 pass through it. 12 13 MADAME CHAIR ENTSMINGER: Yes. 14 MR. FIRMIN: I think that's probably 15 16 the best avenue you can take on that. 17 18 MADAME CHAIR ENTSMINGER: And I totally agree. But and just expounding on what you said what 19 the roadblock is and I think the -- your spaghetti with 20 french fries and ketchup is not his show me the candy. 21 22 Because his -- his is he wants to see that class first 23 and you're saying it needs to be open at the Federal 24 side first. And see there's where I think we're having 25 a little.... 26 27 MR. FIRMIN: That's -- that's..... 28 29 MADAME CHAIR ENTSMINGER: 30 .....difficulty. And go ahead, Jennifer. 31 32 MS. YUHAS: Two points for Mr. Firmin 33 that the all visitors would be again outside the 34 purview of the RAC and the -- and the Federal 35 Subsistence Board. 36 37 MADAME CHAIR ENTSMINGER: Uh-huh. 38 39 MS. YUHAS: So that would be ..... 40 MADAME CHAIR ENTSMINGER: That's your 41 42 ketch or your spaghetti. 43 44 MS. YUHAS: Yeah, that would be -- that 45 would be somewhere else for anything that encompassed all visitors. And then, yes, the idea of saying well, 46 47 if it's opened people say oh, gosh, then it's open. 48 Well, you still can't go without the paper so it's not 49 really open. 50

Page 215 MADAME CHAIR ENTSMINGER: This is why 1 the class needs to be developed because it's hard to 2 3 wrap your head around, you know, exactly what you want. And to be personally just reaching out to Arctic 4 5 Village right now and working with the people and then 6 everybody begins to have an understanding, okay, this 7 is the State law, this is the Federal law, things are 8 done this way under the State, things are done this way under the Federal because it's -- it's all confusing. 9 10 Even people that work and get paid to do stuff come up 11 here and give us mixed information. 12 13 So, yeah, would you be available to 14 help us? 15 16 MS. YUHAS: Madame Chair, I would. And 17 part of the which comes first, the cart or the horse, 18 without the area being open and we've all talked at the 19 State, Federal and local level about dwindling dollars 20 for things, right. So if it's not open nobody's going to fund people going out there to develop anything, 21 22 right, that your agencies are going to say we don't 23 have the funds for that because it's not open. 24 25 MADAME CHAIR ENTSMINGER: But I think 26 -- right now I think the director of Wildlife might be 27 open to this. 28 29 MR. BASSICH: We also have somewhat of 30 a commitment from the Federal Subsistence Board to 31 develop hunter education program. 32 33 MADAME CHAIR ENTSMINGER: And my intent 34 of bringing this before the RAC now was let's start 35 somewhere, let's start right here and -- because it was 36 Eastern Interior that wanted to see something, it was 37 going to be just the Eastern Interior, the hunter ethics thing. And here's a place to start to show that 38 39 we're going to work on it, maybe we can get funding 40 from the Feds to help us develop the program because no 41 one seems to be moving because of this catch 22, this 42 has to open before this is done. And I don't buy it. 43 44 MS. YUHAS: Last comment, Madame Chair, 45 I just urge the RAC and the Board to operate within their authority. So there's been many times they've 46 gotten heat from the other side where they said -- they 47 48 meaning others have said this area is closed and they 49 can't do it. Well, you know, I've said yes, they can, 50

Page 216 there's a conservation concern, that's exactly what 804 1 2 is for. When areas are closed not for a conservation 3 concern it is outside the authority of the RAC and the Board. And acting outside our authority as the 4 5 Sturgeon case showed can only go on for so long. 6 7 MADAME CHAIR ENTSMINGER: Pippa. 8 9 MS. KENNER: Thank you, Madame Chair. 10 And, hi, Jennifer, it's so nice to see you. 11 12 And there's been a couple of times when 13 we've had these really good testimony and conversations 14 about the Arctic Village Sheep Management Area and I 15 think it is my responsibility to remind the Council 16 that the Board was very clear it was using authority in 17 ANILCA to close to the hunting of sheep by non-18 Federally-qualified users based on the continuation of 19 subsistence uses. And that's very clear in ANILCA, 20 it's not outside ANILCA, conservation can also be a consideration. And for the areas south of Cane Creek 21 22 that was the justification, part of the justification for the area north of Cane Creek including Red Sheep 23 Creek. This primarily for the protection of the 24 25 continuation of subsistence uses based on these 26 conflicts and testimony. 27 28 Thank you very much. 29 30 MS. YUHAS: And, Madame Chair, the 31 minutes do show that those statements were made to preserve culture. 32 33 34 MADAME CHAIR ENTSMINGER: Yes. And 35 you're saying that's not -- the law is for 36 conservation? 37 38 MS. YUHAS: It is a fascinating 39 argument made by the deputy who I would love to have a 40 glass of wine with and discuss that, but it didn't in 41 the State's opinion at the time and many others fit 42 within the purview of conservation concerns under 43 ANILCA. A little bit cheeky. 44 45 MADAME CHAIR ENTSMINGER: Okay. Andrew and I were talking and he said, you know, the Board of 46 47 Game process is that right now on the table we have 48 this to adopt so that's everything that's in it. So we 49 would have to amend our -- to be one -- you'll have to 50

Page 217 1 ask the Fish and Game because ..... 2 3 MR. BASSICH: No, my understanding from 4 Ms. Yuhas' testimony here is that the hunt is already 5 on the record and it's still on the record. So why do 6 we even have to write anything. What we wrote as an 7 Eastern RAC that doesn't even have to be written. And 8 it seems to me what needs to happen at this point is we need to make a recommendation to the Federal 9 10 Subsistence Board to open up the hunt which would then 11 allow us to begin to create the hunter ethics that is needed for a hunter to take before they can go out and 12 13 hunt the area. 14 15 Am I correct in that summary? 16 17 MADAME CHAIR ENTSMINGER: Yeah. 18 19 MR. BASSICH: So we don't have to write 20 -- this proposal can go away, it's already on the books, there's already -- there's already a hunt..... 21 22 23 MADAME CHAIR ENTSMINGER: Yes, there's 24 one.... 25 26 MR. BASSICH: ....on the books, it's 27 just not allowed to be done because you have to take a 28 course which isn't even written. So the focus of what 29 we're trying to do should be on how do we develop this 30 course in conjunction and in cooperation with the 31 people from Arctic Village and the region cooperatively, that everybody's in agreement on this 32 33 course, has their input. Once that course is in place then a hunter can take that course and then he or she 34 35 would be able to go and hunt in that area. 36 37 Am I correct, is that the summary -- is 38 that a correct summary? 39 40 MS YUHAS: A long summary and I don't 41 want to testify for or against the proposals that are currently going through, but the simplistic answer is 42 yes, if it's -- if it's just open then the course can 43 be developed. But getting into the weeds of what would 44 45 go into a course during the regulatory proposal process is a separate discussion for everyone, but that is the 46 47 -- the steps would be open it, then we can talk about a 48 course. 49 50

	Page 218
1	MR. BASSICH: On open it on
3	MADAME CHAIR ENTSMINGER: If I may
2 . 3 4 5 6 7 8 9	MR. BASSICH:the Federal side.
7	MS. YUHAS: Uh-huh.
9 10 11 12 13 14 15 16 17 18 20 21 22 23 4 25 27	MADAME CHAIR ENTSMINGER:if I may, Andy. This proposal would take what she's saying it has to be open. Well, that's the the Federal Board proposal that we put that was before us this last meeting and we voted against was to open it. And we voted against it. And then to make things a little simpler for us and more restrictive instead of just opening it to everybody this proposal puts it in a draw. Just the portion of the fall season. And that's one issue in this proposal. Just the portion of the fall season that would be a draw. So that's more restrictive to opening it if they just pulled the Federal restriction. And that was an intent to be conservative and have conservation for the sheep when we put this proposal in. So that part I don't want to see die, that's something to very important. If it were to open it's just going to be a draw.
28 29 30 31 32 33 34 35 36 37 38	to this proposal and I'm sorry that they're so bloody complicated. But and it was something we didn't even talk about was that the youth hunt. See the State has a youth hunt and that had to go in there. But that the winter season I guess is my main concern, secondly to the hunter education and ethics is the winter season and the three sheep limit. So, you know, just saying that, no, let's not do anything is not the answer in my mind, is not being sensitive to the people.
39 40 41	MS. YUHAS: And certainly not testifying against the proposal
42 43 44	MADAME CHAIR ENTSMINGER: No, and we're you're here as a to testify and we got
45 46 47	Does anyone have anymore questions for Jennifer?
47 48 49 50	(No comments)

Page 219 1 MADAME CHAIR ENTSMINGER: Thank you, 2 Jennifer. 3 4 MS. YUHAS: Okay. 5 6 MADAME CHAIR ENTSMINGER: And so 7 Charlie talked to me last night and I'd like Charlie to 8 expound on his idea. 9 10 MR. JAGOW: So our discussion was about 11 the RS 595 winter hunt. Currently it is three sheep by permit, this is under the State regs. And I believe 12 13 I'm understanding this correct that in proposal 82 it's 14 suggested that it's changed to one ram with full curl 15 horn or larger. My thoughts on that would be that we 16 could suggest changing it to one ram with antler 17 destruction required. 18 19 MADAME CHAIR ENTSMINGER: Horn. 20 21 MR. JAGOW: One -- yeah, horn 22 destruction required. 23 24 MADAME CHAIR ENTSMINGER: So I think we should just go through each -- like we said yesterday, 25 26 Charlie, just go through each one and see what we can 27 agree on and then come up with somebody -- a work 28 committee put together what the amendment would be, 29 what we agree on and it be in one motion. 30 31 Would we -- would.... 32 33 MR. WRIGHT: I didn't agree to that. 34 35 MADAME CHAIR ENTSMINGER: Oh, I'm 36 sorry. 37 38 MR. WRIGHT: That's not what I said. 39 40 MADAME CHAIR ENTSMINGER: You did say 41 that we should take piece to piece..... 42 43 MR. WRIGHT: Well, I said to..... 44 45 MADAME CHAIR ENTSMINGER: .....and that's what I was referring to. 46 47 48 MR. WRIGHT: I voted it down, I opposed 49 it. And I want it redone in the future, I don't want 50

Page 220 1 to redo it today. I thought we were done with this 2 yesterday. 3 4 MADAME CHAIR ENTSMINGER: No, we 5 weren't done with it. 6 7 MR. WRIGHT: Okay. Well, that's my 8 misunderstanding. But I would like to see it simplified. There's too many different directions and 9 10 go with -- going with the way it's put in that proposal, there's too much in there..... 11 12 13 MADAME CHAIR ENTSMINGER: Uh-huh. 14 15 MR. WRIGHT: .....for me. 16 17 MADAME CHAIR ENTSMINGER: Would you be 18 in favor of what he just said for the winter hunt? 19 20 MR. WRIGHT: I won't change my stand. 21 22 MADAME CHAIR ENTSMINGER: Okay. And 23 would you be in favor of pushing the State to develop 24 the hunter ethics and work with the people? 25 26 MR. WRIGHT: I would like to see the 27 people involved. That's -- that's why I am opposing everything today is because people need to be involved 28 29 that are going to be affected. And once that --30 because that's who we work for is the people. Once they're involved and we hear their comments and their 31 32 wish and then I'll be happy to go along with whatever 33 they wish and comes out of that. We need to involve 34 the people and we need to consultate with them. We 35 need to -- when our meeting happens up there that would 36 be the best time to get this resolved in a -- in a fair 37 manner where everybody's involved. I think that 38 everybody that's going to be involved and affected 39 needs to be in the room or the people that represent 40 them. 41 42 And that's my bottom line, I just don't 43 want people to be left out and affected in the long 44 run. So as long as everybody involved is there and we 45 work through it I'd be happy. 46 47 MADAME CHAIR ENTSMINGER: So I think we 48 agree on that, uh-huh. 49 50

Page 221 MR. WRIGHT: Yeah. 1 2 3 MADAME CHAIR ENTSMINGER: Uh-huh. 4 5 MR. WRIGHT: Sure. 6 7 MADAME CHAIR ENTSMINGER: Uh-huh. 8 We're -- the motion's on the floor. I don't have any other testimony, but I know Fish and Game's online. So 9 if there's any questions of them we can ask them. 10 11 12 MR. McMANUS: Madame Chair. 13 14 MADAME CHAIR ENTSMINGER: Go ahead. 15 16 MR. McMANUS: Yeah, Madame Chair. For 17 the record I want to -- yeah, I'm into AC and I agree 18 with Charlie. And they oppose this too. I just want 19 to put that on the record. 20 21 Thank you. 22 23 MADAME CHAIR ENTSMINGER: So I'm going 24 to ask you too, Tim, about the hunter ethics and 25 pushing to develop that? 26 27 MR. McMANUS: Yeah, I think if 28 something was wrote up in that point then it might kind 29 of deter a couple people from going there, but if they 30 really want to get out there and get it they're going 31 to do it. 32 33 MADAME CHAIR ENTSMINGER: You mean the 34 Department to development the program? 35 36 MR. McMANUS: Yeah. 37 38 MADAME CHAIR ENTSMINGER: Other 39 discussion on the motion? 40 41 MR. FIRMIN: Madame Chair. 42 43 MADAME CHAIR ENTSMINGER: Andrew. 44 45 MR. FIRMIN: Maybe with Andy's help we 46 could just amend this existing proposal to do away with all of it except for the RS 595 part which is the 47 48 winter hunt and just keep that one portion of it which 49 says -- which changes from -- the existing regulation 50

Page 222 is three sheep by permit from October 1st to April 30th 1 2 from the State season which would change it to one ram 3 with horn destruction. So then people can't drive up there with snowmachines and shoot any three sheep in 4 5 the dead of winter or spring is normally when they go. 6 7 And that would be a amend -- motion to 8 amend the motion I guess. 9 10 MADAME CHAIR ENTSMINGER: Uh-huh. 11 12 MR. FIRMIN: Is that clear enough? 13 14 MR. McMANUS: Madame Chair, I got a 15 question. Because you mentioned yesterday that in the 16 springtime that's when the sheep are dying or skinny 17 and there's no food and so why are they hunting them 18 then? That's my question. 19 20 MADAME CHAIR ENTSMINGER: You know, 21 when you've been around this before it was -- there was 22 a subsistence law in Alaska like I have, they went by -you know, the State was doing the -- I need someone 23 24 from the State, maybe they could do the history better than I. I'm just going by my memory that the people in 25 the north said that they use sheep in the winter and 26 27 the -- and the State passed a season. And it was --28 and they made it to where they -- no one could use an 29 airplane they thought and yet they allowed people from 30 Kaktovik, if you fly into Kaktovik you -- and they were 31 intentioned as I understand it and I might not 32 understand it properly, but this is how I remember it, 33 people from Kaktovik have to fly in there to live. So 34 they gave that exemption. So that makes people able to fly in from anywhere to Kaktovik and go. But did -- we 35 could probably get more information if you wanted, but 36 37 it -- you know, it hap -- it's just an evolving situation I think. 38 39 40 And I believe staff could help me out here. I talked to Nathan and he said he talked to 41 42 Arctic Village last week, Monday and Tuesday, and they 43 don't hunt with a snowmachine in the winter. So I 44 think things have evolved, that something that they 45 might have done a long time ago they're not doing now. So any -- I don't know if anybody can help me out on 46 47 that. 48 49 MR. HAWKALUK: Thank you, Madame Chair 50

Page 223 and Council. My understanding is that in recent years 1 2 Arctic Village hasn't been doing much in the way of 3 snowmachining up in the mountains in the wintertime to 4 harvest sheep. Kaktovik residents still do that 5 traditionally. That's -- for Kaktovik residents my 6 understanding is that they like to have sheep for 7 Thanksgiving. So that's usually the first time they go 8 out by snowmachine trying to harvest sheep for 9 Thanksgiving for the village. And my understanding is 10 that they also go out periodically during the winter later hunting sheep. How much -- how frequently 11 throughout the winter and how late in the season, I 12 don't know. But quite a bit, relatively speaking a lot 13 more than Arctic Village residents do. 14 15 16 MADAME CHAIR ENTSMINGER: And if I may 17 add they still would have that if this passed because 18 it's a Federal regulation that allows them to hunt 19 there? 20 21 MR. HAWKALUK: Yes. 22 23 MADAME CHAIR ENTSMINGER: This -- this is the whole -- under the whole State everybody is 24 qualified as a subsistence user. So that -- that makes 25 26 it hard to wrap your head around how it's all so different. As long as there's Federal land that 27 28 they're hunting on they can go out and harvest a sheep 29 in the winter still under Federal regs because it's a 30 Refuge. 31 32 MS. KENNER: Thank you, Madame Chair. 33 I just wanted to read the State stipulation to you. 34 35 Concerning the Arctic Village Sheep 36 Management Area in unit 25A, the Alaska Department of 37 Fish and Game has used its discretion to prohibit the use of aircraft for access to hunt sheep. So just in 38 unit 25A the Arctic Village Sheep Management Area. 39 So 40 26C, it is open to aircraft, you're right. And that's 41 why the State hasn't used its discretion to prohibit in 42 26A -- in 26C. 43 44 MADAME CHAIR ENTSMINGER: Charlie. 45 46 MR. JAGOW: Okay. But speaking on the 47 RS 595 permit there's no aircraft access into Kaktovik 48 as far as.... 49 50

Page 224 1 MADAME CHAIR ENTSMINGER: Uh-huh. 2 3 MS. KENNER: Yes, that's right. 4 5 MADAME CHAIR ENTSMINGER: Which is 26C, 6 right? 7 8 MR. WRIGHT: Yeah. Well, no, I mean, 9 it -- you can access it. 10 11 MS. LENART: Madame Chair, this is Beth 12 Lenart. 13 14 MADAME CHAIR ENTSMINGER: Yes, Beth, go 15 ahead. 16 17 MS. LENART: You were asking a little 18 bit about the history and I'm not sure because it was -- some of that was before I got here. But if I 19 20 remember correctly the Federal government had 21 implemented a three sheep hunt and the State 22 implemented their hunt after that. And, you know, part 23 of it was we wanted to be sure we were providing 24 subsistence opportunity and at that time when that 25 happened, you know, hunters from particularly Kaktovik, 26 I would agree with what the Refuge manager from ANWR 27 said that Kaktovik hunters do use that hunt. And so 28 there were also -- but also from Arctic Village and we 29 were trying to accommodate, you know, subsistence 30 hunters under the State law too. 31 32 MADAME CHAIR ENTSMINGER: Pippa. 33 34 MS. KENNER: Thank you. So 35 additionally so, you know, in a -- in previous times 36 people from Arctic Village were very nomadic and part 37 of that -- their movement throughout the year wasn't to 38 areas like -- particularly Red Sheep Creek, it was on 39 the route for people to go over the mountains and over 40 to the coast to trade. And people would stay and went 41 in the mountains hunting caribou and sheep. And then 42 they would meet up again with the people who'd gone 43 over the mountains to trade and move on to their next 44 site. Now of course people aren't doing that and 45 moving up into the mountains where -- moving up into the mountains where sheep are available, where there's 46 47 a better chance of being successful in harvest, those 48 sheep are now quite a ways away from Arctic Village. 49 And what the State had done is that 50

Page 225 because they had such restrictive harvest limits in 1 2 this area of unit 25A where you can -- you can harvest 3 one ram with full curl horn or larger in August to September. So what we've heard from Arctic Village and 4 5 others is that the time to be hunting in this new 6 environment where they live, the time to be hunting in 7 that -- in those areas is now the fall. And that when 8 the State allows a subsistence opportunity of three sheep after September that makes it very difficult for 9 10 people. So there's still in the State law local people 11 are restricted to that one ram with full curl horn 12 until after September. And so the State is allowing that more liberal regulation to occur later in the 13 fall. 14 15 16 MADAME CHAIR ENTSMINGER: In the year. 17 18 MS. KENNER: Later in the year. And so 19 what we've heard is that that's too -- that's not 20 subsistence opportunity because that's not when we can 21 get up there, it's getting too late in the year to 22 travel round trip. 23 24 MADAME CHAIR ENTSMINGER: Tom, go 25 ahead. 26 27 MR. DOOLITTLE: Yeah, Madame Chair. 28 The main thing is everybody -- you know, I heard the 29 discussion go back and forth between Federally-30 qualified users and then the State users being all subsistence -- you know, basically all users in the 31 32 State are subsistence hunters. The thing is is about 33 once that Federal regulation is passed and regulations are very clear that Federal public lands are closed to 34 taking the sheep except by rural Alaskan residents of 35 36 Arctic Village, Chalkyitsik, Fort Yukon, Kaktovik and 37 Venetie hunting under these regulations. So and then again in 25 remainder and again it's rural residents 38 under the Federal program. 39 40 So what I'm getting at is that even if the State did that those lands are all still closed 41 42 only to those Federally-qualified users. And so it 43 would take the Federal action at the -- on the 44 proposals that have come in relative to the Federal 45 Board's decision in April before there could be any 46 flexibility relative to State hunters. It's all -it's all contingent on the Federal Board's decision 47 48 coming up in April. 49 50

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So to me it's -- I mean, I kind of have 1 this -- when I see, you know, everybody going back and 2 3 forth I kind of look at the steps that really need to be required to move anywhere. And again it doesn't 4 5 preclude that there shouldn't be continuing education 6 from, you know, some ways, I mean, this -- this group 7 has spent a lot of time with the hunter education 8 program on a regional basis, you know, working through the Federal program. And of course there's the 9 10 specific one that I know there's specific interest in 11 relative to sheep -- you know, to sheep hunting, you know, in the -- you know, in that particular, you know, 12 13 Arctic Sheep Management Area. 14 15 So I just want to kind of throw out, you know, kind of the realistic aspects of this 16 17 relative to the legalities of it. 18 19 My last point of clarification would be 20 on -- basically on 804 of ANILCA itself and that 21 there's been decisions that were -- hasn't necessarily 22 been strictly a conservation issue. I can think of, 23 you know, unit 23 caribou. I can think of some other locations as well where it's really been the argument 24 25 of continued opportunity for subsistence and the Board has made, you know, those arguments. So if you look at 26 it it says for conservation of fish and wildlife 27 service comma, or the continued, you know, opportunity 28 29 for subsistence, safety and health reasons, blah, blah, 30 blah, administrative purposes. 31 32 I'm just saying there's lots of 33 reasons, there's a lot of justification other than pure numbers many times when the Board is synthesizing a 34 decision on behalf of Federally-qualified users on 35 36 Federal public land. 37 38 And that's about it. 39 40 MADAME CHAIR ENTSMINGER: I'm not sure 41 if you muddied the water. Okay. Yeah. There -- I 42 mean, I think I understand the Federal side and State 43 side and it's like -- I am like Andrew in that, you 44 know, if someday conservation says that hey, that needs 45 to be open, it should be conservative, that part I --46 that's how I feel, but as far as the Federal or the State side what you suggested earlier about any sheep --47 48 any ram and -- and going on that for this proposal, I --49 that's the State side and we're just talking about the 50

Page 227 State side on this proposal. And then in your 1 2 background in your mind you have to understand that the 3 Federal side unless it's -- unless the Federal Board 4 which I predict they will not open that to non-5 qualified subsistence users at this next Board meeting because two RACs are against it. So it will be closed. 6 7 So the -- that's -- to me the first step is this hunter 8 education thing and to develop a working relationship 9 with the people in the area. 10 11 And then that -- that winter hunt 12 thing, I've never been in favor of it personally, I 13 think that's -- but I understand that there's a Federal 14 req that allows it and that the people are using it 15 from Kaktovik. I'm -- that's wonderful, I appreciate 16 that. They'll always have that, even if we pass this. 17 This would just -- other users might be using it on the 18 winter hunt. They would be the ones that's limited, 19 not the people that hunt the Federal lands. 20 21 MR. JAGOW: Yeah, I just wanted to 22 second that, whatever changes we make to that RS 595 shouldn't have effect on Federally-qualified users, 23 it's going to have effect on the hunters coming from 24 25 Anchorage and elsewhere using that winter hunt and 26 taking the three sheep. 27 28 MADAME CHAIR ENTSMINGER: Tom. 29 30 MR. DOOLITTLE: But remember this would 31 be only applicable to State lands because the Federal 32 lands would be closed to all the other users because 33 it's defined.... 34 35 MADAME CHAIR ENTSMINGER: Okay. Don't 36 mix it up here. 37 38 MR. DOOLITTLE: Right. 39 40 MADAME CHAIR ENTSMINGER: The only 41 place that it's closed is at Red Sheep and Cane Creek, 42 don't say all the other areas, that's not right, 43 Tom.... 44 45 MR. DOOLITTLE: Well.... 46 47 MADAME CHAIR ENTSMINGER: .....that I 48 know. 49 50

Page 228 MR. DOOLITTLE: Okay. I just wanted to 1 2 make clarification on, you know, the land 3 jurisdictional boxes for any of the regions that we're 4 talking about. 5 6 MR. FIRMIN: But when the State season 7 opens the Federal land follows suit. 8 9 MADAME CHAIR ENTSMINGER: That's right. 10 11 MR. FIRMIN: So it essentially would be 12 the whole place. 13 14 Andy, did you have a comment? 15 16 MR. BASSICH: No, I'm.... 17 18 MR. FIRMIN: You're done? 19 20 MR. BASSICH: .....I'm entertained 21 here. 22 23 MR. FIRMIN: Okay. Well..... 24 25 MADAME CHAIR ENTSMINGER: (Indiscernible 26 - simultaneous speech).... the Chair. 27 28 MR. FIRMIN: ..... want a motion to amend our proposal 82 which is unit 25, RS 595 which is 29 open October 1st to April 30th is three sheep every 30 regulatory year be changed -- it also says East --31 Middle Fork Chandlar River and all the word verbiage in 32 33 there be just -- the only thing to change would be one 34 sheep by permit with horn destruction. 35 36 Can I get a second. 37 38 MR. WRIGHT: Second. 39 40 MR. FIRMIN: Okay. Now the reasoning for some of that would be because there's conservation 41 42 concerns in the area obviously because of the lack of sheep, obviously this is not really very much of a 43 sporting hunt because they're driving them up there 44 45 with a snowmachine and running sheep down that are beat up and can barely walk anyway and it's not a very 46 ethical hunt. And the only thing I can think of why 47 48 people would do that as part of this epic journey is to 49 get something, but the only other reason I could think 50

Page 229 of is because they'll harvest the head, go downtown and 1 2 mount it and sell it to the nearest lodge for a top 3 buck to pay for their trip. Especially..... 4 5 MADAME CHAIR ENTSMINGER: That's not 6 legal. 7 8 MR. FIRMIN: .....if you can get three 9 of them. 10 11 MADAME CHAIR ENTSMINGER: You can't 12 sell it to anyone. 13 14 MR. FIRMIN: Oh, you can sell anything. 15 Trust me. 16 17 MADAME CHAIR ENTSMINGER: Oh. You can 18 go to jail for it. 19 20 MR. FIRMIN: You can go to jail for a 21 lot of things and get away with it too. But, I mean, there's not many reasons why people are decorating 22 their homes and lodges with them. I can still donate 23 24 it to somebody to hang in their house ..... 25 26 MADAME CHAIR ENTSMINGER: Uh-huh. 27 28 MR. FIRMIN: .....at some fancy lodge, 29 but don't -- don't mean I'm selling it to them. I can 30 hang it -- I can hang my moose antlers in Cabela's in Louisiana if I want to, it's not against the law. 31 And that's just -- it's just not an ethical hunt, it's not 32 a sporthunt, it's not a -- and there is a conservation 33 34 concern and that's why we'd like to see it so the 35 people that are using this hunt in the State season are 36 actually doing it for the reason that's there, 37 subsistence uses. 38 39 MADAME CHAIR ENTSMINGER: Okay. A 40 motion has been made and seconded. Any other 41 discussion on proposal 82. 42 43 MR. JAGOW: Yeah, it might -- it might 44 be wise to make that one ram with horn destruction 45 rather than just any sheep for conservation issues. 46 47 MADAME CHAIR ENTSMINGER: I agree. 48 49 MR. FIRMIN: The only reason I said 50

Page 230 sheep is because that was the -- the local people were 1 2 saying that they didn't want only taking the largest 3 ram, if somebody was up there and maybe wanted a lamb 4 or a ewe they had the chance. 5 6 MR. JAGOW: Well, I think with the horn 7 destruction that's probably going to discourage anybody 8 from -- given that that's the idea behind destructing -destruction of the horns is it's going to prevent it 9 10 becoming a trophy hunt at least in my mind. 11 12 MADAME CHAIR ENTSMINGER: So you're 13 okay with that or you want it to say ram. You -- are 14 you hanging your hat on ram? 15 16 MR. JAGOW: I'd rather see it ram. 17 18 MR. FIRMIN: Okay. Friendly amendment 19 to the amendment. 20 21 MADAME CHAIR ENTSMINGER: Would the 22 second agree? 23 24 MR. WRIGHT: Yes. 25 26 MADAME CHAIR ENTSMINGER: Okay. So 27 it's one ram with horn destruction. 28 29 Pippa. 30 31 MS. KENNER: Madame Chair, this is 32 Pippa Kenner with OSM. What area, the..... 33 34 MADAME CHAIR ENTSMINGER: It's the 595, 35 is it. 36 37 MR. FIRMIN: Yes. 38 39 MS. KENNER: Not just the Arctic Valley 40 Sheep Management.... 41 42 Thank you, Madame Chair. 43 44 MR. FIRMIN: Not even in the Arctic 45 Village Sheep Management Area, only the RS 595 hunt. 46 47 MS. KENNER: I understand. 48 49 MADAME CHAIR ENTSMINGER: So repeat 50

Page 231 your motion, it's to amend that portion and get rid of 1 2 everything else. 3 4 MR. FIRMIN: Everything else in 82 5 would disappear except for the three sheep which is --6 which I stated the three sheep in RS 595 would change 7 to one ram with antler destruction and keep all the 8 extra aircraft in Kaktovik and all that stuff would be -- would still include. It's just the bag limit would 9 10 change from three sheep to one ram with horn 11 destruction. 12 13 MADAME CHAIR ENTSMINGER: And that's 14 the only thing left in the..... 15 16 MR. FIRMIN: The whole proposal, the 17 rest of the..... 18 19 MADAME CHAIR ENTSMINGER: Uh-huh. 20 21 MR. FIRMIN: .....the youth hunt is 22 gone, the hunter ethics is gone, the one ram every four 23 years, the draw hunt, all that can go. We'll deal with it in a different cycle. 24 25 26 MADAME CHAIR ENTSMINGER: Okay. So I 27 want to ask do you want to take up the second thing 28 after we vote on this for the hunter ethics and a 29 letter to the Board of Game that it needs to go or do 30 you want.... 31 32 MR. FIRMIN: Yes, we'll address that 33 separately. 34 35 MADAME CHAIR ENTSMINGER: Okay. Any 36 other discussion. 37 38 MR. GLANZ: Question. 39 40 MADAME CHAIR ENTSMINGER: The 41 question's been called for. All understand the motion. 42 43 (No comments) 44 45 MADAME CHAIR ENTSMINGER: Okay. 46 47 MR. FIRMIN: It's only on the 48 amendment. 49 50

Page 232 MADAME CHAIR ENTSMINGER: And it's --1 this is only on the amendment to the motion or to the 2 3 first motion of 82. All in favor of the amendment to 4 the proposal on number 82 say aye. 5 6 IN UNISON: Aye. 7 8 MADAME CHAIR ENTSMINGER: Anyone 9 opposed. 10 11 (No opposing votes) 12 13 MADAME CHAIR ENTSMINGER: Okay. Now 14 we're speaking to the main motion. Any other 15 discussion as amended. 16 17 (No comments) 18 19 MADAME CHAIR ENTSMINGER: Okay. We're 20 ready to vote. 21 22 MR. GLANZ: I'll call the question on 23 that then. 24 25 MADAME CHAIR ENTSMINGER: All right. 26 Understanding the motion, I don't need to repeat it. 27 Okay. Everyone in favor of 82 as amended say aye. 28 29 IN UNISON: Aye. 30 31 MADAME CHAIR ENTSMINGER: Anyone 32 opposed. 33 34 (No opposing votes) 35 36 MADAME CHAIR ENTSMINGER: Okay. We got 37 through that. Next a brief discussion here on what we 38 did I think. 39 40 So does anyone want to handle the next 41 motion. 42 43 (No comments) 44 45 MADAME CHAIR ENTSMINGER: No, we're --46 just hang on a second. 47 48 MR. FIRMIN: Where did we leave off, which number did we leave off. 49 50

Page 233 MADAME CHAIR ENTSMINGER: Wait. We --1 2 I think there's -- are we going to handle this hunter 3 ethics right now, that we're going to ask the Board of 4 Game to develop it. You want to see the candy before 5 you get in the truck. 6 7 MR. FIRMIN: The van. The van. 8 9 MADAME CHAIR ENTSMINGER: Oh, the van. 10 11 (Laughter) 12 13 MR. FIRMIN: However you want to 14 proceed, however proposal 83 is the RS 595 hunt in 26C. 15 16 MADAME CHAIR ENTSMINGER: Seriously. 17 18 MR. FIRMIN: We're on C. 19 20 MADAME CHAIR ENTSMINGER: Since we are 21 adamant about pushing the State on this hunter ethics 22 don't you think we should just have a quick motion and 23 pass that we want to do that, we want to push the State 24 to do that for all this discussion we've had. 25 26 MR. FIRMIN: I think we could address 27 it in our annual report because I don't know if -- or 28 we can probably make a motion, but.... 29 30 MADAME CHAIR ENTSMINGER: I want 31 something to go to the Board of Game because they're 32 going to make a decision. 33 34 MR. FIRMIN: They already made a 35 decision though, that's the whole point of what.... 36 37 MADAME CHAIR ENTSMINGER: No, at the 38 Board. You made a decision on that motion, but we --39 there's nothing to push them to do anything about hunter ethics. And I think a letter to the Board of 40 41 Game that whoever goes would be a good thing. We would 42 -- we think you got the cart ahead of the horse and we're tired of hearing it and we want you to develop 43 44 this and it needs to be a letter. 45 MR. BASSICH: Madame Chair. 46 47 48 MADAME CHAIR ENTSMINGER: Andy. 49 50

Page 234 MR. BASSICH: Yeah, I'd like to make a 1 2 motion that we draft a letter from the Eastern Interior 3 RAC to the State's.... 4 5 MADAME CHAIR ENTSMINGER: Board of 6 Game. 7 8 MR. BASSICH: .....Board of Game in regards to seeking their support and cooperation to 9 10 help us to develop a hunter ethics and education 11 program in the Eastern Interior region. 12 13 MR. WRIGHT: I'll second that. 14 15 MADAME CHAIR ENTSMINGER: Why aren't we 16 specific to..... 17 18 MR. BASSICH: I do. Because I -- the reason I made it specific is because the Federal 19 20 Subsistence Board from my understanding is basically 21 not -- hasn't really given us the approval for the entire State and we've talked a lot in our -- in our 22 23 committee meetings and everything about it that we want 24 to keep this an Interior -- Eastern Interior project 25 and develop it there and then hopefully if it's 26 successful move it on to other parts of the State. So 27 I would like to just see it kept..... 28 29 MADAME CHAIR ENTSMINGER: Okay. Can I 30 ask a question. 31 32 MR. BASSICH: .....as an Eastern..... 33 34 MADAME CHAIR ENTSMINGER: Men are from 35 Mars and women are from Venus, our brains don't work 36 the same. 37 38 MR. BASSICH: Right. 39 40 MADAME CHAIR ENTSMINGER: And my brain is saying that this has to be specific to what we've 41 42 talked about for 30 years, Arctic Village Sheep Management Area. There is on the books a requirement 43 44 to develop that and they haven't developed it. And I 45 would love to see that as part of your motion. 46 47 MR. BASSICH: I see what you're saying. 48 49 MADAME CHAIR ENTSMINGER: Because 50

Page 235 that's what going before the Board and we're dropping 1 2 the ball if we don't put that in there. And I don't 3 want to drop the ball on this. And I'm adamant about 4 it, sorry, as your Chair. 5 6 And that's what I was looking for. And 7 I didn't -- did I hear a second to that? 8 9 MR. WRIGHT: Yeah, you did. 10 11 You can withdraw the motion, Andy. 12 13 MR. BASSICH: Withdraw the motion. 14 15 MADAME CHAIR ENTSMINGER: Okay. Motion 16 withdrawn. Can -- can I have help from you, please, 17 help me out. Please. 18 19 Andy. 20 21 MR. BASSICH: Whip this up. Let's see. 22 Make a motion that the Eastern Interior RAC draft a 23 letter to the State Game Board to ask them to develop 24 the hunter education -- what was the title, I'm sorry, 25 hunter education and ethics.... 26 27 MADAME CHAIR ENTSMINGER: Here's 28 this.... 29 30 MR. BASSICH: .....for the Red Sheep 31 Creek.... 32 33 MADAME CHAIR ENTSMINGER: That they 34 voted on November 11th..... 35 36 MR. BASSICH: Yeah. 37 38 MADAME CHAIR ENTSMINGER: ....2011. 39 40 MR. BASSICH: Right. That they help us -- help to -- or that they develop the hunter education 41 42 and ethics program to support the 2011, what's the 43 proposal number. 44 45 MADAME CHAIR ENTSMINGER: There was a 46 proposal number, but it's not on this thing. 47 48 MR. BASSICH: It's probably on the 49 sheet there. 50

Page 236 MADAME CHAIR ENTSMINGER: This is what 1 2 they gave me. It says proposal was submitted by 3 Eastern Interior to close hunting in this area. 4 Proposal number 178. 5 6 MR. BASSICH: Okay. Proposal 178. 7 8 MADAME CHAIR ENTSMINGER: 178. 9 10 MR. BASSICH: I tell you what. Let's 11 come back to this. Let me just think about it for a little bit. Let's move on and we'll write something 12 13 that we don't have to get wrapped around the axle with 14 and we can address it a little bit later in the 15 meeting. 16 17 MADAME CHAIR ENTSMINGER: That would be 18 great. 19 20 MR. BASSICH: Thank you. 21 22 MADAME CHAIR ENTSMINGER: Thank you. 23 Okay. 24 25 Vince. 26 27 MR. BASSICH: I officially withdraw my 28 motion, incomplete motion. 29 30 MADAME CHAIR ENTSMINGER: It didn't 31 have a second. 32 33 MR. MATHEWS: Yes, I was going to..... 34 35 MADAME CHAIR ENTSMINGER: Go ahead. 36 37 MR. MATHEWS: .....that was my exact 38 point, that we could pull aside and reference the 39 current regulations in the State and et cetera. So I think with a couple of staff we could pull together a 40 motion that would capture that and then you can decide 41 42 if you want to capture the overall goal of the hunter ethics program that Eastern Interior is pursuing. 43 But 44 that's a -- that would be once you get your draft 45 together. So I -- I'm sure that with some staff we can 46 help you with this motion. 47 48 MADAME CHAIR ENTSMINGER: Okay. 49 50

Page 237 1 MR. BASSICH: Thank you, Vince. 2 3 MADAME CHAIR ENTSMINGER: And we'd love 4 it at lunch, maybe a couple people could get together. 5 6 MR. FIRMIN: Lunch. 7 8 MADAME CHAIR ENTSMINGER: Yeah. I 9 heard that's what Southcentral does. 10 11 I see a hand. Did you have a card? 12 13 MS. MILLER: I didn't have a card. 14 15 MADAME CHAIR ENTSMINGER: Okay. 16 17 MS. MILLER: This is an unfolding 18 conversation. 19 20 REPORTER: You can't.... 21 22 MS. MILLER: I can't speak from here. 23 24 REPORTER: Not from there, you'll have 25 to come up here if you want to. 26 27 MS. MILLER: My name is Pamela A. 28 I would just like to speak on the hunter Miller. 29 ethics program. 30 31 I think the Eastern Interior is a 32 region where there are conservation concerns looking 33 into the long run on sheep. And there's a number of 34 proposals in your packet here and I believe also in the Western Interior having to do with sheep. And I think 35 36 it would make sense for the Eastern Interior region, 37 you could focus on the Arctic Village situation, but if 38 you're going to offer, there are other places people go 39 sheep hunting and the same issues apply. They're farther from Arctic Village or from the other 40 communities, even Kaktovik, but I think the course 41 42 would be really important for all the sheep hunters in these regions to alleviate a longstanding concern. And 43 also other visitors might be interested in taking a 44 45 course because it's all about being out there in the 46 wild and being safe and respecting the animals and the 47 land. 48 49 So I thought the first proposal was a 50

Page 238 pretty good one from the standpoint of reflecting a 1 2 region of the Board. 3 4 Thank you. 5 6 MADAME CHAIR ENTSMINGER: Thank you. 7 And it's been in our annual report yearly for the 8 region and we can -- I mean, it's in there. 9 10 Did you guys look at that too. And I 11 also want you to be thinking about what's going to be 12 in that annual report as we go on. 13 14 Are you working on something, Andy, 15 that you wanted to..... 16 17 MR. BASSICH: No. No. 18 19 MADAME CHAIR ENTSMINGER: Oh. 20 21 MR. BASSICH: No just keeping me -- I'm 22 just trying to get a head start on my deadline. 23 24 MADAME CHAIR ENTSMINGER: Okay. Let's 25 keep moving. 26 27 Oh, Andrew mentioned that Paul Williams 28 had said he wanted to talk. 29 30 And, Paul, are you still online, did you want to speak to anything now. And you have to 31 32 push star six to unmute. 33 34 MS. PITKA: Sorry. This is Rhonda 35 Pitka. I just signed in. 36 37 MADAME CHAIR ENTSMINGER: Did you 38 understand that? 39 40 REPORTER: Sue. Sue, that's Rhonda. 41 42 MADAME CHAIR ENTSMINGER: Oh. Yes, go 43 ahead, Rhonda. 44 45 MS. PITKA: Oh, I had no comments. Ι just wanted to let you know that I signed in. 46 47 48 MADAME CHAIR ENTSMINGER: Oh, okay. 49 Thank you. All right. Okay. Well, I -- if Paul comes 50

Page 239 on I hope that he'll interrupt us. 1 2 3 Okay. I do have another blue card, but 4 -- Tisha, are you representing the Delta AC or 5 vourself? 6 7 MS. KENNELL: Just myself. 8 9 MADAME CHAIR ENTSMINGER: And did you 10 want to speak to -- what our process is here, we 11 usually vote or make a motion to take up a proposal and then you could come up to each proposal. Is that how 12 13 you want to do it or do you just want to come up and 14 speak to -- generally. 15 16 MS. KENNELL: I'll go proposal by 17 proposal. 18 19 MADAME CHAIR ENTSMINGER: Okay. A11 20 right. Just raise your hand because I got your card. 21 22 MS. KENNELL: Okav. 23 24 MADAME CHAIR ENTSMINGER: Moving 25 rapidly along. What's our next proposal. 26 27 MR. FIRMIN: Motion to adopt proposal 28 83. 29 30 MR. WOODRUFF: Second. 31 32 MADAME CHAIR ENTSMINGER: Discussion. 33 34 MR. FIRMIN: Proposal 83 is to modify the bag limit for sheep in RW 595 in unit 26 C which is 35 the same hunt we just mod -- talked about except it's 36 37 on the other side of the hill. And he has -- he 38 changes it to any three sheep to must be three-quarter 39 curl horn or smaller, including rams with both horn 40 tips broken. 41 42 My suggestion would be to support with 43 the modification that it mirrors our previous one with 44 one ram with antler horn destruction. 45 46 MR. WOODRUFF: Second. 47 48 MADAME CHAIR ENTSMINGER: You should 49 have made a motion that way you got to amend it. 50

Page 240 1 MR. FIRMIN: If I get a second with Don 2 I'll just.... 3 4 MADAME CHAIR ENTSMINGER: Did you hear 5 that, Donald? 6 7 MR. WOODRUFF: What's that. 8 9 MADAME CHAIR ENTSMINGER: He should 10 have made the motion that way or we got to do the 11 amendment and the -- and go through it. Do you want --12 he said he'd withdraw, do you agree. 13 14 MR. WOODRUFF: Yeah. 15 16 MADAME CHAIR ENTSMINGER: And he'll 17 remake the motion. 18 19 MR. WOODRUFF: Yeah. 20 21 MADAME CHAIR ENTSMINGER: Okay. Go 22 ahead. 23 24 MR. FIRMIN: Okay. So it's a motion to adopt proposal 83 with the modification to change the 25 26 RS 9595 hunt to match what our modifications in 27 proposal 82 which is -- and go from three sheep to one 28 ram with antler horn destruction. 29 30 MR. WOODRUFF: Second. 31 32 MADAME CHAIR ENTSMINGER: Discussion. 33 And I will clarify. That was 595. 34 35 I think you said 9595. 36 37 MR. FIRMIN: Yes. 38 39 MADAME CHAIR ENTSMINGER: Okay. 595. 40 Go ahead. 41 42 MR. FIRMIN: This -- that way this is just on 26C and it's to make the bag limit on that side 43 of the hill the same as the Arctic Village side or the 44 45 south side of the mountain will match the north side. And the same -- same one, RS 595, then the bag limits 46 47 will be the same. 48 49 MADAME CHAIR ENTSMINGER: Any other 50

Page 241 discussion. 1 2 3 MR. WRIGHT: Question. 4 5 MADAME CHAIR ENTSMINGER: The 6 question's been called. All in favor of this motion as 7 amended, 83, say aye. 8 9 IN UNISON: Aye. 10 11 MADAME CHAIR ENTSMINGER: Anyone 12 opposed. 13 14 (No opposing votes) 15 16 MADAME CHAIR ENTSMINGER: Okay. That 17 passes. 18 19 MR. FIRMIN: Sue, have you read 20 proposal 84? 21 22 MADAME CHAIR ENTSMINGER: I've heard 23 about this. This is the one that they took an hour and 24 a half on upstairs, right, the Dalton Highway. 25 26 I think what it does is it -- it's very 27 complicated. Did you guys vote on it? 28 29 Did -- you didn't take it up, did you, 30 Andy or Bill. 31 32 (No comments) 33 34 MADAME CHAIR ENTSMINGER: This is the 35 one that -- just to help he asked if I looked at it and I'm aware of it. I'm sure this is going to be a tough 36 37 one for the Board of Game because they want to open it 38 to rifle I think. 39 40 Well, the next one that I had from you 41 guys was 86. So for us comes up to the Tok area. 42 43 MR. STEVENSON: That's on page 100 of 44 your blue meeting book, Sue. 45 46 MADAME CHAIR ENTSMINGER: You guys took 47 it up. You want to take it up? 48 49 MR. BASSICH: Madame Chair, make a 50

Page 242 motion to support proposal 86, reauthorizing predator 1 2 control. 3 4 MR. GLANZ: Okay. I'll second that 5 one. 6 7 MADAME CHAIR ENTSMINGER: Discussion. 8 9 MR. BASSICH: All right. Yeah, the 10 Eagle AC supports this. We think it's a really 11 important tool for managers to have at their disposal to help regulate caribou and moose populations. And so 12 13 we -- let's see, we did have a split vote on this. We 14 had three in support and I guess I have to correct 15 myself, we were tied on this at our AC. So three 16 supported and felt the need -- felt that this was an 17 important tool for managers to have and three opposed 18 generally to most forms or need for predator control in 19 the program. 20 21 So it was kind of a split decision from 22 our RAC regarding this. 23 MADAME CHAIR ENTSMINGER: Give me a 24 25 minute because I haven't.... 26 27 MR. BASSICH: Uh-huh. 28 29 MADAME CHAIR ENTSMINGER: Bill, did you 30 guys take it up. 31 32 MR. GLANZ: No, we have not. But we --33 I was under the understanding it was on the books, it 34 could be activated at 2026, but I understand -- I 35 didn't know it expired in 2020. 36 37 MADAME CHAIR ENTSMINGER: I did get --38 Barb Pine sent me the -- how they voted. And I don't 39 see 86, did they take it up. Well, it's not in her -what she sent us. 40 41 42 All right. Any other discussion. 43 44 MR. WRIGHT: Yes. 45 46 MADAME CHAIR ENTSMINGER: Go ahead. 47 48 MR. WRIGHT: I just wanted to 49 understand a little clarification on why they would 50

Page 243 need predator control and they have too many caribou 1 2 already in the area. But this is covering a lot more 3 area than just that area I guess. 4 5 MR. GLANZ: The reason why it's --6 Robert, is that the Caribou Board gets Gross in charge 7 of this thing here and he was the one that put it on 8 it. Didn't put it on a suspension, he just said we don't need it right now, but it's on the books because 9 10 it probably will come back to haunt us if we don't do 11 it. You know, he has no tools to operate with and so this is from -- this can solidify a deal, but they got 12 13 it for him so he can use it if he needs it. That's the 14 main reason. But it's not being used at the present 15 time. 16 17 MR. BASSICH: Yeah, and if I could add 18 to that a little bit, Robert, if this helps you from what I recall and I think Jeff's in the room. 19 20 21 MR. GLANZ: He's right back there. 22 23 MR. BASSICH: If this was to go away, 24 it's a very lengthy process to get it back on the books 25 and oftentimes the amount of time that it would take for this to get back onto the books and the work 26 27 involved in doing it would maybe be too late for a 28 program that he may need at a given time. So it's just 29 -- basically it's a housekeeping, this is basically 30 just a housekeeping, it's not asking to institute 31 predator control, it's just making sure it stays in the 32 tool box for the manager. 33 34 Thank you. MR. WRIGHT: 35 36 MADAME CHAIR ENTSMINGER: Tisha, did 37 you -- your -- want to speak to this? 38 39 MS. KENNELL: You just covered it. 40 41 MADAME CHAIR ENTSMINGER: Oh, I was --42 I wondered if you wanted to speak to it. So you need to let me know if you need to speak to a proposal, 43 44 okay, and you should..... 45 46 MR. FIRMIN: Do we need a motion? 47 48 MR. BASSICH: Yeah, there was a motion. 49 50

Page 244 1 MADAME CHAIR ENTSMINGER: There's a 2 motion, uh-huh. And this is discussion. 3 4 MR. FIRMIN: Okay. 5 6 MR. WOODRUFF: Madame Chair. 7 8 MADAME CHAIR ENTSMINGER: Don. 9 10 MR. WOODRUFF: The way I understand it 11 that this is a proposal because it's in the cycle, the 12 game cycle, and it would be three years or whatever 13 before they could reintroduce it. But at the same 14 meeting they said they can introduce stuff out of 15 cycle. And so I don't see the need for this at this 16 time for the herd and if we can introduce this proposal 17 out of cycle then I don't see a need for it right now 18 personally. 19 20 MADAME CHAIR ENTSMINGER: Jeff, can you 21 speak to that. 22 23 MR. GROSS: Madame Chair, I'm Jeff 24 Gross with Alaska Department of Fish and Game and I 25 apologize for having my hat on today. 26 But, yeah, I guess to give a little bit 27 28 of context, when we do put a predator control program --29 when we go to put one on the books, generally there's 30 a Board of Game meeting that a proposal's put forward and Board of Game -- for a Board of Game meeting. And 31 32 we generally go to the Board, give them a presentation, give them an update on the prey populations, the 33 predator population and the potential need. And then 34 35 the Board will generally give us or instruct us to do a 36 feasibility assessment and come back to them. So we go 37 do a feasibility assessment which can take, you know, I 38 mean, if everything is done out of cycle, you know, we 39 could have that done for the next year and then we 40 could potentially if they -- if they conclude the 41 feasibility assessment is -- you know, it makes sense 42 then they can put it on the books and it would be the 43 year after that we'd -- we'd be able to implement it. 44 45 So it's -- it is a process and this is assuming everything goes well and there's no -- I mean, 46 47 one thing to keep in mind, we've had a lot of 48 experience with political and social challenges with 49 getting some of these on the books. Whether the --50

Page 245 generally if the biology says that it's -- you know, 1 2 it's feasible and needed, to date it -- it's worked fairly well. So anyway it would take a couple years 3 and it is definitely no small feat. I've ben here 4 5 since 2003 and we started working towards this control 6 program back then. And it -- it's been kind of my 7 whole career just kind of continuing to keep it going, 8 it and the harvest plan. 9 10 So anyway it is a very important tool. 11 I don't want to underemphasize it. I'm not saying that we can't -- if it came off the books that we couldn't 12 13 get it back on the books, but it's -- I caution you 14 against assuming it would be an easy thing to do. 15 16 MR. WOODRUFF: Thank you. 17 18 MR. GROSS: Thanks. 19 20 MR. BASSICH: Yeah, thank you. You 21 know, from my perspective it -- it's not needed right 22 now, but it would cost a lot of time, money and effort 23 to the biologists and the State so why would we spend all that money just to try and get it on the books 24 25 again when we need it. So just keep it on the books, it's not going to cost anything, it's there, it's in 26 27 the toolbox, I have great confidence in our process that it won't be used unduly. And so therefore I think 28 29 we should support this proposal. 30 31 Madame Chair. 32 33 MR. WOODRUFF: Madame Chair. 34 35 MADAME CHAIR ENTSMINGER: Don. 36 37 MR. WOODRUFF: I wanted to ask Jeff if 38 you have to get it back on the books, is this the first 39 step you're taking or is it on the books and you're 40 just reiterating it? 41 42 MR. GROSS: Through the Chair. It's --43 it -- it's on the books now, but it expires this June 44 30th. And so especially since we're in cycle the timing is right to ask to have it put back on the 45 books. 46 47 48 Yeah, and I will I guess for the 49 Committee here, the predator control program is 50

Page 246 suspended, the soonest -- we're doing -- currently 1 2 doing an evaluation, we're doing some research with the 3 caribou and the predator populations. And the soonest 4 that it would be reimplemented is kind of no matter 5 what is once that evaluation is finished. So once it was finished the soonest we would potentially put it 6 7 back in play is regulatory year 2024. So the winter of 8 2025. And that would likely -- I mean, I don't have total control over, you know, everything, but the way I 9 10 understand it that would likely only occur if we 11 started seeing a precipitous decline in the herd and we wanted to be able to respond. And because we don't 12 13 know when something like that could occur, it's hard to 14 predict. 15 16 But anyway to give you some context, 17 it's not in place right now. There'd have to be some 18 justification to reimplement it. And as of now I don't 19 know of any justification at this time. So..... 20 21 MADAME CHAIR ENTSMINGER: So to keep 22 the tool in the toolbox you'd have to do this again in 23 three years? 24 25 MR. GROSS: Yes. And this is -- doing it this way is -- it's still a lot of work because we 26 27 have to update everything. But it's a fraction of the 28 work that it takes to get one put back on the books. 29 So anyway. 30 31 MADAME CHAIR ENTSMINGER: Any other 32 questions. 33 34 MR. GLANZ: Call the question. 35 36 MADAME CHAIR ENTSMINGER: The question 37 is called for. All in favor. 38 39 IN UNISON: Aye. 40 41 MADAME CHAIR ENTSMINGER: Anyone 42 opposed. 43 44 (No opposing votes) 45 46 MADAME CHAIR ENTSMINGER: I just was 47 looking for the number, guys. So it doesn't get messed 48 up. 49 50

Page 247 MR. GLANZ: 86. 1 2 3 MADAME CHAIR ENTSMINGER: 86. That was 4 proposal 86. No opposition. Okay. Next. 5 6 You guys have 88? 7 8 MR. BASSICH: We have 87. 9 10 MADAME CHAIR ENTSMINGER: Oh, 87. 11 Yeah. I guess I missed that. 12 13 MR. BASSICH: So, Madame Chair, motion 14 to support proposal 87, caribou change register to draw 15 hunts. 16 17 MR. GLANZ: I'll second that one. 18 19 MR. BASSICH: Yeah, this was a little 20 bit on -- a little bit confusing. We opposed this 21 unanimously. My understanding of this is this would create some draw hunts which could restrict other 22 23 people from having an opportunity who were just local 24 people because it would be a draw hunt. So our comments were we unanimously oppose, this creates an 25 26 undue hardship to file ahead of time to hunt. Managers 27 would likely have no limit to the draw permit anyway so there's no benefit to having a draw hunt. And this 28 29 increases the burden and the cost to the State to 30 produce the hunt. So a draw hunt would be much more expensive. And our manager of the area told us that he 31 would likely have no limit so what's the purpose of 32 having a draw hunt instead of a registration hunt. 33 So 34 it's just kind of a meaningless proposal really, it 35 doesn't benefit anybody the way we saw it at our AC. 36 37 Madame Chair. 38 39 MADAME CHAIR ENTSMINGER: Right. 40 41 MR. GLANZ: Madame Chair. 42 43 MADAME CHAIR ENTSMINGER: Bill. 44 45 MR. GLANZ: Also in order to get --46 implicate this type of a program, he has to have the 47 House and the Senate and the Governor sign it. So I'd 48 say we -- I'm against it. 49 50

Page 248 MADAME CHAIR ENTSMINGER: That's true. 1 The Board.... 2 3 4 MR. GLANZ: It's very unlikely it would 5 ever come down to getting the House and the Senate and 6 the Governor to sign it anyway. So if they -- if it 7 would have went we would've -- we would've asked for some kind of hunt like that to eliminate this confusion 8 that we have during the hunting season, they're open 9 10 three days before they take their thousand or 1,500 11 caribou. 12 13 MR. BASSICH: Ouestion. 14 15 MADAME CHAIR ENTSMINGER: Ouestion. 16 17 MR. WOODRUFF: Madame Chair. 18 19 MADAME CHAIR ENTSMINGER: Don. 20 21 MR. WOODRUFF: Yeah, I want to respond to Bill's comment. And I think it's a scary thought if 22 23 the House and Senate is doing big game management. It 24 just doesn't sit right with me. I'm sorry. 25 26 MADAME CHAIR ENTSMINGER: If it's not 27 in the Board's purview they won't even take it up. 28 29 Okay. All in favor say aye. 30 31 (No affirmative votes) 32 33 MADAME CHAIR ENTSMINGER: All opposed 34 same sign. 35 36 IN UNISON: Aye. 37 38 MADAME CHAIR ENTSMINGER: Fails. 39 40 MR. BASSICH: Madame Chair, motion to 41 support proposal 88 which resumes predator control in 42 unit 12. 43 44 MADAME CHAIR ENTSMINGER: Do I hear a 45 second. 46 47 MR. GLANZ: I'll second it. 48 49 MR. BASSICH: Madame Chair. 50

Page 249 MADAME CHAIR ENTSMINGER: 1 Andy. 2 3 MR. BASSICH: Speaking to the motion. 4 Our AC had a split decision on this one again. 5 Basically our AC whenever it comes to predator control depending on our attendance that day we -- we have 6 7 pretty much a split vote. Same reasons as before with 8 the other one. Supporting members felt that it's a 9 good tool for managers to help control ungulates for 10 harvest and the opposing side they oppose any need for 11 predator control programs in general. So we were split 12 at Eagle. 13 14 MADAME CHAIR ENTSMINGER: Any other 15 discussion. 16 17 MR. BASSICH: Yeah, I guess I'd for --18 I was one of the supporters and I just feel -- it's the 19 same reason as we just had on one of these previous proposals, keeping it on the 20 21 books. It's just a good thing for managers to have 22 because of the length of time that it takes for some of these programs to go into effect. It delays management 23 actions when populations are in serious decline. And I 24 25 have a lot of faith in the system that we have for predator control, for regulating predator control and 26 27 vetting whether it's necessary or not. So I'm in 28 support of this. 29 30 Madame Chair. 31 32 MADAME CHAIR ENTSMINGER: And I see 33 it's an Upper Tanana proposal. And I'll speak to it. 34 35 I've been in the air and done that. 36 And they're -- that's dedication to be able to go get 37 them wolves. And I would be in favor of this. 38 39 MR. BASSICH: Question. 40 41 MADAME CHAIR ENTSMINGER: The 42 question's been called for. All in favor say aye. 43 44 IN UNISON: Aye. 45 MADAME CHAIR ENTSMINGER: I'm saying 46 47 aye this time. Anyone opposed same sign. 48 49 (No opposing votes) 50

Page 250 1 MADAME CHAIR ENTSMINGER: Okav. 2 3 MR. BASSICH: Madame Chair, support 4 proposal 89 which is a proposal to allow the retention 5 of moose and caribou tickets at the same time. 6 7 MR. WOODRUFF: Second. 8 9 MR. BASSICH: Speaking to the motion. 10 I have in dark bold underline under my notes here from 11 the Eagle AC that they oppose vigorously and unanimously. We've had a long history of heavy 12 pressure along the Taylor Highway. One of the things 13 14 that was developed, I quess it was maybe back even in 15 the '90s, maybe early 2000, was to as a part of the 16 caribou harvest plan and just general hunting in the 17 area to make it to where a hunter cannot possess both a 18 moose tag and a caribou tag at the same time in the 19 area. And this was a way to try and make the area a 20 little bit less inviting and try and reduce some of the heavy hunting pressure and crowding and competition 21 22 that goes with that, not to mention it's a safety issue 23 at times. So we feel that it has been very effective to try and keep this in place where you can only carry 24 25 as a personal hunter a caribou tag or a moose hunt. 26 27 And people have learned to get around 28 it when they hunt in groups, we're fine with that, we 29 understand that. But we just think that with the 30 amount of people coming up especially onto the Taylor 31 Highway there and hunting that if they have both 32 caribou and moose tickets the harvest is going to go up 33 dramatically which may cause a drop in populations, moose populations or possibly caribou populations, 34 below what we're intending to try and regulate. So 35 36 there's a potential for overharvest and unsafe hunting 37 practices. So therefore the Eagle AC vigorously and unanimously oppose this proposal. 38 39 40 Madame Chair. 41 42 MADAME CHAIR ENTSMINGER: Any other 43 discussion. 44 45 (No comments) 46 47 MADAME CHAIR ENTSMINGER: And I can 48 verify that in my area the people agree with this, they helped develop it. 49 50

Page 251 MR. GLANZ: Madame Chair. 1 2 3 4 MADAME CHAIR ENTSMINGER: Bill. 5 MR. GLANZ: I'd just call the question. 6 7 MADAME CHAIR ENTSMINGER: Okay. 8 Question's been called for. All in favor of 89 say 9 aye. 10 11 (No affirmative votes) 12 13 MADAME CHAIR ENTSMINGER: All opposed 14 same sign. 15 16 IN UNISON: Aye. 17 18 MADAME CHAIR ENTSMINGER: Fails. 19 20 MR. BASSICH: Madame Chair, the last 21 one that the Eagle AC took up was proposal 90. And this is a -- in my notes here it's nonresidents versus 22 23 kindred. So this is a -- this is a proposal -- I quess 24 I need a second or did I get a second. 25 26 MADAME CHAIR ENTSMINGER: No. 27 28 MR. GLANZ: I'll second. 29 30 MADAME CHAIR ENTSMINGER: Okay. 31 32 MR. BASSICH: Okay. Yeah, speaking to 33 the motion. This was a little bit confusing to us, but 34 basically the way we interpreted this is this is put into place giving nonresidents a slightly upper hand in 35 trying to obtain hunting opportunities..... 36 37 38 MADAME CHAIR ENTSMINGER: Uh-huh. 39 40 MR. BASSICH: .....versus families. And we feel like this is a bad road to go down, we 41 42 oppose this unanimously. And our comments, this is a growing trend among guide services to try and take 43 greater portions of the Alaska hunts away from local 44 45 and State resident hunters, lining their pockets at the loss to Alaska hunters and families. This is a bad 46 47 erosion of State resident first rights to our game 48 resources. 49 50

Page 252 Madame Chair. 1 2 3 MADAME CHAIR ENTSMINGER: Ditto. And 4 I'm a quide. And my son works there. 5 6 MR. FIRMIN: Maybe we better have a 7 roll call. 8 9 MADAME CHAIR ENTSMINGER: Any other 10 discussion. 11 12 MR. GLANZ: Call the question. 13 14 MADAME CHAIR ENTSMINGER: The question 15 is called for. All in favor of proposal 90 say aye. 16 17 (No affirmative votes) 18 19 MADAME CHAIR ENTSMINGER: All opposed 20 same sign. 21 22 IN UNISON: Aye. 23 24 MR. BASSICH: That's all we had on the 25 Eagle AC. 26 27 MADAME CHAIR ENTSMINGER: Okav. And I 28 have Minto's next. I have yours from Minto Flats. 29 30 Does anyone have anything they'd like 31 to take up before 140. Because I got the minutes from 32 Minto and 140 is next. 33 34 I've been asked for a break. Let's 35 take a coffee break. We'll just take a 10, 15 minute break. 36 37 38 (Off record) 39 40 (On record) 41 42 MADAME CHAIR ENTSMINGER: Calling the 43 Board back to whatever, order. 44 45 Andrew, you had one that you wanted to 46 do. 47 48 MR. FIRMIN: I had a motion to adopt 49 proposal 84 and 85. 50

Page 253 MADAME CHAIR ENTSMINGER: I wish I 1 2 could second it. Just to help you out it's the two 3 sheep proposals for the Dalton Highway that extends the 4 season specific for bowhunters. 5 6 MR. WOODRUFF: 84 and 85. 7 8 MADAME CHAIR ENTSMINGER: Uh-huh. They 9 both do the same thing .... 10 11 MR. WOODRUFF: Oh, okay. 12 13 MADAME CHAIR ENTSMINGER: 14 ....extending the season. Do I hear a second. 15 16 MR. WOODRUFF: Second. 17 18 MADAME CHAIR ENTSMINGER: Go ahead, 19 Andrew. 20 21 MR. FIRMIN: Speaking to the motion. 22 This is the Dalton Highway Corridor Management Area 23 which includes 25A, 24A and 26B. They're both archery 24 hunts and they want to extend the hunts that normally close September 20th, they want to keep them open until 25 26 October 5th. And I think our RAC took no -- I mean, 27 the Yukon Flats AC took no action on them, but we did have some discussion and thought that's kind of crazy. 28 29 And if there's conservation concerns in the area how do 30 you extend the season by what, you know, 16 days. That's a two week -- two week extension of a archery 31 hunt in an area that's probably going to turn into more 32 rescues or something than anything. I don't -- I don't 33 34 know of anybody that wants to hunt in Atigun Pass in 35 the first week of October. 36 37 For those reasons stated in the 38 conservation concern that is a specific bowhunt only special season at the end of an already what, month 39 long season. I think I'd -- personally I'm going to 40 41 oppose it. 42 43 MADAME CHAIR ENTSMINGER: Any other 44 discussion. 45 46 MR. GLANZ: Call the question. 47 48 MADAME CHAIR ENTSMINGER: The 49 question's been called for. The motion was support for 50

Page 254 84 and 85. All those in favor say hi -- aye. You can 1 2 say hi too. 3 4 (Laughter) 5 6 (No affirmative votes) 7 8 MADAME CHAIR ENTSMINGER: All those 9 opposed same sign. 10 11 IN UNISON: Aye. 12 13 MADAME CHAIR ENTSMINGER: Motion 14 passes. Next. 15 16 MR. FIRMIN: Motion to adopt proposal 17 140. 18 19 MR. WOODRUFF: Second. 20 21 MADAME CHAIR ENTSMINGER: Okay. 22 Discussion. 23 24 MR. McMANUS: Yes, Madame Chair. 25 26 MADAME CHAIR ENTSMINGER: Go ahead. 27 28 MR. McMANUS: Okay. Thank you. I just want to give a little history about how this came about 29 and how we found out about this. I was in a meeting, 30 fish meeting in Galena, and wanted to thank Fish and 31 Game for allowing us -- we had a death of a young lady 32 33 in our village and she was from Minto and Nenana area 34 so she had two villages she went back to. When she 35 passed away the fishing was -- the kings were shut down, they had an emergency order to shut down. And so 36 37 I called Fish and Game and asked if we could fish for 10 fish for a potlatch for this young lady and they 38 39 gave me permission to get 10 kings. So me and my buddy went out and we both caught five that evening. We made 40 41 -- we sent them there and everything was good. We 42 thank Fish and Game for that. 43 44 And Holly Carroll was on the line and I 45 said well, thank you, that's what we do for moose also. And she mentioned in that report that they give out 20 46 permits each year in the Minto Flats area, 20B and 47 48 after that permits are done they shut down the average 49 moose hunt. And it was brought to our attention that 50

Page 255 even for ceremonial use at a potlatch we were not 1 2 allowed to get a moose in that area. And it wasn't only that area, it was Minto, Manley, Nenana, Rampart, 3 Tanana, and nobody was aware of that. And so when we 4 5 found out about that Fish and Game said there was 6 enough moose there to do the permit on. But then once 7 that was done it was shut down for everything. And so 8 and they're trying to propose it again so that's why we're opposing this one and we're still fighting them 9 10 on this one. 11 12 Thank you. 13 14 MADAME CHAIR ENTSMINGER: Any other 15 discussion. 16 17 MR. FIRMIN: Madame Chair. 18 19 MADAME CHAIR ENTSMINGER: Andrew. 20 21 MR. FIRMIN: The Yukon Flats AC took 22 this up and we opposed it unanimously. 23 MR. WRIGHT: I did call into the 24 25 Rampart Tanana Valley AC over this and they opposed it 26 also. 27 28 Thank you. 29 30 MADAME CHAIR ENTSMINGER: Just a quick question, Tim. Did they -- they told you they have an 31 antlerless moose season on the -- or that's what's in 32 here I guess, but you couldn't even hunt any moose in 33 34 the area? 35 36 MR. McMANUS: When they did this and we 37 got further into it, they said we could get a bull 38 moose for potlatch moose in the wintertime, but, you 39 know, after rut season and wintertime they're pretty 40 skinny and stinky still. And that's really not a option for some of the people. Then they gave us a 41 42 area where we could hunt, but that's up in the Saw 43 Tooth Mountains and miners don't even go up there in 44 the winter. So the options that they gave us were in 45 our minds, you know, it's -- nobody's going to do that. I mean, it's -- who wants to get a skinny bull moose 46 47 that smells like rut and then if you go up in the 48 mountains in the wintertime, there's no moose up there. 49 50

Page 256 MADAME CHAIR ENTSMINGER: Charlie. 1 2 3 MR. WRIGHT: I'd like to say that you 4 can't always eat a bull moose. Like Tim said there's 5 times of the year when they're just not good eating. And sometimes when hardship, deep snow, a cow moose is 6 7 something that -- all you can find. And it doesn't 8 seem to be very conservative to have a cow moose hunt, permitted hunt, going in the same area if they're not 9 10 going to allow people to subsist in their -- in their 11 ceremonial actions. It just doesn't make sense to me. 12 13 MADAME CHAIR ENTSMINGER: Yeah, I don't 14 want to prolong the meeting, but it doesn't make sense 15 to me either. This is a reauthorization so it's been 16 on the books for a while it sounds like. 17 18 Any other discussion. 19 20 MR. WOODRUFF: Question. 21 22 MADAME CHAIR ENTSMINGER: The 23 question's been called for. All in favor of proposal 24 140 say aye. 25 26 (No affirmative votes) 27 28 MADAME CHAIR ENTSMINGER: All opposed 29 same sign. 30 31 IN UNISON: Aye. 32 33 MADAME CHAIR ENTSMINGER: Okay. 141, 34 Tim. 35 36 MR. McMANUS: Yeah, proposal 141 was 37 submitted by Tanana Rampart Manley AC. They'd like to 38 eliminate the winter cow moose hunt in the Minto Flats 39 Management Area RM 785. Those opposed to winter cow moose hunt and those opposed to closing ceremonial use 40 of cow moose whatever, cow moose hunts are still on the 41 42 books, should support proposal 141. 43 44 Thank you. 45 46 MADAME CHAIR ENTSMINGER: Sounds like a 47 motion. 48 49 MR. WOODRUFF: Move to adopt 141. 50

					Page	257
1		MADAME CHAIR	ENTSMINGER:	Okay.		
3		MR. FIRMIN:	Second.			
1 2 3 4 5 6 7	discussion.	MADAME CHAIR	ENTSMINGER:	Anymore		
8 9		MR. McMANUS:	Question.			
10 11 12	question's call		ENTSMINGER:	The		
13		MR. FIRMIN:	Madame Chair			
14 15 16		MADAME CHAIR	ENTSMINGER:	Andrew.		
17 18 20 21 22 24 25 26 27 29 31 23 34 35 37 39	the Yukon Flats unanimously.		I just wanted up and we sup	_		
	And I know we're just running through the proposals here, but maybe I'm surprised Andy hasn't reminded us yet, that some of our procedure for proposals, it would be good to get on the record why we support or oppose some of these even if it's just real quick other than going along with what the ACs do. Because some of these I think that the heart of it is kind of an allocation issue, some of it is like Tim was saying how can you say yes to this and no to that person or user, it's kind of two sided. And then on one hand they want to reauthorize antlerless hunts, but, you know, they but it what's good for the goose is good for the gander. It doesn't seem fair that on one hand you're telling this user group no, you can't get a potlatch moose, but here yet they have an open season until their permits are filled. It's kind of maybe they should allocate a specific amount of permits just for potlatches or memorials.					
40 41		MR. WRIGHT:	They do.			
42 43		MR. FIRMIN:	But they're b	bull only	•	
44 45 46 47 48 49 50	MR. WRIGHT: No, they did authorize some, but there's there was there's a limit. And it's kind of conflicting, but because there's so many people in this area right here from so many different areas that that limit is not near enough. Because there's so many Fairbanks is a new village. A lot					

Page 258 of people from the villages have moved in here and they 1 2 all use that ceremonial moose for potlatch where 3 they're putting their loved ones away. So I don't 4 think that number is sufficient. 5 6 MR. McMANUS: Madame Chair. 7 8 MADAME CHAIR ENTSMINGER: Tim. 9 10 MR. McMANUS: Each year they have a 11 permit and they held it in front of the community hall in Nenana and three days before that -- they had that 12 13 draw for the permits there was people with motorhomes, 14 they had their tents set up there. And out of those 15 ones out of Nenana there was one local guy that stayed 16 there, you know, even though he lives there he -- he 17 put up a tent and did the same thing. But and then the 18 Minto area I think there wasn't anybody that got one of 19 those permits. So all the permits that they got were 20 coming either from somebody out of Anchorage or 21 Fairbanks coming to get those permits to hunt. There 22 was hardly any locals out there with permits. 23 24 MADAME CHAIR ENTSMINGER: Any other 25 discussion. 26 27 MR. BASSICH: Madame Chair. 28 29 MADAME CHAIR ENTSMINGER: Andy. 30 31 MR. BASSICH: Yeah, I didn't read anything really biologically on it, is there -- is 32 there a problem biologically why they feel like they 33 have to have the cow moose brought down in numbers, I 34 35 just haven't seen any data? 36 37 MADAME CHAIR ENTSMINGER: Go ahead, 38 Don. 39 40 MR. WRIGHT: The Fish and Game say that 41 there's too many moose in the area. I've been flying 42 over that area for 30 years, directly over it, and there used to be moose all over in those flats, now 43 44 there's only a couple groups in there. So I don't know 45 how they're justifying that there's still so many in there. I fly over it all the time coming to my 46 47 meetings and there's not near as many moose as there 48 used to be. People in Minto are having a hard time 49 finding moose in their own back yard. So this is 50

Page 259 becoming a very bad conservation problem. 1 2 3 MR. McMANUS: Madame Chair. 4 5 6 MADAME CHAIR ENTSMINGER: Tim. 7 MR. McMANUS: Yeah, we had our last AC 8 meeting in Minto so they picked us up in Nenana, we 9 flew over that area, I counted two moose from Nenana to Minto. It's winter, their dark, you could see the 10 11 tracks, you could see where they were, but there's only two that I counted. I don't know where they're getting 12 13 their numbers. 14 15 MR. BASSICH: Do we have -- do we have 16 what the State's position is on this? 17 18 MADAME CHAIR ENTSMINGER: We should. 19 20 MR. BASSICH: I'm just curious. 21 22 MADAME CHAIR ENTSMINGER: Beth Lenart 23 is online. 24 25 MR. BASSICH: Because it just seems to 26 me that if there is a decline going on obviously the --I would think the biologists would know about it and 27 would be recommending that this hunt be closed 28 themselves if it's getting to that point. So..... 29 30 31 MADAME CHAIR ENTSMINGER: Beth are you 32 online? 33 34 And they can't do allocations as you 35 know. 36 37 MR. BASSICH: I know, but they -- a biologist is going to be sending up some alarms if all 38 of a sudden their moose population is dying and they're 39 rutting and they're doing winter cow hunts, right..... 40 41 42 MADAME CHAIR ENTSMINGER: Uh-huh. 43 44 MR. BASSICH:....I would hope anyway. 45 46 MADAME CHAIR ENTSMINGER: Oh, yeah. 47 Yeah. 48 49 MR. BASSICH: I know our biologists 50

Page 260 would do that, right, Jeff, you would do that. 1 2 3 MADAME CHAIR ENTSMINGER: He's busy 4 talking. 5 6 MR. GLANZ: Madame Chair. 7 8 MADAME CHAIR ENTSMINGER: Bill. 9 10 MR. GLANZ: You have to realize too 11 that that moose -- that cow moose hunt starts on top of Twelvemile Summit 20 miles from Fairbanks. 12 13 14 MADAME CHAIR ENTSMINGER: Your mic. 15 16 MR. GLANZ: Oh, I thought I turned it 17 on, I turned it off. Anyway the 25B area starts on top 18 of Twelvemile Summit which is like 20 miles -- air miles from my house, maybe 25. And we don't really 19 have that abundance of moose and everybody in that 20 area's complaining about it, you know. And so I'm 21 22 totally for getting rid of that. 23 24 MADAME CHAIR ENTSMINGER: Yeah, and to 25 my knowledge these -- is that a -- these moose hunts 26 are -- if it's a cow moose it has to be reauthorized 27 every -- and this one is for the specific one, 785. And I was -- I'm-- I was trying to look it up in the 28 book here. But.... 29 30 31 Vince is here to enlighten us. 32 33 MR. MATHEWS: Yes, hopefully Beth would 34 be online, but I have a copy of the Alaska Department 35 of Fish and Game proposal. You know, comments on the proposal in 141, paging down here, they oppose it. And 36 37 again it would be best if Fish and Game would -- would 38 share that. 39 40 MADAME CHAIR ENTSMINGER: I'm going to 41 reach out. Beth, are you online, Beth Lenart. 42 43 MR. BURCH: Madame Chair, this is Mark 44 Burch from the Department of Fish and Game. Ι 45 understand that Beth has signed off, but it may be possible to ask her to get back online if you'd like me 46 47 to see if I can track her down. 48 49 MADAME CHAIR ENTSMINGER: That would be 50

Page 261 1 great. In the meantime we have..... 2 3 MS. TRAINOR: Hello, Madame Chair. For 4 the record my name's Alida Trainor, I'm the subsistence 5 resource specialist for Fish and Game. I was involved 6 with preparing the Department's comments on this 7 proposal. Tony Hollis, who is the area biologist is 8 being tracked down to call in. 9 10 MADAME CHAIR ENTSMINGER: So we called 11 the wrong one. Sorry. 12 13 MS. TRAINOR: It's okay, Beth is 14 knowledgeable as well. 15 16 MADAME CHAIR ENTSMINGER: Uh-huh. 17 18 MS. TRAINOR: So if we look through the 19 background that was provided for this proposal, there 20 are some biological concerns for moose in this area. Reauthorizing this hunt would allow -- it's just like 21 22 Andy was saying, a tool in the toolbox for managers to 23 be able to maintain a sustainable population of moose 24 in the area. 25 26 MADAME CHAIR ENTSMINGER: Oh. So this 27 is one of the toolbox ones. 28 29 MS. TRAINOR: Yes. And it's -- the 30 Department is opposed to it because it is a reduction in opportunity to harvest the avail -- current 31 available surplus of moose. And so we are concerned 32 that if we eliminate this that we would not be able to 33 34 provide reasonable opportunity. 35 36 MADAME CHAIR ENTSMINGER: Surplus of 37 moose, but I'm hearing that it -- that people don't 38 believe that. 39 40 MR. BASSICH: Madame Chair. 41 42 MADAME CHAIR ENTSMINGER: Andy. 43 44 MR. BASSICH: Yeah, I guess maybe that 45 goes to one of these issues that we often have, is that a surplus to the whole State or is that a surplus to 46 47 the local people. And that is oftentimes misunderstood 48 in the wordage. So I guess I have to lean towards what 49 the locals are telling me in their area and if they're 50

Page 262 struggling to find moose that that's setting up a 1 2 pretty big alarm in my book. 3 4 So I appreciate your comments and the 5 State's position on that, but I think I'm going to 6 support this proposal. 7 8 Madame Chair. 9 10 MADAME CHAIR ENTSMINGER: Andy, did you 11 want any more Fish and Game.... 12 13 MR. BASSICH: No, I was just curious if 14 they -- I mean, if they can get it to us, but.... 15 16 MADAME CHAIR ENTSMINGER: Oh, yeah. 17 18 MR. BASSICH: Thank you. I've made my 19 decision I think, Madame Chair. I would like to see 20 that information in the future for -- you know, on some of these proposals, but I -- I'm going to go with the 21 22 guys that live there and tell me that there's an issue and there's hunter conflict issues, all the things that 23 24 this RAC has been addressing for a couple years with 25 hunter ethics and competition and people in rural 26 communities, you know, struggling to meet their needs 27 at times. So sounds to me like Fairbanks is doing great, but the people locally aren't. And I'm not 28 29 saying that because of allocation, but I do want to 30 protect local, Federally-qualified people as a member of this RAC to their subsistence harvest opportunities. 31 32 It's essential to the lifestyle. 33 34 MADAME CHAIR ENTSMINGER: Well, and I 35 might add too, past history of cow moose seasons, 36 oftentimes the regulation process is too slow when they 37 need to close it. And in that light I'm in favor of it 38 because I've seen moose populations decline, you know, 39 with data that I've read, severely because they left 40 them open too long. 41 42 Any other discussion. 43 44 MR. GLANZ: Ouestion. 45 MADAME CHAIR ENTSMINGER: 46 The question's called for. All in favor of proposal 141 to 47 48 eliminate the moose permit RM 785 in Minto Flats say 49 aye. 50

Page 263 1 IN UNISON: Aye. 2 3 MADAME CHAIR ENTSMINGER: All opposed 4 same sign. 5 6 (No opposing votes) 7 8 MADAME CHAIR ENTSMINGER: Okay. 9 This looks like the same thing. Passes. 10 11 MR. McMANUS: This is -- Madame Chair. 12 13 MADAME CHAIR ENTSMINGER: Uh-huh. 14 15 MR. McMANUS: This is the same, it was 16 written by Dr. Anna Frank. Back in history in 1972 17 when there was a potlatch Carl Spranken shot a moose 18 and it ended up to the Supreme Court and that's how today our law is that we're able to get a cow moose for 19 20 our hunts. And she just wanted the -- that she's been 21 there, she's seen the decline on moose, the cow moose. So this is the one that she put in. She's a elder from 22 23 Minto. 24 25 MADAME CHAIR ENTSMINGER: I would ask 26 agreement from -- and if I'm interpreting this 27 correctly, it's the exact same proposal as the first one before, in light of the way we voted on 141 we 28 29 would agree that we are also opposed to this or do you 30 want to just take it up and vote. 31 32 MR. BASSICH: Probably just as quick to 33 take it up. 34 35 MADAME CHAIR ENTSMINGER: Okay. Do it. 36 37 MR. BASSICH: Madame Chair, a motion to 38 support proposal 143.... 39 40 MR. GLANZ: Second. 41 42 MADAME CHAIR ENTSMINGER: 2. 43 MR. BASSICH: .....I'm sorry, 142 44 45 as.... 46 47 MR. GLANZ: 142. 48 MR. BASSICH: .....142 clarification. 49 50

Page 264 1 MR. GLANZ: Second. 2 3 MADAME CHAIR ENTSMINGER: And second. 4 And.... 5 6 MR. BASSICH: And I'll just cite the 7 previous -- this is a mirror proposal to 141. So we 8 will support this as we did 141. 9 10 Madame Chair. 11 12 MADAME CHAIR ENTSMINGER: Anything 13 else. 14 MR. WRIGHT: Question. 15 16 17 MADAME CHAIR ENTSMINGER: The 18 question's been called for. All in favor of the 19 proposal say aye. 20 21 IN UNISON: Aye. 22 23 MADAME CHAIR ENTSMINGER: All opposed. 24 25 (No opposing votes) 26 27 MADAME CHAIR ENTSMINGER: Okay. That 28 one's done. 29 30 MR. McMANUS: Okay. Madame Chair. 31 32 MADAME CHAIR ENTSMINGER: Tim. 33 34 MR. McMANUS: Proposal 143, when you 35 look at it it's kind of the same, but then -- let me 36 see where I got lost. It's the ceremonial use part, 37 it's protected by Alaska's constitution. Our AC supported this, I know a couple of them did. They want 38 39 to eliminate the permit hunt so Fish and Game has better managing for priority over ceremony use. 40 41 42 MADAME CHAIR ENTSMINGER: Okay. We 43 were getting some background noise. And I just got a notice that Tony's on, the biologist is online right 44 45 now if anybody wants to ask questions. 46 47 MR. WOODRUFF: Madame Chair. 48 49 MADAME CHAIR ENTSMINGER: Donald. 50

Page 265 1 MR. WOODRUFF: Move to adopt 143. 2 3 MR. FIRMIN: Second. 4 5 MADAME CHAIR ENTSMINGER: Okay. 6 Discussion -- further discussion. 7 8 MR. BASSICH: I guess I just need a 9 little bit of clarification on this. It seems like 10 it's kind of mirroring the other ones to a certain 11 extent. What's the difference between the RMS 785 and just all of 20E. Is the RM 786 strictly in the area of 12 13 Minto? 14 15 MR. McManus: Yes, you're correct. 16 17 MR. BASSICH: Yes. 18 19 MR. McMANUS: It's right in the middle 20 of it pretty much. 21 22 MR. BASSICH: So 41 if I understand 23 would then eliminate all draw permits throughout all of 24 20B. 25 26 MR. McMANUS: Yes. 27 28 MR. BASSICH: And so is it necessary to 29 do that. It just seems to me that it may -- I mean, I 30 haven't got the map in front of me, but it seems to me that that might be a tool that might be useful. 31 If your -- if the intent behind the other two was to 32 protect that area around Minto, to protect that local 33 34 population of Federally-qualified people to help them. 35 But unit 20B is a considerably larger area that also people from the Fairbanks area would be utilizing for 36 37 these winter hunts. If the population warrants cow 38 hunts in the winter why wouldn't we be in favor of that 39 as long as it's not locally impacting that community. 40 41 MADAME CHAIR ENTSMINGER: What I'm 42 seeing is that under this -- what's the issue you'd like the Board to address, eliminate all antlerless 43 44 moose hunts in 20B except Minto Flats area. I don't 45 know why that's that way. 46 47 Go ahead, Tim, I see you want to talk. 48 49 MR. McMANUS: On -- excuse me, on this 50

Page 266 one they -- I don't have the other paper, they didn't 1 2 send it to me, but there is other units in there that 3 have kind of the same thing. And this is what she was 4 getting at is close everything down as for the -- Fish 5 and Game to do that and it's much of a problem for 6 everybody so that's why she just kept 20B in there. 7 Because I think it would be impossible for them to 8 close everything down. And that's just the point she was trying to make out, Dr. Anna Frank. 9 10 11 MADAME CHAIR ENTSMINGER: You think 12 it's impossible, huh. 13 14 MR. BASSICH: Madame Chair. 15 16 MADAME CHAIR ENTSMINGER: Go ahead, 17 Andy. 18 19 MR. BASSICH: Yeah, I don't think I'm 20 going to support this one just because I -- looking at the area, all of 20B, that's a really large area there 21 22 that would serve North Pole, Eielson, Fairbanks 23 directly and I don't see any remote populations that 24 are -- you know, out in that area. You know, Minto is fairly isolated out there, but this other is a very 25 large area that it may warrant. If the bio just 26 27 warrants that there's a need for cow hunts I don't see 28 why that should be restricted or taken from. So I'm 29 going to oppose this. 30 31 Madame Chair. 32 33 MADAME CHAIR ENTSMINGER: Any other 34 discussion. 35 36 MR. GLANZ: Ouestion. 37 38 MADAME CHAIR ENTSMINGER: I do want to 39 ask -- well, I have a card from Tisha Kennell. 40 41 Did you want to speak to that from 42 Delta? 43 44 MS. KENNELL: Not to that one. 45 46 MADAME CHAIR ENTSMINGER: Okay. The 47 question's been called for. All in favor of proposal 48 143 that eliminates all the moose hunts, cow moose 49 hunts, in 20B say aye. 50

Page 267 1 IN UNISON: Aye. 2 3 MADAME CHAIR ENTSMINGER: Okay. All 4 opposed the same sign. 5 6 IN UNISON: Aye. 7 8 MR. FIRMIN: We'll have to use our 9 hands for this one. 10 11 MADAME CHAIR ENTSMINGER: Okay. Let's 12 do it again. 13 14 MR. FIRMIN: Hand, please. 15 16 MADAME CHAIR ENTSMINGER: All in favor raise your hand to closing all these seasons. 17 18 19 One, two three, 20 21 (Three affirmative votes) 22 23 MADAME CHAIR ENTSMINGER: All opposed 24 same sign. 25 26 (Three opposing votes, two abstentions) 27 28 MADAME CHAIR ENTSMINGER: So two of you 29 are.... 30 31 MR. WOODRUFF: Abstaining. 32 33 MADAME CHAIR ENTSMINGER: 34 .....abstaining. That's a no vote. 35 36 REPORTER: So Don and Andrew are 37 abstaining. 38 39 MR. FIRMIN: Yes. 40 41 REPORTER: Okay. 42 43 MADAME CHAIR ENTSMINGER: Next. 44 45 MR. BURCH: Madame Chair, may I 46 interrupt for a moment. This is Mark Burch again. 47 48 MADAME CHAIR ENTSMINGER: Yes, go 49 ahead. 50

Page 268 MR. BURCH: I do understand that Tony 1 Hollis is on the phone. I also can see that you've moved along. So I don't know if it would be helpful to 2 3 4 have him answer any questions at this point. 5 6 Thank you. 7 8 MADAME CHAIR ENTSMINGER: Council 9 members, any questions. 10 11 (No comments) 12 13 MADAME CHAIR ENTSMINGER: You know 14 what, I think I voted wrong. 15 16 (Laughter) 17 18 MADAME CHAIR ENTSMINGER: Because I 19 voted to dump them all, right. 20 21 MR. FIRMIN: You guys voted backwards 22 or what. 23 24 MADAME CHAIR ENTSMINGER: I think we 25 did. Is anybody else confused as I was there on that 26 vote. I was -- I did not want to dump them all. I 27 think I voted wrong, right, it says to eliminate all 28 antlerless moose drawings. 29 30 MR. GLANZ: I think that's the way I 31 voted anyway, eliminate all..... 32 33 MADAME CHAIR ENTSMINGER: I wanted to 34 vote the other way, not against it. 35 36 MR. GLANZ: I did that vesterday and 37 I've been looking at the book. Don't feel bad. 38 39 MADAME CHAIR ENTSMINGER: Good. I'm 40 glad you clarified that. I.... 41 42 MS. KENNER: Madame Chair. 43 44 MADAME CHAIR ENTSMINGER: .....don't 45 feel bad. I don't feel bad. 46 47 MS. KENNER: Madame Chair, this is 48 Pippa Kenner. So three-three fails. It failed. The 49 vote.... 50

Page 269 MADAME CHAIR ENTSMINGER: It was.... 1 2 3 MS. KENNER: .....the motion. 4 5 MADAME CHAIR ENTSMINGER: .....should 6 have been three, two and two, shouldn't it. 7 8 MR. FIRMIN: Three and two. 9 10 MS. KENNER: It was..... 11 12 MADAME CHAIR ENTSMINGER: Oh, three-13 three.... 14 15 MS. KENNER: Right. 16 17 MADAME CHAIR ENTSMINGER: .....and two. 18 Okay. 19 20 MS. KENNER: If the majority of Council 21 members agree it can be taken up again. 22 23 MR. BASSICH: So, Sue, you want to take it back up. 24 25 26 MADAME CHAIR ENTSMINGER: I just want 27 -- I think I'm getting senile. 28 29 (Laughter) 30 31 MADAME CHAIR ENTSMINGER: Eliminate all antlerless moose hunts. And to favor it I -- I was not 32 33 in favor of it and I should have voted against it. Can 34 I just change my vote or do you want a revote. 35 36 MR. FIRMIN: I think since they don't 37 track individual votes it's just a Council decision it 38 doesn't matter. 39 40 MADAME CHAIR ENTSMINGER: So it failed. 41 42 MR. FIRMIN: However if you want -- it 43 failed, yeah, it didn't -- I don't know, unless somebody wants their -- my track record to say I voted 44 45 for or against something. That's the only thing ..... 46 47 MADAME CHAIR ENTSMINGER: Well, it just 48 be a little bit stronger, the failing, right. 49 50

Page 270 1 REPORTER: No. No, it either is or it 2 isn't. 3 4 MADAME CHAIR ENTSMINGER: Okay. Forget 5 it. Let's move on. 6 7 Any questions of the biologist online? 8 9 (No comments) 10 11 MADAME CHAIR ENTSMINGER: When you need 12 them they're not there. You didn't want your question 13 answered right now then? 14 15 MS. PARKER McNEILL: Madame Chair. 16 17 MADAME CHAIR ENTSMINGER: Yes, go 18 ahead. 19 20 MS. PARKER McNEILL: This is Doreen 21 Parker McNeill with the Alaska Department of Fish and 22 Game and I believe Tony Hollis, the area biologist, for 23 this area is on the line if you have questions or need 24 any of the biological information clarified. 25 26 MADAME CHAIR ENTSMINGER: Yeah, on 27 moose.... 28 29 MR. HOLLIS: And, yes, I -- this is 30 Tony Hollis and I am on the line. 31 32 MADAME CHAIR ENTSMINGER: Hi, quys. 33 34 MR. HOLLIS: Hello. 35 36 MR. BASSICH: 20B moose. 37 38 MADAME CHAIR ENTSMINGER: Is this 20B 39 moose you can address? 40 41 MR. HOLLIS: Yes, it is. Yep. 42 43 MR. BASSICH: Yeah, thank you. This is Member Bassich. I just would like some -- you don't 44 45 have to go into a long detailed explanation, but what 46 is the current reason for having cow hunts in 20B and if you could split it from north of Fairbanks and south 47 48 of Fairbanks. We're taking up some of these proposals 49 and there's some questions as to why we would be having 50

Page 271 cow moose hunt draw permits in the Minto area when 1 2 locals are seeing a decline and are having difficulties 3 meeting their needs due to low moose populations in the 4 area. So if you could address that briefly I'd 5 appreciate it. 6 7 MR. HOLLIS: Absolutely. So the unit 8 20B moose population is at about 13,000 moose right now and that's based on a 2017 estimate. And our objective 9 10 is 12,000 to 15,000 moose. So we're right in the middle of our objective. And so the cow harvest in 11 unit 20B is fairly low at this time. There is no 12 13 drawing permits in Minto Flats. We have a registration 14 hunt that begins October 15th and currently the quota 15 for that registration hunt is only 20 cows in that 16 area. We have a drawing permit for moose right around 17 the town of Fairbanks in the Fairbanks Management Area. 18 That harvest is just to reduce road kill and trouble 19 moose right in town. That's generally about 30 cow 20 moose. That is all the cow hunts we have in 20B at 21 this time. 22 23 Fairbanks Management Area is a drawing permit, there's a couple different permits, it's only 24 around Fairbanks. And then there's a registration cow 25 permit in Minto Flats for right now a guota of 20 26 moose. And that's about -- that harvest we -- is a 27 level to maintain the moose population. We're not --28 29 we don't want it to grow, we still see nutritional 30 problems with moose in 20 -- in Minto Flats, they have 31 very low twinning weight rates and calf sizes. 32 33 So we're not trying to reduce moose 34 numbers, we're trying to maintain them at the current 35 level. 36 37 MR. BASSICH: Thank you. 38 39 MADAME CHAIR ENTSMINGER: Andy says 40 thank you. 41 42 MR. McMANUS: Madame Chair. 43 44 MADAME CHAIR ENTSMINGER: Tim. 45 46 MR. McMANUS: All right. Tony, when you give out those 20 permits and they're -- they all 47 48 got them and you shut it down and that's when you shut 49 down the ceremonial moose harvest too for potlatches, 50

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correct?

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2 3 MR. HOLLIS: Okay. So in 2018 there 4 was -- we estimated about 30 -- a harvestable surplus 5 in Minto Flats of 30 cow moose. And what happened in 6 that particular season was there was a potlatch for a 7 prominent member of the Native community that requested 8 quite a number of moose. We estimated about -- and we have poor records of harvest from ceremonial harvest, 9 10 but we estimated based on requests for potlatch moose, 11 ceremonial harvest moose, we estimated about 10 moose, 10 cow moose were taken in Minto Flats that -- in 2018. 12 13 The quota for the registration hunt was 30. What we 14 did was since we estimated 10 cow moose were taken by 15 potlatch, we lowered that quota to 20. Once that hunt occurred and 20 moose were taken then we closed Minto 16 17 Flats. That happened in November, at the end of 18 November, right at the beginning of December. We 19 closed Minto Flats, no potlatch, no ceremonial harvest 20 for cow moose. That went into place until June 30. 21 Once July 1st hit it opened back up, you could take 22 moose for ceremonial harvest, cow moose. 23 24 What we did then in 2019 is we adjusted 25 the quota, there would still be -- there's still about 30 cow moose as a harvestable surplus in Minto Flats, 26 but we just set the hunt -- the quota for the hunt, the 27 28 registration hunt at 20 and we left 10 for potlatch or 29 ceremonial harvest. That way we would -- the 30 subsistence hunt wouldn't get into the moose that may be taken for ceremonial harvest. That way it would not 31 32 be closed down like we had to the previous year. 33 34 Thank you for that MR. BASSICH: explanation. This is Member Bassich again. How is the 35 36 reporting done, it's a registration hunt so pretty much 37 anybody can register and go out there and hunt, how is the harvest reported and what kind of a timely manner 38 39 do you have for that to..... 40 41 MR. HOLLIS: There.... 42 43 MR. BASSICH: .....guard against..... 44 45 MR. HOLLIS: .....there's a requirement 46 of three days. 47 48 MR. BASSICH: Okay. 49 50

Page 273 MR. HOLLIS: So and we track it pretty 1 2 close. What happens is when that hunt opens in October travel conditions are poor. It's just freezing up. As 3 the Flats freeze and the snow comes access gets more 4 5 available. And so we track it and since it's a short 6 reporting period as it gets close to quota then we 7 issue an EO to shut the hunt down. 8 9 MR. BASSICH: Thank you. 10 11 Madame Chair, we've made our vote on 12 this unless we want to bring it back up. I'd make a 13 recommendation we just keep moving through..... 14 15 MADAME CHAIR ENTSMINGER: Okay. 16 17 MR. BASSICH: .....proposals. 18 19 Thank you for that information. 20 21 MADAME CHAIR ENTSMINGER: And to bring 22 it back up you have to be on the -- changing your vote 23 if I remember it correctly. 24 25 MR. McMANUS: Madame Chair. 26 27 MADAME CHAIR ENTSMINGER: Yeah, Tim. 28 29 MR. McMANUS: The last one I had was 30 82, but we already did that so thank you guys so much. 31 32 MADAME CHAIR ENTSMINGER: Okay. 33 34 MR. BASSICH: Madame Chair, one more. 35 36 MADAME CHAIR ENTSMINGER: Yes. 37 38 MR. BASSICH: Yeah, Madame Chair, we 39 have a member in the public that informed me during the break that they would like us to comment on proposal 91 40 which is dealing with hunting season and bag limits of 41 small game in the Delta region. 42 43 44 And so I'd like to make a motion that 45 we adopt proposal 91. 46 47 MR. WOODRUFF: Second. 48 49 MR. BASSICH: And if we could call her 50

Page 274 1 up. 2 3 MADAME CHAIR ENTSMINGER: Okay. Tisha. 4 5 MS. KENNELL: Hi, Madame Chair. I'm 6 Tisha Kennell and I'm from Delta Junction and I'm a 7 member of the AC there. As an AC we did propose 91 8 this year in reference to grouse bag limit reductions. 9 And we've got several reasons why we're asking on this. 10 11 One of the -- one of the situations 12 that we're facing down there is that we have one of the 13 most vast road systems in the Interior due to farming 14 practices there. And unfortunately that's taken a big 15 impact on our bird hunting. We just have so much 16 access in the area that road hunting has taken a large 17 population of these birds. We've had a couple of 18 really bad winters, three act -- or springs, three 19 actually consecutively. And we believe that that's 20 kind of brought down the population of our local grouse 21 also. 22 23 You know, unfortunately we don't have a 24 lot of data on this because we have -- we do have a 25 small game department, but they're fairly new and so she's working really hard to gather data on our local 26 27 grouse population and we've been assisting her in doing so, but we just don't have a lot of data at -- at this 28 29 time right now. So with -- having discussions with her 30 and what we -- what we're seeing down there, we've talked about the fact that in most cases and this is 31 32 all throughout the United States, they don't recommend 33 reducing bag limits unless there's what is considered a 34 local overharvest. And we think that that's what 35 happening here. 36 37 And unfortunately our area has been 38 published through social media and through publications 39 about being one of Alaska's most prominent grouse 40 hunting areas. So due to that we have a lot of people 41 who travel a long ways to come and hunt this area. 42 I've seen people -- I've seen Danish people come here to hunt our birds. And we have people that show up 43 44 with five, six, seven hunting dogs. These are people 45 who are well practiced upland hunters. They use 46 champion dogs. I actually hosted three friends last year and we all have wonderful grouse dogs. And 47 48 fortunately they had been here three years prior and 49 they were all astounded at the population of grouse 50

Page 275 that they were not seeing in that area, the same areas 1 2 that they had hunted three years prior. 3 4 So we're very concerned about this 5 issue and it was brought up that we're bringing this up 6 because of allocation and that's definitely not the 7 issue right now. We're just looking to extend the 8 season and to provide some conservative conservation 9 thinking here as far as these numbers with birds go. 10 11 As far as extending the season, a lot 12 of us are hunting sheep, caribou, moose through August 13 and part of September and so some of us don't really 14 even get into grouse hunting until later in the season 15 and by that time you're basically not seeing any birds 16 on the ground. Like I say we've had a couple of really 17 bad springs, we'll see a few -- we'll see a few broods 18 and then, you know, due to the weather or whatever all 19 we're seeing is your larger breeder birds that have 20 survived whatever conditions they've gone through. 21 So we're hoping that you guys will 22 We do have this in and we have gotten support this. 23 support from Tok AC also as we have some hunters that come from that area and they're kind of aware of the 24 25 situation also. 26 27 Thank you, Madame Chair. 28 29 MADAME CHAIR ENTSMINGER: Questions. 30 31 MR. BASSICH: Madame Chair. 32 33 MADAME CHAIR ENTSMINGER: Andy. 34 35 MR. BASSICH: Yeah, Madame Chair, just 36 to support this. I -- it sounds like there is a 37 conservation concern even though it's not -- maybe not 38 biologically studied through the State. Hunters are 39 oftentimes some of your best information on game 40 populations irregardless of the species. And I'm 41 hearing that through this testimony and therefore I --42 I'm going to support proposal 91 here. 43 44 MADAME CHAIR ENTSMINGER: Any other 45 questions or discussion. 46 47 MR. McMANUS: Yes, Madame Chair. Move 48 to support this. I've just got a question for..... 49 50

Page 276 MADAME CHAIR ENTSMINGER: Uh-huh. 1 2 3 MR. McMANUS: On average how many --4 how many birds are you guys getting annually in your 5 community and then do you know the numbers of people 6 that's coming and fluctuating your community and how 7 many they're getting? I'm just trying to see if 8 it's.... 9 10 MS. KENNELL: We don't have any data on 11 this unfortunately. We have a system of trying to collect data on this, we have wing barrels and things 12 like that, but we don't get a lot of cooperation on 13 14 this. Unfortunately people bag and leave and go. So 15 that doesn't leave us with much data. We're trying to 16 work with the local biologist here, she's trying to 17 implement some type of a system to where we can track 18 some numbers here because that's going to be our 19 biggest -- our biggest data that we have. We do run 20 brood counts in the summertime and all of us volunteer 21 to help her with that so we can kind of see what's out 22 there ourselves. And then she runs -- she runs counts 23 in the spring during their breeding to see where we're 24 at there. 25 26 And although as we know for these types of surveys they're picking random areas and some of the 27 28 areas that are chosen through the computer or however 29 the means is, sometimes aren't the best areas because 30 they're protected areas where there is no hunting. So sometimes that can skew -- this is private property 31 32 stuff where some of these -- these counts are being done. So it sort of skews our numbers because there 33 34 may be a few more birds there that what you would 35 normally see. 36 37 And in talking about disbursement also we're just -- we're not getting the disbursement that 38 39 she's saying that these birds will normally do. She's 40 saying that the average grouse will redisburse up to 10 41 miles and unfortunately from the center of Delta 42 Junction we're hunting at least 30 miles in either 43 direction. I can attest to that because I personally 44 hunt 30 miles in every direction. And when you get --45 and more, even further out, you know, as far as the 46 Denali and things like that. And so when you get that 47 much hunting pressure everybody's just expanding 48 further out every year to try to, you know, get a 49 bigger bag limit. And we feel like this will just 50

Page 277 1 encourage people. 2 3 Birds aren't necessarily a subsistence 4 food, they're just more of a sporting game, you know. 5 And we like to see the youth be able to hunt these 6 This is a game animal that most kids start on birds. 7 and we want to be able to have those birds around so that kids can learn to hunt with these types of animals 8 too. So we're just trying to be a little bit 9 10 conservative on this side and allow for that population 11 to stabilize. 12 13 Again I talked to a biologists from the 14 Lower 48 and he's stating that's the only time that 15 they would really recommend reducing bag limit is when 16 you're seeing that heavy local of a harvest like we do. 17 18 MR. McMANUS: Thank you. 19 20 MADAME CHAIR ENTSMINGER: Any other 21 questions. 22 23 MR. BASSICH: Call the guestion. 2.4 25 MADAME CHAIR ENTSMINGER: I had a 26 couple. 27 28 MR. BASSICH: Okay. 29 30 MADAME CHAIR ENTSMINGER: I wondered if Delta is seeing the pressure that we see on the Nabesna 31 Road and the McCarthy Road of Hmong people hunting 32 33 grouse and things. I mean, it's pretty amazing. 34 35 MS. KENNELL: We don't have a Hmong 36 population in Tok. 37 38 MADAME CHAIR ENTSMINGER: Well, like --39 no, these Hmong people aren't from -- they come from Anchorage and come up and hunt in -- on all these dirt 40 roads where there's a lot of grouse. 41 42 43 MS. KENNELL: Unfortunately for you guys I think they're passing us and going to you. But 44 45 what we do have is a heavy population of Russian people 46 and.... 47 48 MADAME CHAIR ENTSMINGER: Uh-huh. 49 50

Page 278 MS. KENNELL: .....coming from that 1 2 type of a cultural situation, a lot of this -- a lot of 3 thinking is survival and so they will basically hunt 4 and shoot everything. 5 6 Another situation we have that's very 7 difficult to address because during the season you also 8 have your large game going and so our one game warden is out handling larger issues than birds..... 9 10 11 MADAME CHAIR ENTSMINGER: Uh-huh. 12 13 MS. KENNEL: ....and we have -- we see 14 a lot of poaching. And the only reason I can attest to 15 that is because I exercise my dogs every day prior to 16 season and all and I see evidence of this on the road, you know, two, three weeks prior to season. 17 18 19 So we just have a lot of elements there 20 that are creating kind of a catastrophic event for 21 these birds. 22 23 I can tell you personally as far as 24 numbers go I think I shot four sharp-tails and I shot 25 one ruffed grouse last year and I wish I hadn't shot it, I thought it was a spruce grouse. And as it turned 26 27 I saw what it was, it was too late. Because I'm --28 being the sportsman that I am, I'd rather not shoot 29 them, let them recover so that my grandkids could come 30 up here and shoot them someday. But.... 31 32 MADAME CHAIR ENTSMINGER: Okay. 33 34 MR. BASSICH: Ouestion. 35 36 MADAME CHAIR ENTSMINGER: The 37 question's been called for. All in favor of proposal 38 91 that limits grouse season.... 39 40 IN UNISON: Aye. 41 42 MADAME CHAIR ENTSMINGER: Anyone 43 opposed. 44 45 (No opposing votes) 46 47 MADAME CHAIR ENTSMINGER: Are the.... 48 49 MS. KENNELL: Thank you, Madame Chair. 50

Page 279 1 MADAME CHAIR ENTSMINGER: Thank you. 2 Do we have any more proposals? 3 4 (No comments) 5 6 MADAME CHAIR ENTSMINGER: No, I see 7 that.... 8 9 MR. JAGOW: One more. 10 11 MADAME CHAIR ENTSMINGER: Go ahead, 12 Charlie. 13 14 MR. JAGOW: Yeah, can we bring up 15 proposal 145, page 157. 16 17 MADAME CHAIR ENTSMINGER: We need a 18 motion. 19 20 MR. JAGOW: So I make a motion that we 21 support proposal 145. 22 23 MR. BASSICH: Second. 24 25 MADAME CHAIR ENTSMINGER: Go ahead, 26 Charlie. 27 28 MR. JAGOW: And it is to change the moose hunting bag limits for nonresidents in unit 25C 29 30 to one bull with 50 inch or larger antlers or four or more brow tines. 31 32 33 MADAME CHAIR ENTSMINGER: Do you want 34 to speak to it? 35 36 MR. JAGOW: I think people in this area 37 are a little concerned with the lack of moose and the 38 amount of nonresident hunting pressure. And they're a little bit concerned that -- it's one of the only areas 39 40 where a nonresident can take any bull. 41 42 MADAME CHAIR ENTSMINGER: And that's 43 where they would go. 44 45 MR. JAGOW: And that's where they are 46 going. 47 48 MADAME CHAIR ENTSMINGER: Yeah. Uh-49 huh. 50

Page 280 MR. JAGOW: And I do know that 1 2 (indiscernible) and Circle obviously saw a lot of these 3 hunters and there is plenty of nonresidents taking any bull, especially somebody that doesn't want to go 4 5 through the worries of making antler judgments. So 6 they see this regulation and of course it's very 7 attractive. 8 9 MR. GLANZ: And we tried this with our AC I don't know how many years ago and it failed. But 10 with the lack of moose we're having up there in this 11 area, Fort Yukon, Circle, Central, I myself will 12 13 support this proposal. 14 15 MADAME CHAIR ENTSMINGER: Any other 16 discussion. 17 18 MR. FIRMIN: Madame Chair. 19 20 MADAME CHAIR ENTSMINGER: Andrew. 21 22 MR. FIRMIN: The proponent there he 23 also applied to be on the RAC and was declined a seat, 24 one of our open seats as well. 25 26 MADAME CHAIR ENTSMINGER: Oh. 27 28 MR. FIRMIN: And I think we did get the 29 hunter liaison, we got a report from her in our book 30 from last meeting as well that would reflect some of 31 what he's saying here. 32 33 MR. GLANZ: Yeah, they stay at the 34 Slavens cabin and work with the Park Department all 35 summer long. So and they live in Circle and she's 36 Native and he's not. But a great couple. 37 38 MADAME CHAIR ENTSMINGER: So he put in 39 for a.... 40 41 MR. FIRMIN: Yeah. 42 43 MADAME CHAIR ENTSMINGER: Uh-huh. 44 Okay. 45 46 MR. GLANZ: Question. 47 48 MADAME CHAIR ENTSMINGER: The 49 question's been called for. All in favor of proposal 50

Page 281 145. 1 2 3 IN UNISON: Aye. 4 5 MADAME CHAIR ENTSMINGER: Anyone 6 opposed. 7 8 (No opposing votes) 9 10 MADAME CHAIR ENTSMINGER: Okay. Any 11 other ones? 12 13 (No comments) 14 15 MADAME CHAIR ENTSMINGER: If you have 16 any you have a second chance after lunch. 17 18 We'll break for lunch until 1:15. 19 20 (Off record) 21 22 (On record) 23 24 MADAME CHAIR ENTSMINGER: And I'm going 25 to ask the Council was there any other Board of Game 26 proposals. 27 28 (No comments) 29 30 MADAME CHAIR ENTSMINGER: So there was not. And I'm going to move on to agency reports. 31 And the first one is the tribal governments and I have Eric 32 Rowe for Tanana Chiefs Conference. 33 34 35 Go ahead, Eric. 36 37 MR. ROWE: Thank you, Madame Chair. 38 I'm going to get this projector set up. 39 MR. MATHEWS: Madame Chair, I'll just --40 41 we talked about this earlier. I -- the letter I read 42 from yesterday, I was 98 percent correct, now I'm 100 percent correct. It is an official public document so 43 I've copies of the letter I read concerning the 44 45 proposal 82. So I'll give it to your coordinator to 46 pass around. 47 48 Thank you. 49 50

Page 282 1 MR. STEVENSON: Thank you, Vince. 2 3 MR. ROWE: Thank you, Madame Chair and 4 members of the Council. My name is Eric Rowe, I'm from 5 Tanana Chiefs Conference. I've recently been put in 6 the position of Henshaw Creek project lead. And I'm 7 going to present today on last year and the past 20 8 years of the project. We have been collecting data for the past 17 years excluding three years due to flooding 9 10 events that stopped the weir from collecting summer chum and chinook salmon run timing and escapement. 11 12 13 Our partners. We partner with ADF&G, 14 U.S. Fish and Wildlife Service, Kanuti National 15 Wildlife Refuge and the Allakaket Tribal Council. With 16 them -- all of them help us meet all of our goals for 17 the season. 18 19 2000 to 2008 average escapement for 20 chinook salmon was 822. From 2009 to 2017 it was 1,301. For 2019 it was below the historical average 21 22 for chinook salmon, the escapement was 441 at Henshaw 23 Creek. 24 25 For chum salmon 2000 to 2008 the historical average was 71,902. For the 2009 to 2017 26 27 average it was 246,708. And last year, 2019, the 28 escapement was also below the historical average with 29 34,474. 30 31 For chinook run timing, the blue line 32 on the graph or the red line represents the earlier years of 2008 to 2000 or 2000 to 2008 and the blue line 33 represents 2009 to 2017. And the bars are the 2019 34 35 season. And as you can see the bars are shifted to the 36 right. And for chinook they were about four days later 37 than the average and for chum they were about a week 38 later than average. 39 40 As for the sex composition for chinook 41 the percent female in the earlier years was 32 percent 42 and in the later years 43 percent. And from last 43 season it rose to 62 percent females passing through 44 the weir. For chum salmon it's remained pretty stable. 45 In the earlier years it was 52 percent female, 2009 to 46 2017, 57 percent and in 2019 it was 50 percent. 47 48 And for age composition most of the 49 ages for chinook salmon are one/two, one/three and 50

Page 283 one/four age classes. And one/twos made up the 1 2 majority of the run for 2019 with 46 percent. And that 3 was a lot higher than the historical average of 25 4 percent to 24 percent. The one/three and one/four age 5 classes were lower than the historical average. Τn 6 2000 through 2008 and 2009 to 2017 they were 44 7 percent, that dropped down to 31 percent. And the 8 one/four age classes dropped from 29 percent and 31 9 percent to 20 percent in 2019. 10 11 For chum age composition ages -- oh, I'd like to back up to this previous slide. I would 12 like to add that age classes two/one, two/two and 13 14 two/three were present, however they made up less than 15 3 percent of the total escapement. 16 17 As for the chum age composition -- age 18 classes three and four are the most predominant age. And the age class three is -- in 2000 to 2008 was 64 19 20 percent, 2009 to 2017, 63 and 2019, 65. For age class four it was about the same, it just remained relatively 21 22 stable over the past 20 years. 23 24 For average length at age for age 25 classes one/three for chinook male and female, age classes one/three, one/four and one/five for female 26 27 have gone down in 2019. In 2000 to 2008 they were in the 700 to higher 800 levels or lengths. And in 2019 28 29 the one age classes of one/three went down to 537 30 millimeters. And as for male chinook age classes 31 one/two and one/three that were present in 2019 saw a 32 little bit of growth, they became a little longer. The one/threes went from 691 from 2000 to 2008, 2009 to 33 2017 to 709 millimeters and in 2019 to 713 millimeters. 34 35 So there's been a gradual trend of getting longer. 36 37 As for female and male chum salmon the earlier age classes of two and three -- excuse me, 38 three and four have stayed relatively stable 39 They 40 haven't changed much, staying in the mid 500 41 millimeters. As for the male chum they also have 42 remained relatively stable with 563 millimeters in 2000 43 to 2008 and then 2009 still at 559. So relatively 44 stable, not a lot of change in their length compared to 45 their age. 46 47 One of our favorite projects at Henshaw 48 Creek is the culture and science camp that we put on for the local communities, the villages. We get the 49 50

Page 284 elders together with -- and the children and for a week 1 2 long we hold classes and teach them about salmon 3 biology. It's a great way to connect the youth with nature and we just highly value this because it's --4 5 it's a way to get the children to learn from their 6 elders and learn traditional knowledge as well as 7 western science knowledge combined. 8 9 And we partner with the Kanuti National 10 Wildlife Refuge and the Allakaket Tribal Council. And here's just some pictures from last season's science 11 camp. In these first pictures they are being taught 12 13 traditional fish cutting and drying and we also teach 14 them salmon biology and ecology. They got the chance to set a fishing -- set net for fishing and they also 15 16 learn about weir sampling. And there's a lot of other activities that go on that the children really enjoy. 17 18 19 I'd like to acknowledge our partners, 20 the Allakaket Tribal Council, the U.S. Fish and Wildlife Service Fairbanks Field Office, the Kanuti 21 22 National Wildlife Refuge, the Alaska Department of Fish 23 and Game and the Office of Subsistence Management Partners Program. Without these partners this project 24 25 could not be possible. 26 27 And we're in the process of conducting 28 this 20 year review and it's -- it provides great data 29 for a long term -- long term study data set, this --30 analyzing these trends with the chinook and summer chum 31 salmon on Henshaw Creek. 32 33 And with that I would like to answer 34 any questions if you have any. 35 36 MR. BASSICH: Madame Chair. 37 38 MADAME CHAIR ENTSMINGER: Andy. 39 40 MR. BASSICH: Yeah, Madame Chair, 41 sorry. I apologize for being late. 42 43 Was there a handout for this 44 presentation? 45 46 MR. ROWE: No, I didn't have a handout, 47 but I can -- I'd be happy to email this presentation to 48 you. 49 50

Page 285 MR. BASSICH: Yeah, that would be 1 2 great. I'll make sure you get my email. And then when 3 you complete your 20 year review of this if you come up with a document I'd love to have a copy of that as 4 5 well. 6 7 MR. ROWE: Yes, I'll send those to you. 8 9 MR. BASSICH: Yeah. I also had one 10 other question. I came in a little late, I was looking 11 at your chinook data there and I didn't see one plus 12 sixes there. Did you have any seven year olds? 13 14 MR. ROWE: For the chinook, no, we didn't have any seven year olds. 15 16 17 MR. BASSICH: No seven year olds at 18 all? 19 20 MR. ROWE: No. 21 22 MR. BASSICH: And what about if you 23 look back in history, were you -- did you have seven year olds, had they been extirpated from the run? 24 25 26 MR. ROWE: From the 20 year for chinook 27 -- from the 20 year study that we've been doing we 28 haven't noticed any of those come through. 29 30 MR. BASSICH: Never any seven year 31 olds? 32 33 MR. ROWE: I would -- no, not the 34 information that I -- that I have.... 35 36 MR. BASSICH: Okay. 37 38 MR. ROWE: .....in front of me right 39 now. And from making these charts we didn't come 40 across any. 41 42 MR. BASSICH: Okay. Thank you. 43 44 MR. ROWE: You're welcome. 45 46 MADAME CHAIR ENTSMINGER: Any other 47 questions. 48 49 MR. WILLIAMS: Hello, I have a comment. 50

Page 286 1 MADAME CHAIR ENTSMINGER: Yeah, go 2 ahead. 3 4 Hello. My name is Paul MR. WILLIAMS: 5 Williams, Jr. I've been listening for the last two 6 days. I wanted to make a comment on what I've been 7 hearing. 8 9 First of all I want to thank each one 10 of you for really a complicated and dedicated job that 11 you're doing to manage our great land here in Alaska. And a lot of the information I can use within my unit 12 13 in teaching our Athabascan language. And the beginning 14 of the school year when I meet up with a lot of your 15 representatives I bring back a lot of the information 16 that your organization developed with coloring books 17 and land and fish and a lot of posters on how to take 18 care of our land and what's going on in our area. So I 19 use that to develop that to also use the English part 20 and the one in Gwich'in. So a lot of the materials are -- I use in my classroom. So I want to thank you for 21 22 that. 23 24 And it's really important to protect 25 our resources and really get our young people to be part of this because we have to take care of what god 26 has given us. And it's our land, it's our role to take 27 28 care of it with respect. And this morning we -- I was 29 hearing stories about sheep hunting and it's really 30 important that we keep an eye on what's going on. And 31 I wanted to say my dad, Paul Williams, Sr., went sheep 32 hunting in Arctic Village mountains years ago for my 33 grandmother and elders and they were very happy that 34 they got to eat sheep. And we hold all of the moose 35 and the caribou with the king salmon and the fish with 36 deep respect because that's our main source of food. 37 38 And I just wanted to say thank you very 39 much for all of what you -- you are all doing, it is 40 very much appreciated. And as we work together with could own this all for the generation that's coming up. 41 42 43 Thank you very much. (In Native). 44 45 MR. ROWE: Thank you. 46 47 MADAME CHAIR ENTSMINGER: And thank 48 you, Paul. 49 50

Page 287 1 Any other questions. 2 3 Andy and then.... 4 5 MR. BASSICH: Yeah, just -- I'm just 6 curious. I can't see the one side of the screen there 7 which is fine for right now, but over time has the 8 three and four year old component of the run been the major contributor, I'm seeing like 75 percent of the 9 run out of three and four year olds instead of four and 10 11 five year olds. So, you know, in the main stem on the Yukon four and five year olds are the main component of 12 the run with a declining of seven year old fish in the 13 14 run. So I'm just kind of curious is this indicative of 15 Henshaw Creek over time or is this something that's 16 happening a little bit more recently in time? 17 18 MR. ROWE: This has been happening over 19 the past 20 years. This first -- the first one is age 20 classes, the three year old age classes have been 21 getting larger most recently. 22 23 MR. MASCHMANN: Madame Chair. 24 25 MADAME CHAIR ENTSMINGER: Gerald, go 26 ahead. 27 28 MR. MASCHMANN: Through the Chair. 29 Just remember you've got to add a year because they're 30 in the gravel. So if you're adding the numbers up add 31 one more year because it was in the gravel. So a 1.3 32 is one plus three is four plus one in the gravel. 33 34 MR. BASSICH: Okay. I thought they 35 were counting for that, yeah. 36 37 Thank you. That explains it. 38 39 MADAME CHAIR ENTSMINGER: Did you have 40 something to add, Zach? 41 42 MR. STEVENSON: Pardon me. Zach 43 Stevenson with the Office of Subsistence Management. 44 Through the Chair. I just wanted to thank you for your 45 detailed presentation, that's really helpful. 46 47 Secondly I just wanted to request a 48 copy of that presentation because I'm required to 49 retain that for our official record. If you'd email it 50

Page 288 to me please and I'll make sure the Council gets that 1 as well. 2 3 4 Thank you. 5 6 MR. ROWE: Through the Chair. Yes, 7 Zach, I got your card here and I'll make sure you get 8 the presentation. 9 10 Thank you. 11 12 MR. STEVENSON: Thanks so much. 13 14 MR. BASSICH: Madame Chair. 15 16 MADAME CHAIR ENTSMINGER: Andy. 17 18 MR. BASSICH: Thank you. I just want to say I think Henshaw Creek is a great example of the 19 20 way they incorporate bringing young people into the fisheries and getting them excited about it and 21 22 hopefully become future biologists or whatever. I 23 think that's a really important component of the run 24 and I know they put a lot of effort into that over the 25 years and I really applaud that. And I think --26 actually I think that should be a part of every program 27 that takes place in the State that's State funded or Federally funded myself. But I appreciate the extra 28 29 effort, I know it takes extra effort to do it, but it 30 really helps the future of fishermen along the river. 31 32 Appreciate that. 33 34 MR. ROWE: Thank you. Yeah, we had a 35 very successful year, science camp last year and could 36 really see the excitement in the children and kind of 37 sparking that interest in conservation and getting 38 involved with their management. It's really great. 39 40 Thank you. 41 42 MR. WRIGHT: Thank you. 43 44 MADAME CHAIR ENTSMINGER: Yeah, thank 45 you. 46 47 Any other questions. 48 49 (No comments) 50

Page 289 MADAME CHAIR ENTSMINGER: 1 Okay. 2 3 MR. ROWE: Thank you, Madame Chair. 4 5 MADAME CHAIR ENTSMINGER: And thank you 6 again. 7 8 Okay. Next is Native organizations, 9 Yukon River Drainage Fisheries. We did that. And then there was the University of Alaska Fairbanks, Carrie 10 11 Stevens. Did she ask to be on? 12 13 She was invited and I MR. STEVENSON: 14 was told she would be here yesterday, but I haven't 15 seen her today. 16 17 MADAME CHAIR ENTSMINGER: Okay. She --18 we'll give her a chance if she comes back. 19 20 MR. BASSICH: It's more fish stuff so 21 it -- kind of build on what we just heard. 22 23 MADAME CHAIR ENTSMINGER: Okay. Put that on record. 24 25 26 MR. BASSICH: Madame Chair, I would request that we get the presentation by Randy Brown. I 27 think it -- it's fisheries related and I think it's 28 appropriate to bring it on and it'll build and -- it's 29 just helpful if you're talking about fish to talk about 30 fish for a while and then not mix fish and moose and 31 32 caribou. Helps me anyway. Too much gray hair. 33 34 MADAME CHAIR ENTSMINGER: Randy, Randy 35 Brown. 36 37 MR. BROWN: Do you want me to go now? 38 39 MADAME CHAIR ENTSMINGER: We do. We 40 have a special request. Randy, did you have a Power 41 Point? 42 43 MR. BROWN: Yes. 44 45 MADAME CHAIR ENTSMINGER: Vince has something to do while we're waiting there to get that 46 47 set up. 48 49 MR. MATHEWS: Yes, because usually 50

Page 290 technology doesn't always work. So I'll turn it over 1 2 to Andy. I drafted a motion that you discussed on 3 hunter education and I haven't had a chance to show it 4 to Andy. So I don't know if Andy wants to read it or 5 you want me to read it. 6 7 MR. BASSICH: Just go for it. 8 9 Well, okay. MR. MATHEWS: 10 11 MR. BASSICH: It's a draft. 12 13 MR. MATHEWS: Now hold on. I'm not the 14 best with computers. So -- okay. I already shared it 15 with Sue and I shared it with the coordinator, it's a 16 draft. 17 18 The motion addresses your hunter education orientation requirement for sheep in the Red 19 20 Sheep/Cane Creek area of 25A. The motion that I 21 drafted would be the Eastern Interior Regional Advisory 22 Council submit a letter to the Alaska Board of Game to 23 request to go forward with developing a hunter 24 education and orientation program. I need to pause there because that is what is in regulation, it's not 25 hunter ethics. So maybe that'll save a little time 26 27 there. I'm pulling directly from the State regulations. Anyway developing a hunter education and 28 29 orientation program for sheep hunting in Red Sheep 30 Creek and Cane Creek within the Arctic Village Sheep 31 Management Area within unit 25A, 5 AAC 92.003. 32 Currently the State of Alaska regulations has a 33 requirement for this hunter education and orientation 34 program established in 2011 for this area. The 35 regulation requires a person must possess proof of 36 completion of the program to hunt sheep in the area. 37 38 Justification. One, developing the Red 39 Sheep and Cane Creek area hunter education program 40 would be the first step to address this Council's 41 desire to have a workable solution to an historically 42 contentious issue and build mutual respect between 43 village hunters and other parties. The program would 44 be a joint effort with all parties involved. 45 Second justification would be 46 47 development of this hunter education program would be 48 an excellent example of the Eastern Interior Regional 49 Advisory Council's hunter ethics program to build 50

Page 291 mutual respect and understanding between user groups 1 2 within the Eastern Interior region. 3 4 That is the whole motion and I -- since 5 I got the mic on the next phase of this would be the 6 letter. 7 8 MR. BASSICH: Thank you, Vince, for 9 getting the detailed information in there. So if you 10 could maybe give that to me so I could actually read 11 the motion part of it so that we can take action on it. 12 13 And thank you again for filling in some 14 of the justifications of it which we'll be able to use 15 in the letter to the Board. 16 17 MR. MATHEWS: Okay. 18 19 MADAME CHAIR ENTSMINGER: Yes, Vince, I 20 deeply appreciate that. I was wondering how it was 21 going to get done. 22 23 MR. BASSICH: It's a long motion. Let 24 me see if I can -- okay. 25 26 The motion, Madame Chair. The Eastern 27 RAC submit a letter to the Alaska Board of Game to 28 request to go forward with developing a hunter 29 education and orientation program for sheep hunting in 30 Red Sheep Creek and Cane Creek within the Arctic 31 Village Sheep Management Area, unit 25A. 32 33 And I'm just going to stop there 34 because from that point on it begins to go into some of 35 the justification and reasoning behind it. So with 36 that motion that's what we're asking them to do. 37 38 MR. WOODRUFF: Second. 39 40 MR. BASSICH: Okay. And then I would 41 suggest, Madame Chair, that we use the -- some of 42 information here as a building block and that we assign a couple people from the Council to work with our 43 coordinator, draft the letter. I don't think we need 44 45 to draft the entire letter right now to the Board. 46 47 MADAME CHAIR ENTSMINGER: It goes to 48 the Board of Game and it would be nice to talk about it.... 49 50

Page 292 1 MR. BASSICH: Okay. 2 3 MADAME CHAIR ENTSMINGER: .....when --4 whoever goes. 5 6 MR. BASSICH: Right. But I'm saying 7 the final draft. Maybe what we need to do is have some 8 discussion at the Council right now as to some of the components of the letter that are important to include 9 10 in the letter, right. 11 12 MADAME CHAIR ENTSMINGER: Okay. 13 14 MR. STEVENSON: Madame Chair. 15 16 MADAME CHAIR ENTSMINGER: Yes. 17 18 MR. STEVENSON: Through the Chair. 19 This is a question for clarification for Andy. Is the 20 intent to submit this letter to the Board of Game who 21 will be meeting tomorrow? 22 23 MR. BASSICH: Yes. 24 25 MR. STEVENSON: Okay. Then if I 26 understand correctly we'll have that letter composed 27 now or at least draft -- in draft format prepared now. 28 29 MR. BASSICH: Up to the Chair. 30 31 MADAME CHAIR ENTSMINGER: Yes. 32 33 MR. STEVENSON: Thank you. 34 35 MADAME CHAIR ENTSMINGER: The answer is 36 yes. 37 38 MR. STEVENSON: Thank you for the 39 clarification. 40 41 MR. BASSICH: Let me -- can I ask one 42 thing about the procedural aspect of the Board of Game. They meet for a week so does all materials have to be 43 44 in by the start of that meeting? 45 46 MADAME CHAIR ENTSMINGER: The other 47 part of our discussion on this is who's going to go for 48 the RAC. 49 50

Page 293 1 MR. BASSICH: Okay. 2 3 MADAME CHAIR ENTSMINGER: And Andrew 4 and I spoke about that and he would rather someone else 5 go. And I'm in town, I could stay an extra two days, 6 not that I want to, but I contacted Nissa and she said 7 she would sign me up right away and a RAC person can do 8 that unless an AC wants to go first. So you could ask her to go first, you want to get out of here too. But 9 10 an AC would trump a RAC. So.... 11 12 MR. BASSICH: Okay. 13 14 MADAME CHAIR ENTSMINGER: .....somebody 15 would go.... 16 17 MR. BASSICH: Yeah. 18 19 MADAME CHAIR ENTSMINGER: .....and then 20 they'd present it. 21 22 MR. BASSICH: Okay. Madame Chair, for 23 some of the justification there's basically three 24 bullet points that I can pull out of this. After that 25 motion Vince has here, currently the State of Alaska 26 regulations has a requirement for hunter education and 27 orientation programs established in 2011 for this area. 28 The regulation requires a person must possess proof of 29 completion of the program to hunt sheep in the area. 30 So that's one bullet point of the letter. 31 32 A second point would be developing a 33 Red Sheep and Cane Creek area hunter education program would be a first step to address the Eastern Interior 34 35 Regional Advisory Committee's desire to find a workable 36 solution to a historically contentious issue and build 37 mutual respect between village hunters and other 38 parties. That would be the second component of it. 39 40 The -- a subcomponent of that would be the program should be a joint effort with all parties 41 42 involved meaning RAC, the people from the area, any other -- I would imagine the Sheep Hunters Association, 43 44 all the people that would be interested in contributing 45 to.... 46 47 MADAME CHAIR ENTSMINGER: So you got to 48 name.... 49 50

Page 294 1 MR. BASSICH: ....an educational 2 3 program. 4 MADAME CHAIR ENTSMINGER: .....and the 5 Refuge. 6 7 MR. BASSICH: Right. 8 9 MADAME CHAIR ENTSMINGER: Yeah. 10 11 MR. BASSICH: And the Refuge. 12 13 MADAME CHAIR ENTSMINGER: But that was 14 not.... 15 16 MR. BASSICH: That's not identified. 17 Maybe that's something that we want to include as I 18 begin to identify as an example and then put some of 19 those entities in there. Okay. That would be a 20 subpoint of this. 21 22 And then the final bullet point is 23 development of a hunter education program would be an 24 excellent example of the Eastern RAC's hunter ethics program to build mutual respect and understanding 25 26 between user groups within the Eastern Interior region. 27 28 29 So that would kind of cover my initial 30 motion that I withdrew which is more focused on our 31 region, developing hunter ethics and education. 32 33 So that -- that's what we have to work 34 with. I guess I would ask is there other areas that we 35 need to add to this, are there other concerns from Council members or other aspects that they'd like to 36 37 see included in a letter. 38 39 MR. FIRMIN: I would like to see 40 something just maybe a -- like so it's to all user groups like you mentioned and not just direct..... 41 42 43 MR. BASSICH: Say what. 44 45 MR. FIRMIN: So it's not just directed at sheep hunters and sheep in the Red Sheep Creek area. 46 So it's like sheep hunters in unit 25. There's more 47 48 Native allotments and property that's owned and -- you 49 know, than just that area. So if it was directed on a 50

Page 295 broader scale and to more user groups than just sheep 1 2 hunters in the Red Sheep Creek area. 3 4 MR. BASSICH: Yeah, I think -- Vince, 5 do you still have my original piece of paper I gave 6 vou? 7 8 MR. MATHEWS: No. 9 10 MR. BASSICH: No. To draft this? 11 12 MR. MATHEWS: Yeah, somewhere. 13 14 MADAME CHAIR ENTSMINGER: So.... 15 16 MR. BASSICH: Because I had something 17 kind of like in there as a -- the final paragraph was 18 this program could be used -- talking off the top of my 19 head, this program could be used by sheep hunters 20 regionally and statewide as a guideline for hunter 21 ethics and education on sheep hunting. It was 22 something along those lines. 23 24 Yeah, this course would be available 25 regionally and statewide for sheep hunters. 26 27 MR. FIRMIN: Yes, that kind of covers 28 it I think in a broad way. 29 30 MR. WRIGHT: Should be required. 31 32 MR. BASSICH: That would require a 33 whole different -- opening up a whole different thing. 34 I think let's start would be available..... 35 36 MADAME CHAIR ENTSMINGER: That's a 37 different spaghetti. 38 39 MR. BASSICH: ....or be -- how about 40 recommended, use the word recommended, right, the course would be recommended to be available to regional 41 42 and statewide hunters for sheep. 43 44 MADAME CHAIR ENTSMINGER: And did I 45 understand that you wanted to see other users, not --46 and other hunters? 47 48 MR. FIRMIN: Well, there's more than 49 just one user group using the Arctic Village Sheep 50

Page 296 1 Management Area is what..... 2 3 4 MADAME CHAIR ENTSMINGER: Yeah. 5 MR. FIRMIN: ..... was getting at. 6 7 MADAME CHAIR ENTSMINGER: This could be 8 used for other users. I -- maybe you said it in that 9 sense, but just to make sure. 10 11 MR. MATHEWS: The only comment I have 12 on that is we're focusing heavily on the State regs 13 that exist so recommend is the right word instead of 14 requiring, et cetera. Anyways that's my only comment on that is the audience you have when they see that 5 15 16 AAC 90 whatever, whatever, that's what they're going to 17 focus on. 18 19 MR. BASSICH: Yeah. So I have here the 20 course should be recommended and be available 21 regionally and to regional and statewide sheep hunters. 22 23 MADAME CHAIR ENTSMINGER: Thanks for doing that, Vince, really. That's awesome. 24 25 26 MR. BASSICH: Yeah, thanks for cleaning 27 up, it helps a lot. The team is really happy. 28 29 (Laughter) 30 31 MR. MATHEWS: I will email that to the three of you and then to be honest I didn't capture all 32 33 your comments so I believe Zach captured your 34 additional comments. 35 36 MADAME CHAIR ENTSMINGER: It's on paper 37 too, right, oh, isn't it. Did we capture everything 38 that you read. 39 40 MR. BASSICH: Yes. 41 42 MADAME CHAIR ENTSMINGER: Uh-huh. 43 44 MR. BASSICH: So between what Vince has 45 in text here we can just add what I just read out to you as the final bullet point.... 46 47 48 MADAME CHAIR ENTSMINGER: Uh-huh. 49 50

Page 297 MR. BASSICH: .....in the letter. 1 2 3 MADAME CHAIR ENTSMINGER: So we often 4 do this on the record like this and vote on it and then 5 we just approve it, make sure it's all in there. 6 7 So is there anything else, any 8 other.... 9 10 You're asking Charlie, they're over there whispering. You should put it on the record. 11 12 13 (Laughter) 14 15 MADAME CHAIR ENTSMINGER: You don't 16 have to be shy, Charlie. Just pretend you're talking 17 to us. 18 19 MR. BASSICH: I was going to -- I was 20 going to give him the pen so he could cross a few 21 things out. 22 23 (Laughter) 24 25 MADAME CHAIR ENTSMINGER: So any other 26 discussion. 27 28 MR. GLANZ: I'll call the question 29 then. 30 31 MADAME CHAIR ENTSMINGER: The 32 question's been called for. All in favor of the motion 33 to send this to the Board of Game say aye. 34 35 IN UNISON: Aye. 36 37 MADAME CHAIR ENTSMINGER: Anyone 38 opposed. 39 40 (No opposing votes) 41 42 MADAME CHAIR ENTSMINGER: Okay. Thank 43 you very much all of you. 44 45 How's the set up going back there? 46 47 MS. KENNER: Really well. We'll get 48 it. 49 50

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MR. BROWN: Madame Chair, members of 1 2 the Council. My name is Randy Brown and I work with 3 the U.S. Fish and Wildlife Service here in Fairbanks as a fish biologist. And for the last 25 years or so I've 4 5 been working along the Yukon and elsewhere in northern 6 Alaska mostly studying fish migrations. 7 8 And the -- our office has been running two weirs for the last 25 years or so, since 1994. 9 And 10 recently myself and some of my colleagues, Catherine 11 Bradley and Jeff Melegari, have looked at the whole -well, about a 23 year span of our weir data and looked 12 at trends over time for chinook salmon and summer chum 13 14 salmon during this period. And we think there's some 15 interesting things. While it's outside of the Eastern 16 Interior regional area I think the chinook salmon 17 anyway have -- there's some patterns that I think are 18 probably happening with chinook salmon that spawn in 19 the upper reaches of the drainage as well. And so I 20 think you'll be interested in some of these. 21 22 It's a little bit awkward, but Pippa's 23 going to be tabbing this on to the next slide when I 24 say. 25 26 That's the Gisasa River weir right there. These weirs are really amazing structures, you 27 28 know, they really do close off the river and the fish 29 have to go through the trap. 30 31 Next slide, please. 32 33 And just to give you some geographic idea of these two weirs, the Andreafsky River is in the 34 lower Yukon and it flows from the north down into the 35 36 Yukon about 175 kilometers from the sea. The Gisasa 37 River is about 900 kilometers upstream from the sea and is a trib of the Lower Koyukuk River. And I have Pilot 38 39 Station included there because we use some of their 40 data and it's an important component of the whole 41 picture here. 42 43 Next slide. 44 45 So these weirs, you have a trap there and you count the fish through and you can close the 46 47 front door of it and fish of whatever species you're 48 interested in will come in and you close the back door 49 and then you can go down and sample these fish. 50

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Next slide. 1 2 3 And you can -- you sample the big fish 4 and the small fish, all of them, it's not a selective 5 sample. One of the things we were interested in is 6 whether when there's a big run in the Yukon which we're 7 looking at Pilot Station as kind of looking at the 8 whole run coming through. And I -- granted Andreafsky River's downstream from that, but essentially if we 9 10 have a big run in the whole river do we also have all 11 of the spawning areas doing well. And with chinook 12 salmon our data suggests that's not true at all. There 13 seems to be no relationship between a big run at Pilot 14 Station and the run size in east fork Andreafsky or 15 Gisasa River. The summer chum salmon though do seem to 16 have -- be highly correlated both with Pilot Station 17 and with each other. 18 19 And what we think is going on there is 20 a life history difference between the two where chinook 21 salmon rear for a year after they hatch in their natal 22 stream. There's actually some that leave their natal 23 streams, but mostly we think they rear in a natal stream and they're subject to all the different 24 25 environmental influences on that stream, whether it's a 26 giant flood that might reduce the growth rate or cause additional mortality or really low water where the heat 27 28 might cause the fish to leave or go into cooler tribs, 29 whatever, but each one of these streams is going to 30 have it's own specific survival dynamics for a given 31 summer. 32 33 And summer chum salmon however they 34 leave their streams shortly after they hatch and go to 35 the sea. So they're seeing a common environment in the 36 river, in the Yukon River and also in the Bering Sea 37 very soon in life. And so they tend to have high survival, if it's good for one population it's good for 38 all of them. So they kind of operate much more in 39 40 synchrony as this lower plot shows. 41 42 These are called correlation plots and 43 the one for Pilot Station and Gisasa River in the 44 middle is really kind of the best example of this, they 45 have the closest correlation of the grid. But all of 46 them have a positive relationship. 47 48 Next slide. 49 50

Page 300 So another thing we were looking at is 1 2 the possibility that we were going to see earlier run 3 timing over the course of this 23 year span because 4 we're getting such dramatic warmer periods out in the 5 Bering Sea, reduced ice coverage, earlier breakups on 6 average and things like that. And we did not see this 7 happen for either population of chinook salmon. The 8 Gisasa River are the lighter bars. What these are --9 the midpoints are the circles and then the bars cover 10 from the first quartile to the second. So it's the 11 central half of each one of these runs going through 12 the weirs. 13 14 And Gisasa River weir they tend to 15 migrate in there about three and a half to four days later on average than the Andreafsky. And because it's 16 17 about 700 and some kilometers farther upriver, it takes 18 them about 18 days extra to make that migration at the 19 speeds that they swim down there. And so what this 20 means is the Gisasa River fish are coming in a couple 21 of weeks before the Andreafsky fish which is kind of an 22 interesting dynamic. 23 24 Next slide, please. 25 26 We also didn't see any trend for the summer chum salmon. They also come in a little bit --27 28 well, they come in the river earlier for Gisasa River, 29 but they come through the weir about five days later 30 than those in the east fork Andreafsky, but we saw no 31 trend over time. There was a variation, a week this 32 way or that way off of the average for both the chinook and the summer chum, but no trend, they're not coming 33 34 in earlier. 35 36 And we think what this -- what's 37 happening here, it's a phenomena they call the match, mismatch hypothesis about some of these salmon spawning 38 times in that the temperature in the gravel really has 39 40 a strong influence on hatching time, the incubation 41 time and subsequent hatching of the juveniles. And 42 what you don't want is for juveniles to hatch and there 43 be no food available to them. So that's the match, 44 mismatch. If they hatch and there's no food they die. 45 If they hatch and there's food they live. And so the 46 real driver of spawning timing is what the juveniles 47 see when they hatch on the other end of this. 48 49 And so the fact that the ice might be 50

Page 301 going away in the Bering Sea and the Yukon breaking up 1 2 earlier really doesn't appear to have anything to do 3 with the timing of these spawning migrations. 4 5 Next slide. 6 7 So one of the things that we thought 8 would be really interesting is to look at the average age, average annual age of the spawning escapements for 9 10 chinook salmon given that during this period of time we 11 have really high exploitation early on, it averaged about 33 percent for the chinook -- for the east fork 12 13 Andreafsky and about 40 percent for the Gisasa. That 14 means that 33 out of a hundred fish are being harvested 15 out of Andreafsky, downstream from the Andreafsky. 16 17 In the first seven years or so of the 18 -- of our time period we had the 2000 kind of a crash 19 that made everybody pretty nervous and harvest rates 20 were somewhat less after that, somewhere around 15 to 21 20 percent for a little while in the mid 2000s and then 22 it dropped down to pretty much no harvest, it was down 23 below 5 percent all the way to the end. And we thought since the fishery was mostly a large mesh gill net 24 fishery and those meshes do catch -- they tend to catch 25 older fish and they tend to catch bigger fish. 26 So we 27 thought that with this trend in reduced exploitation, 28 we should see an increase in the average age. 29 30 At the same time however what was 31 happening is the Bering Sea was warmer and there have 32 been a number of papers showing that when juveniles are 33 rearing in warmer temperatures they grow faster and one of the triggers for initiating spawning is to reach 34 35 some threshold size where all of a sudden a fish that 36 maybe in a cool year might come back as a six year old 37 might in a warm year come back as a five year old. And these results suggest that that environmental factor is 38 39 having a much stronger influence on the age at maturity 40 for these fish than the fishery which definitely takes 41 many of the older and bigger fish out of it. 42 43 So that I -- we thought was really 44 interesting. We didn't know how those two would play 45 out, but they were both happening at the same time and 46 the environment seems to be a stronger influence there. 47 48 49 Next slide. 50

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The chum salmon, you know, there isn't 1 2 really a selected fishery on chum salmon. They don't cover the same range of sizes. The primary age classes 3 are fours and fives for chum salmon. And they often 4 5 alternate strongly, you'll have, you know, 75 or 80 6 percent of the run being four year olds, the next year 7 it'll be five year olds. So it's the same brood class, 8 you know, so you'll have a real strong brood class and 9 it will supply two years of adequate escapements, the 10 first year as age fours, the second year as age fives. 11 And so what you have is sometimes the -- a brood year will go out to sea and it will be a disaster for them 12 and very few survive so you'll get small escapements 13 from that brood year, but it'll be made up for by a 14 15 strong one the next year or the year before that fill 16 in the gaps. 17 18 And we did not see -- there is a slight 19 trend down to its lower ages, but it's not significant. 20 And so they're not facing the same sort of issues that 21 chinook salmon are. 22 23 Next slide. 2.4 25 So this was a length at age plot for 26 chinook salmon in the two spawning grounds and for the two sexes. And what we saw was a little bit of a 27 28 slight decline in age fives, not really much of any --29 nothing significant for age sixes or fours. 30 31 Next slide. 32 33 And this is the chum salmon slide. Now 34 they -- it was -- this was really interesting. Again 35 the sixes are a very small component, usually 95 36 percent or more of the runs are age fours and fives, 37 but we have enough sixes to do a little bit of a trend and it was just slightly up, but not by much, it wasn't 38 significant. The others, the fours and the fives for 39 both populations and both sexes had a curved 40 41 relationship with a high point around 2002. And we 42 don't really understand what's causing that, but it was 43 an interesting thing. 44 45 The other interesting thing about the chum salmon population is Gisasa River was 46 47 significantly bigger size for every age class for both 48 sexes. And we suspect that's an adaptation for the 49 increased distance they migrate. 50

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Next slide. 1 2 3 Now we did some production work. 4 Production work always has a few caveats to it because 5 what you have to do is estimate what fraction of 6 harvest downstream from a particular spine stream 7 should be allocated to it and what the age structure of 8 that harvest is in order to create the full run. Because your production is not just the ones that make 9 10 it through the weirs, but all of those that return to 11 the river. It's a difficult -- it's a difficult thing to do, it's much easier in the lower river where you 12 have much more control and understanding over the 13 14 harvest because almost all the harvest for the chinook 15 salmon is commercial or it's certainly the dominant harvest in the lower river. And so those are tallied 16 up really well, they're allocated to lower river, 17 18 middle river, upper river as far as age structure. And 19 there's a tally of them in the commercial fishery. 20 21 So we felt pretty comfortable with 22 these and what we see with the chinook salmon is that 23 the Gisasa River is not doing very well. It averages one recruit per spawner, many years have less than one. 24 25 And not only that, but we've been seeing a declining 26 abundance in the Gisasa River. It is losing about 4 and a half percent a year over our time period. 27 Ι mean, annually it varies a little bit up or down, but 28 29 over the trend line over that period of time is on the 30 decline. And the production supports that assessment. 31 32 The Andreafsky is averaging 1.36 33 recruits per spawner over that period with a high year in 2000. The 2000 brood year for both of them was the 34 high one. So but it was still only a little less than 35 36 five recruits per spawner on that year. And that's 37 really kind of the -- that's not unusual for chinook 38 salmon. 39 40 Next slide. 41 42 So chum salmon it's a little bit 43 wilder. They definitely produce more when they're on a 44 high production schedule and not many at all when 45 they're on the low. 46 47 The -- on the Gisasa River we had one 48 year, this is -- 2001 was the high year for them. And 49 in the Gisasa that one year was a little over 23 50

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Page 304 recruits per spawner. And we looked at that and said no, this can't be. And we looked through all the data, it's a solid number. And we don't know how to explain it, but they had enormous recruitment that year. And it was interesting because 2001 for chum salmon is the year that -- so they were spawned in 2000 and went to sea in the spring of 2000 -- no, no, no. They were going to sea at the same year as the big year for chinook salmon, right. So chinook salmon it was the 2000 brood year going to sea in -- it was the '99 brood year going to sea in 2001 and the chums were going to -- it was the 2000 brood year going to sea in 2001. And so what you see is that that strong brood year for both chinooks and chums, they were entering the ocean at the same time on the same year and had really high recruitment. But the chums are -- they're not trending in escapement level down or up, but they vary -they swing really dramatically from year to year. Next slide. I'm going to end with this slide. This is the stock recruitment curve, the Ricker stock recruitment curve which is how many people try and set escapement goals. And in the Andreafsky River with the chinook salmon it fit a Ricker curve well, the Gisasa did not. And what this is is the escapement, the number of spawners through the weir are on the X axis and that's a real solid number because we count them through the weir. And the recruits is not quite as solid a number because we have to estimate the harvest, but from Andreafsky I think we do -- it's a pretty simple calculation for that. And what we come up with is a -- what they call the number of spawners at the maximum sustainable yield at about -- almost 1,700 fish which is just slightly less than what Fish and Game came to in a -- they used a percentile method they call it, it's a different way to approach that problem. But their range of escapement for the Andreafsky was just slightly higher, you know, 2,100 to almost 5,000. But what you can see looking at that plot is that there's high escapements and low escapements in that whole band from 2,000 to 4,000 or more. And those seem like appropriate escapement goals for there. The diagonal line. One of the ways to

The diagonal line. One of the ways to look at that diagonal line is that as you move a goal 50

Page 305 say or a perspective goal if you increase it along 1 2 there what you have is a probability that you will not 3 open a fishery because if you're trying to get that you need to have at least that many recruits come in in 4 5 order to have any what they call surplus fish or fish 6 beyond your escapement goal. And you can see that 7 during -- you know, somewhere around, you know, 2,000 8 to 4,000 fish or a little more we'll get -- our data shows that we get recruits higher than that one to one 9 10 line. And so that's an important consideration in 11 this. The fact that they really couldn't manage a fishery to get that into the Andreafsky River 12 specifically because you can't manage for the 13 14 tributaries very well at all, but it certainly seems to 15 be an appropriate goal range that they have set aside 16 for that system. 17 18 And I can take questions if anybody's 19 got any questions on anything, if I haven't made 20 something clear or something. 21 22 MADAME CHAIR ENTSMINGER: Ouestions. 23 24 MR. BASSICH: Madame Chair. 25 26 MADAME CHAIR ENTSMINGER: Andy. 27 28 MR. BASSICH: I guess maybe -- that's a 29 lot of technical talk for a lot of people that don't 30 follow fisheries a lot and so maybe a simple summary of 31 this, I'm going to make an attempt at it and maybe you 32 can correct me if I'm wrong. 33 34 So the simple takeaway from this is 35 that there are declining numbers at both of these two 36 weirs for chinook salmon over time and that they're 37 returning at a younger age over time. There's a steady 38 trend of fish returning at a younger age over time at 39 both of these two weir sites; is that correct? 40 41 MR. BROWN: The population is not 42 declining in Andreafsky, but it is in Gisasa. And, yes, they are trending significantly younger in age 43 44 over this time period. 45 46 MR. BASSICH: Right. And then the 47 other point you brought up is that this may be affected 48 more -- there may be more of an influence on that by 49 the conditions that they're actually reared in and the 50

Page 306 stream temperature when they're -- let's call it born, 1 2 spawned or hatched rather than out in the ocean or 3 conditions out in the ocean contributing to that. Is 4 that a fair assumption too? 5 6 MR. BROWN: The -- what we're saying is 7 that the experiment that looked at growth rates, you 8 know, increased growth rates reaching a threshold size earlier in life and maturing a year earlier than they 9 10 would normally mature in a cooler environment, that's 11 happening out in the sea. 12 13 MR. BASSICH: Okav. 14 15 MR. BROWN: They are exposed --16 individual populations are exposed to different natural 17 forces that might improve survival or reduce survival within each stream which is why they don't correlate, 18 they don't all have a good year versus all have a bad 19 20 year like the chum salmon appear to. 21 22 Okay. MR. BASSICH: Thank you. 23 24 MADAME CHAIR ENTSMINGER: Any other 25 questions. 26 27 (No comments) 28 29 MADAME CHAIR ENTSMINGER: All right. 30 Thank you, Randy. 31 32 MR. BROWN: Madame Chair. So I should 33 let you know this, we have produced a manuscript that 34 is out for review at the Journal of Fish and Wildlife 35 Management and we'll make sure you get copies when it 36 is published. 37 38 Thank you. 39 40 MADAME CHAIR ENTSMINGER: Okay. You're 41 welcome. All right. 42 43 Yukon Flats National Wildlife Refuge. 44 45 MR. MATHEWS: Yes, this is Vince Mathews. I do work for Yukon Flats National Wildlife 46 47 Refuge. Nothing has really changed from our summary 48 from 2019 in October, but I have copies that you may 49 want an additional one. 50

Page 307 The other thing I wanted to share --1 2 two things. We have a real good cooperative working 3 relationship with Council of Athabascan Tribal Governments. I was just reviewing some of the 4 5 documents. So part of that to keep you informed since 6 Henshaw Creek talked about their cultural camp, the 7 Flats Refuge supports a cultural camp for CATG and 8 additional programs like that. And we work with the villages of the Flats through CATG on the moose 9 10 management issues. 11 12 So those are that and then I'll wait to 13 see if there's any additional questions on that. 14 15 There is another one I forgot. I work 16 for three Refuges so the -- my mind has to spin right 17 and left so I got to spin left now. 18 19 The new Refuge manager for the Yukon 20 Flats Refuge, I'm not sure if he was at your last 21 meeting, is Jimmy Fox. Our position as deputy Refuge 22 manager is empty, but yesterday, I don't know if he 23 introduced himself, but Bill Hedman is on a leadership at -- program with BLM, Bureau of Land Management, so 24 25 he's on a detail to fill the deputy position. And that's really exciting because we have a lot of similar 26 27 issues and knowledge and a whole bunch of other things that we can benefit from with a direct connection with 28 29 BT.M. 30 31 So then I'll stop and ask if there's 32 any questions on the Refuge for Yukon Flats and then I 33 wanted to talk to you about a youth program. 34 35 MADAME CHAIR ENTSMINGER: Any 36 questions. 37 38 MR. FIRMIN: Madam Chair. 39 40 MADAME CHAIR ENTSMINGER: Andrew. 41 42 MR. FIRMIN: When are we going to get 43 some more cool pictures of the lynx studies? 44 45 MR. MATHEWS: Right now the lead biologist, Mark Bertram, is out there on that lynx 46 47 project. So is that what you're indicating? 48 49 MR. FIRMIN: That one and I know you 50

Page 308 quys' trail camera, your remote cameras. I quess we'll 1 wait for our fall meeting to see probably..... 2 3 4 MR. MATHEWS: Yeah, I'll bring that 5 back. That would be Bryce Lake who made a presentation 6 on that and that is still ongoing. So I will mention 7 that maybe an update on the lynx which is broader than 8 just Yukon Flats and then also the trail cam. Because I think Bryce is looking at how that would be used to 9 10 help with population counts. 11 12 MR. FIRMIN: Yeah, that's all, Vince. 13 Thank you. 14 15 MR. MATHEWS: Okay. I'll go on to the 16 youth thing. Some of you have heard my little speech 17 on this so I appreciate your patience. But the Fish 18 and Wildlife Service as well as with National Park 19 Service, NASA, who am I leaving out. Oh, there's a 20 whole bunch of agencies, Bureau -- how could I forget, Bureau of Indian Affairs sponsored a week long Native 21 22 youth congress, it has a longer title, but for time 23 we'll just call it the Native youth congress and it is for mature junior high school students, but we prefer 24 25 high school, you know, seniors. It's a week long and 26 it's at the National Conservation Training Center. It's an opportunity for the youth to become better 27 environmental leaders, build friendships and networks 28 29 with -- boy, I was working with students from Samoa and 30 Guam. It was just phenomenal to meet these upcoming 31 leaders from across the nation. And in addition the 32 youth would get more knowledge and awareness of 33 environmental careers and they get to float the Potomac 34 River with me. So.... 35 36 (Laughter) 37 38 MR. MATHEWS: .....anyway it -- no, it's a great opportunity so I'll share with the 39 40 coordinator the flyer that you can pass out. And for 41 those that are actually working with youth, we created 42 kind of a help sheet or a cheat sheet on how to apply 43 because once the student starts to apply online they 44 have to complete it nonstop. And if you remember back 45 when you were in high school and you get these global 46 questions that you need to answer on sometimes you say I'll get back to it. Well, then you would have to 47 48 start all over again. 49 50

Page 309 So I'll provide that to your 1 coordinator and that's all I have. 2 3 4 MR. STEVENSON: Madame Chair. 5 6 MADAME CHAIR ENTSMINGER: Go ahead. 7 8 MR. STEVENSON: Thank you, Madame Chair. Through the Chair. Vince, what is the deadline 9 for submitting applications, my first question. 10 Μv 11 second question was if folks might be interested in 12 applying, but have questions whom should they contact. 13 14 Thank you, Madame Chair. 15 16 MR. MATHEWS: Yeah, that's a good 17 question. It closes on March 31st, but most likely 18 it'll be extended. I am going to push to extend it. We have 229 tribes in Alaska, 550 plus in the nation. 19 20 So you would think we would have a lot more students 21 involved in this. The four -- three years I've been 22 involved with it we've had as low as two and as high as 23 eight. So I'm hoping that we'll be able to extend that 24 application period to March, but that's not in my 25 control though that'll be my push. 26 27 Last week I checked on the applications 28 and we have one from Alaska. It's free, there's no 29 cost. 30 31 So Charlie's done an excellent job getting the word out and that, it's just someone's got 32 to sit down with these high school students. I mean, 33 34 it -- I wouldn't have sat down when I was a high school 35 student in senior year to fill out an application to be 36 honest with you. So it needs to have some other people 37 that say hey, jump on this. Yes, it's during fishing season, I understand that. The committee I'm on, we're 38 39 exploring a change in those dates for future ones, but I don't know if that's going to happen, but this year 40 it is July 27th -- I mean, excuse me, June 27 through 41 42 July 2nd. 43 44 MR. STEVENSON: Thanks so much, Vince. 45 And if folks had questions who should they contact? 46 47 MR. MATHEWS: Well, the best one --48 they can contact me because I'll walk them through it, 49 but there's also in the flyer they can go to the 50

Page 310 website, that's to start out. Most of these students 1 2 are real comfortable on websites, I'm not one of those. 3 And from there they can explore and then if they have 4 additional questions would be myself or JoAnne Brant 5 who was here yesterday or they can contact, this is coordinated through New Mexico Wildlife Federation in 6 7 New Mexico and that -- that website is on this handout. 8 9 MR. STEVENSON: Thanks, Vince. If you 10 can email me that -- those materials I'd be happy to 11 get those out to folks as well. 12 13 Thank you. 14 15 MADAME CHAIR ENTSMINGER: Thanks, 16 Vince. Any questions. 17 18 (No comments) 19 20 MADAME CHAIR ENTSMINGER: I forwarded 21 your email to -- we got one right here, Tim. 22 23 MR. McMANUS: Oh. 2.4 25 MADAME CHAIR ENTSMINGER: To our school 26 district. 27 28 MR. McMANUS: Yeah, Vince, thank you. 29 Last time me and you got together we talked a little 30 bit, you gave me a calendar that the youth submitted to Fish and Game, it was like a drawing contest and it's 31 32 migratory birds. 33 34 MR. MATHEWS: Yes, I think you're 35 talking about and others can help me on this because I'm not directly involved in it, I think you're talking 36 37 about the migratory bird calendar art contest. 38 39 MR. McMANUS: Yes. 40 41 MR. MATHEWS: Is that it? 42 43 MR. McMANUS: That's it. 44 45 MR. MATHEWS: And you would like one? 46 47 MR. McMANUS: No, I got one and I 48 brought it to the -- our elementary school in Nenana. 49 And I -- the information was on there, I just wanted to 50

Page 311 1 see if you'd speak out more about that. 2 3 MR. MATHEWS: Okay. Because I don't know when that closes. It may have closed already for 4 5 art to be submitted, I'm not tracking that. 6 7 MR. McMANUS: I was trying to get more 8 information out to everybody else so they could submit 9 something in for the future. That's all I was after. 10 11 MR. MATHEWS: Okay. I'll make a note of that. And there's other staff that work closer with 12 13 it, within Fairbanks and elsewhere that can get that 14 information out. 15 16 Thank you. MR. McMANUS: 17 18 MR. STEVENSON: Madame Chair. 19 20 MADAME CHAIR ENTSMINGER: Zach. 21 22 MR. STEVENSON: Thank you, Madame 23 Chair. To the question from Mr. McManus, the Alaska 24 Migratory -- I'm looking at their website right now. 25 The Alaska Migratory Bird Calendar Contest 2020 theme 26 was hunt for the future. The deadline was February 27 7th. And the students, public, private or homeschooled, residing in or adjacent to the North 28 29 Slope Borough and the following National Wildlife 30 Refuges including Alaska Maritime, Alaska Peninsula, Becharof, Arctic, Innoko, Izembek, Kodiak, Selawik, 31 Togiak, Yukon Delta, Yukon Flats and Tetlin were 32 eligible to apply. 33 34 35 Thank you, Madame Chair. 36 37 MADAME CHAIR ENTSMINGER: Okay. 38 39 MR. McMANUS: Thank you. 40 41 MADAME CHAIR ENTSMINGER: National Park Service is next for -- the first one on the agenda was 42 Denali National Park update. 43 44 45 You'll have to forgive us because our agenda was missing some people. So for Fish and 46 Wildlife Service I have on here it says Yukon Flats, 47 48 Nathan, but you're here. 49 50

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Thank you, Madame 1 MR. BERENDZEN: 2 Chair. For the record, Steve Berendzen, Refuge 3 manager, Arctic National Wildlife Refuge. And, yeah, I'll be reporting on or providing an update on Arctic 4 5 Refuge. And what I've got is actually just an update 6 of our summary of activities that we provided last 7 fall. And I'm just going to hit the changes or updates 8 that have occurred since then to keep this relatively 9 brief. 10 11 So for caribou in the last one we had projected a meeting for the International Porcupine 12 13 Caribou Board to happen last fall. It just happened 14 last week actually, February 25th through 27th in 15 Whitehorse. I didn't really get much in the way of results of that meeting and my understanding is there 16 17 may not have actually been that much in the way of 18 results, but it was an opportunity for the Canadian 19 members and the Alaska members to get together and 20 discuss status. And I think some of the issues that 21 were discussed were the development of oil and gas in 22 the coastal plain that the Canadian members would be 23 potentially impacting to the caribou herd. 24 25 So if no questions on that I'll move to 26 the next topic that I have an update on. 27 28 For moose we had a request and we 29 mentioned this last year that Kaktovik had made a 30 request to extend their season. And they not only 31 requested an extension of the season, which we granted 32 from October to April, but they also wanted to have 33 permits issued to 10 residents, retain the three bull moose harvest, but provide that opportunity to 10 34 35 residents who could have tags because it's more 36 opportunistic moose hunting when they happen to see a 37 bull moose they would harvest it and they would cut off the hunt when three -- three bulls had been -- have 38 been harvested. At this time -- last updates was 39 40 yesterday and they still had not harvested any moose. 41 So they typically do harvest them in the spring, March 42 is the time frame they generally have enough light to 43 get out and search for moose and so we're expecting 44 they'll be trying to do that here in the near future. 45 46 The other topic I've got an update on 47 is sheep and we've discussed the Arctic Village Sheep 48 Management Area and because of the interest in that 49 we're prioritizing a survey of that area this year 50

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instead of doing one of our otherwise typically 1 2 scheduled surveys that would include a third of the 3 Refuge. So we're going to forego the standard survey 4 and just do the Arctic Village Sheep Management Area 5 which is a smaller area to survey, but our funds are diminishing and so actually that's helping us out 6 7 because we didn't -- we were struggling to come up with 8 funding to survey what we normally would have anyway. And the reason for that is we're putting a lot more 9 effort into doing monitoring, baseline monitoring and 10 studies on the coastal plain in anticipation of 11 upcoming oil and gas development. So that's what we're 12 13 doing with sheep there. 14 15 One other thing that is related to 16 sheep is we have -- have interest in precluding 17 domestic pack animals that would include goats, sheep, 18 alpacas and lamas from going into the Brooks Range to 19 potentially transmit infectious diseases to dall sheep. 20 So we have a proposal into the Federal hunting and 21 fishing regulations package that's being submitted 22 through headquarters promoting or proposing a 23 regulation change to preclude any use of those domestic pack animals, those four species in Arctic Refuge. And 24 it's not just for the purpose of hunting or fishing and 25 26 not just for specific areas, it would be a blanket 27 exclusion for the entire Refuge. So we don't know how 28 that's going to proceed or if it will get shortstopped 29 at some point. We are anticipating some opposition 30 from the Lama and Alpaca Owners Association, but we're 31 hoping we can get that through and make that regulatory 32 change. And it was something we proposed in our 33 comprehensive conservation plan that was completed in 34 2015. 35 36 So that's all I've got. If there are 37 any questions I'll be happy to try to answer those. 38 39 MR. WOODRUFF: Madame Chair. 40 41 MADAME CHAIR ENTSMINGER: Donald. 42 43 MR. WOODRUFF: The Kaktovik moose hunt, 44 is that any moose? 45 46 MR. BERENDZEN: Bull moose only. 47 48 MR. WOODRUFF: Thank you. 49 50

Page 314 1 MR. BERENDZEN: Yes. 2 3 MADAME CHAIR ENTSMINGER: Any other 4 questions. 5 6 (No comments) 7 8 MADAME CHAIR ENTSMINGER: Okay. 9 10 MR. BERENDZEN: Thank you. 11 12 MADAME CHAIR ENTSMINGER: Thank you. 13 All right. I got to make sure I cover everybody here. 14 15 Tetlin's next. 16 17 Did you have a question of him? 18 MR. FIRMIN: I know Vince and them 19 20 covered the Yukon Flats and I thought maybe Jimmy Fox or Nathan Hawkaluk would be here today, but I just had 21 22 the question that I brought up at our AC meeting, Ι 23 just wanted to pose to you guys was that I was hoping 24 for more information. But like Doyon and Hilcorp were going to do some -- a bunch of aerial surveys they've 25 26 got scheduled for like the entire Yukon Flats this 27 summer. But and they've got a permit from the Refuge 28 to fly these surveys with I don't know, lidar or some 29 type of -- they wouldn't tell us what they're going to 30 They said we're going to fly at 500 feet and fly do. this grid over the whole entire Yukon Flats with a DC-3 31 and they were going to do -- scan for -- basically 32 looking for oil and gas development. 33 34 35 But I was just wanted to -- well, what 36 are they going to do, how big is the plane, what are 37 they going to -- what are the hours that they're going 38 to fly, what times, what dates and what technology, if 39 they're being -- I don't know, they wouldn't tell us what technology they're using which I want to see a 40 scientific study saying it's not going to harm the 41 animals. Is it going to -- is it going to kill all the 42 43 bees, I mean, where have they used it before. And the 44 quy from Hilcorp and Doyon said I don't know, we can't 45 tell you it's good, but we got a permit to do it and we're doing it this summer. Have a nice day. And it 46 was like well, I just wanted more info or, you know, a 47 48 third-party from the -- you know, from the Refuge or 49 somebody to at least assure us that it's a safe 50

Page 315 practice. I mean, are they going to be doing it during 1 2 moose season, are they going to be doing it during bird 3 hunting season when, you know, all the birds are 4 flying. I just wanted more information basically. 5 6 MADAME CHAIR ENTSMINGER: Go ahead, 7 Vince. 8 9 MR. MATHEWS: Yes. Council member 10 Andrew, yes, that was passed on to Jimmy. Jimmy's 11 still in dialogue with the contract and all the aspect of the -- because I -- he was -- he's -- it's not ready 12 to reply directly to all that's gong on I suppose is 13 14 the best answer. But he is aware of it and is 15 addressing the questions you had. And then from there 16 I think the agreement was that whatever summary of that 17 would be shared with the AC members. If this Council 18 wants that also then that's possible, but it's -- it 19 didn't get lost is what I want to tell you. It just --20 it's not there. Maybe Steve has additional..... 21 22 MR. BERENDZEN: Madame Chair, I do have 23 additional information because the same proposal was proposed last year for the coastal plain of Arctic 24 25 Refuge. And what they -- actually we don't issue a permit, as long as they don't set foot on Refuge lands 26 27 we can't -- we have no authority to prohibit them from 28 flying over Refuge lands. So they -- my understanding 29 is they would not be requesting a permit, they -- there 30 are no restrictions on them -- against them from doing 31 that. 32 33 And what they proposed for Arctic 34 Refuge was middle of the summer timing for their -- the 35 flights. I have no idea how long that would take on 36 Yukon Flats, that's a huge area and it could go for 37 several weeks I'm sure. And it is low overflight, I think it was like 500 feet. And they fly transects, 38 39 they're pretty tightly spaced. So will there be 40 disturbance, I don't know, but a DC-3 is a pretty big 41 plane and flying low that certainly could have some 42 disturbance. 43 44 That's what information I have. Ι 45 don't know if you have any other specific questions. 46 47 MR. FIRMIN: Well, I know like the 48 military and the Refuge has a surface ceiling for when 49 they're playing war games, they're not rocketing the --50

Page 316 you know, breaking the sound barrier at 500 feet over 1 2 Fort Yukon. I mean, I don't see why you guys don't 3 have a service ceiling or at least more info on what are they going to be scanning with, you know. I mean, 4 5 the last time they had some type of huge MRI torpedo they were flying around with underneath a helicopter, 6 7 you couldn't watch TV all summer because it screwed up --8 cable TV still ain't right in Fort Yukon after that. 9 And, no, every time the thing took off and left, you 10 know, it would -- you'd -- you know, you could hear it 11 and I don't know, what is that, I don't know. 12 13 But so, I mean, how is that going to 14 affect the animals, is there any scientific study or 15 data to backup that it doesn't bother the animals or is it going to throw off migration patterns for -- you 16 17 know, like I said is it going to kill all the 18 bumblebees or something, what -- who knows. And they 19 just said I don't know. They didn't know either. 20 So.... 21 22 MR. BERENDZEN: Yeah. 23 24 MR. FIRMIN: .....that was kind of 25 interesting that if they were coming up and I believe they mentioned that they got a special use permit or 26 something I thought was the way they presented to us 27 28 from the Refuge. Or they were -- they were in talks 29 with -- I guess with Jimmy Fox was..... 30 31 Well, I'm not MR. BERENDZEN: Okay. 32 aware that they were applying for a permit, maybe they 33 have. And if they are I expect it will be issued. But my understanding is they weren't going to need one for 34 35 Arctic Refuge so I would expect they wouldn't need one 36 for Yukon Flats. But it's possible. 37 38 As far as a ceiling, we don't have a 39 ceiling, we just have a recommendation through the FAA 40 so we -- it really doesn't have much in the way of 41 teeth to enforce -- there's no enforcement authority. 42 So we make that recommendation for 500 feet, but can't 43 do an enforcement if people fly lower than that. And 44 as far as affecting wildlife or bumblebees or any 45 insects, whatever, our understanding is no, this should 46 not have any impact on them. But again I can't speak 47 for the folks who are doing that. 48 49 MR. GLANZ: When I used to fly a lot 50

Page 317 and we got -- and it went I believe to the Supreme 1 2 Court and we got a ruling that nobody owns the air rights. So, you know, like somebody says -- was 3 4 telling me they were going to -- they wanted to take 5 some equipment down the road and I got to take -- well, can I charge them. I said no. Why is that. Because 6 7 nobody owns the air rights, you got to move your power 8 lines out of the way, let them go through and put them back together. So I don't even know if they need to 9 10 even get permission to fly over a Refuge as long as you 11 stay 500 feet from people, you know, you fly the contour. Anyhow that's all I know about some of the 12 13 overhead rights. 14 15 MR. STEVENSON: Madame Chair. 16 17 MADAME CHAIR ENTSMINGER: Zach. 18 19 MR. STEVENSON: Through the Chair. 20 Responding to Andy's point a moment ago. I'm aware that the Native Village of Kotzebue and the Northwest 21 22 Arctic Borough have developed into code requirements which outsiders must follow to brief the tribe on any 23 future research that would affect tribal members in 24 25 their area. That includes identifying potential impacts to subsistence resources and any potential 26 27 impacts of that research on their members. And I would 28 be happy to provide through the Chair a copy of those 29 documents if that would be helpful to address Andy's 30 point. 31 32 Thank you, Madame Chair. 33 34 MADAME CHAIR ENTSMINGER: Andrew. 35 36 MR. FIRMIN: Yeah, I just wanted to let 37 other Council members know that. I just thought that 38 was kind of invasive. I don't know, I guess flying 39 isn't the same as hovering, but if somebody hovered 40 over your house at 500 feet in a helicopter you'd get 41 ticked off and say something about it, you know. And 42 basically if they're going to be flying, I think they 43 said eight to 10 weeks like you said all summer long 44 and who knows where they're going to be basing and 45 getting fuel out of. So I think the tribe requested that they do it out of Fort Yukon so at least we can 46 47 see them come and go all day, but -- instead of just 48 having this strange airplane flying around all summer 49 long for two and a half months straight or whatever. 50

Page 318 And then that's going to be -- so that's going to be 1 2 all the fishing season, right up to moose season. So with all the other air traffic going on and what if --3 4 you know, fire season and everything else, it's going 5 to make it -- it's going to be kind of awkward, you 6 know. 7 8 So I just was curious as to what -- if they've come up with anything new or the Refuge had 9 10 anything different to say. Maybe I got my permit 11 misconstrued up with the ..... 12 13 MR. GLANZ: The only thing they can 14 make -- TSA out of it where -- like we used to do with 15 fire, tell all other aircrafts stay out because we had 16 excessive helicopter movements and so forth. And so 17 that may be what they got the permit from somebody that 18 if something comes in they have to stop flying 19 immediately. So we'll see. 20 21 MADAME CHAIR ENTSMINGER: Sounds 22 dangerous to be in the air during that time, especially 23 a Super Cub. Okay. 24 25 MR. FIRMIN: Well, my point is if they're going to be zapping something to see what's 26 27 under the ground, 3,000 feet down, what's that do to me standing there looking up at it. Should I wear glasses 28 29 or cover my eyes.... 30 31 MADAME CHAIR ENTSMINGER: Well, I was 32 going to mention that, what..... 33 34 MR. FIRMIN: .....put my tinfoil hat or 35 something. I don't know. 36 37 MR. GLANZ: Yeah, I believe that they 38 -- they -- if they didn't say anything about a megatron 39 [sic], you've seen them flying them over to -- with helicopters and I don't think a aircraft can do them, 40 41 do megatrons hanging underneath them. I don't know, 42 but I'm saying no. I don't think they can go fast like 43 that. 44 45 MR. BASSICH: Yeah, maybe, Andrew, you should ask them to put their first born child out there 46 47 on the ground. 48 49 (Laughter) 50

Page 319 1 MR. FIRMIN: Yeah. 2 3 MR. BASSICH: And if they're willing to 4 do that then it's probably okay. 5 6 MR. FIRMIN: Well, the funny thing is 7 they wouldn't tell me and they didn't even -- they were 8 -- you know, that was kind of the running joke is because Hilcorp is privately owned they couldn't -- the 9 guy didn't even know who he worked for, his boss. Oh, 10 11 they don't tell me that. I was like well, you can't tell me that, how would I believe you this is safe. 12 13 You can't tell me who you work for. It was kind of --14 it was a comical conversation with the geologist there. 15 16 MADAME CHAIR ENTSMINGER: Andrew needs 17 to know more about that. 18 19 Tetlin's next. I'm pretty sure. Okay. 20 21 MR. GLANZ: Anyway, Madame Chair, I 22 didn't mean TSA, I meant TFR, flight restrictions. 23 24 MADAME CHAIR ENTSMINGER: Oh. 25 26 MR. GLANZ: TSA's the ones I really 27 like. 28 29 (Laughter) 30 31 MR. GLANZ: But anyway I want to tell you something that happened. We was going on vacation, 32 my wife had all her meds in the bag. Only a blood 33 34 pressure and arthritis med. We go through the TSA in 35 Fairbanks, I get to Chicago and my wife -- we get to my daughter's house, my wife says half my meds are gone. 36 37 They stole -- TSA stole them. So I wrote a letter to 38 TSA and they said well, send a picture of the pack. Ι said it's a red fire pack, you've probably seen -- and 39 this guy's in Fairbanks. And then that didn't work so 40 they said well, send me a -- we'll send you this, you 41 42 fill it out and we'll reimburse you. I said I don't want my money reimbursed, I want that dude fired or 43 44 whoever's going through the bags because they stole 45 half her meds and never heard no more about it. So even the people we trust to protect us are trying to 46 47 steal from us. 48 49 (Laughter) 50

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1 MADAME CHAIR ENTSMINGER: Okay.
3 MR. BAYLESS: Madame Chair. 4
5 MADAME CHAIR ENTSMINGER: Go ahead. 6
MR. BAYLESS: Shawn Bayless, Tetlin Refuge manager. It's been a while since I've been here, good to be back. I'm going to let Tim do all the heavy lifting, I'm just going to give you a quick, brief on our staffing status, things have changed since last time I was here talking to you folks.
First of all Mr. Lorenzini also known as the Italian Stallion was selected as our visitor services manager. So we're very happy about that. We didn't get any more employees, he just shifted jobs. He's evolved into the manager so he's now the in charge of all the visitor services obligations of the Refuge. So he's been doing that for three years so it only makes sense that he gets paid now to do so. So we're happy to have him.
Secondly we lost our last biologist in December so we're without a biological program right now. We're doing the best we can. We did fly a survey this year, the moose survey, Tim's going to talk about that. We're still doing the lynx project, he's going to talk about that. We're still banding ducks, he's going to talk about that. So we're doing the best we can with what we have. I was able to pick up two term biotechs which is good, we'll be able to continue what we've been doing, maybe not to the degree as we hope so, but I'm hopeful that we'll be able to fill both biologist positions soon, but the current challenges we face in hiring in the Federal government makes it very, very difficult. So we're doing the best we can.
9 And unless you have questions of me 0 directly I'll just turn it over to Tim.
1 2 MADAME CHAIR ENTSMINGER: Any 3 questions.
4 5 (No comments)
6 7 MADAME CHAIR ENTSMINGER: Thank you. 8
9 MR. LORENZINI: Good afternoon. My 0

Page 321 name's Tim Lorenzini. As Shawn pointed out I'm going 1 2 to go through an update here, it helps me to have 3 pictures. And just stop me as I go. I'm used to being able to click myself so I'm a little awkward when I 4 5 can't see what's going to be up there. So I apologize 6 for that. 7 8 So in 2017 we did a moose survey and we 9 noticed an unusual drop in a bull/cow ratio. And it 10 was kind of concerning for us if that was going to be a 11 trend. So we decided to resurvey as soon as we could. 2018 we didn't have the right conditions, but we did 12 this last fall. 13 14 15 So if you could go to the next slide. 16 17 And so we went back up about the range 18 that it has been, you know, roughly since 1990 when 19 surveys began. So it's right in that same ratio which 20 took away that concern we were going to have in 2017. So that was good news for moose hunting and subsistence 21 22 users of the area. 23 24 Next slide. 25 26 So, yeah, it jumped back up from 2017. 27 Why it was down, you know, I talked to the Fish and Game, you know, Jeff Wells and Jeff Gross, could have 28 29 just been that survey year. Adjacent survey areas also 30 saw a drop that year and then a slight bounce back up 31 by 2019. So it kind of fit in with some of those other 32 units nearby. We did restratify some of the units too 33 which might have adjusted our numbers a little bit too. 34 35 So just a recommendation is to 36 resurvey, normally it's every four years. So this one 37 was sooner than the four year period because of that bull/cow ratio concern which is no longer a concern. 38 39 40 Next slide. 41 42 Our moose season just closed. We have 43 a Federal moose season that closes in the end of 44 February for one antlered bull. It gets fairly low 45 participation. We don't have all our harvest reports back yet, they're due in the next few days so they'll 46 47 start streaming in here in the next couple weeks. But 48 I don't expect to see too many more harvested bulls, 49 it'll probably be did not hunt or was not successful. 50

Page 322 But it might be one or two more moose would be my 1 2 presumption based on previous years. But that's --3 only one of those bulls was taken after the September 4 season. So the winter season sees fairly low 5 participation and fairly low success as well. 6 7 Next slide. 8 9 So the caribou hunt, we're talking 10 Nelchina caribou. There has been a little bit more 11 success this year than the last few years. They -there's small groups kind of hanging around the Refuge 12 13 and folks have been more successful with caribou in the 14 last couple years. 15 16 We have been monitoring the Park 17 Service also with Glennallen Fish and Game put out GPS 18 enabled collars on the Mentasta herd and so instead of flying to try to listen for where the collars were, 19 20 with telemetry now we can be more accurate in locations 21 where those Mentasta caribou are. And generally 22 they're not spending a whole lot of time on the Refuge. There's some that barely moved at all, they're sticking 23 24 down at Wrangell-St. Elias, unit 11, others are over by 25 Dawson. So they -- they travel through the Refuge, but 26 they're not -- at least this year very few are spending 27 any kind of significant time on the Refuge and the ones 28 that are are fairly difficult to access. So we haven't 29 had any cause of concern to close down this caribou 30 hunt that's targeted toward Nelchina because Mentastas haven't been at risk according to where the collar 31 32 locations are. 33 34 MADAME CHAIR ENTSMINGER: Before you 35 move on.... 36 37 MR. BASSICH: A quick question. 38 39 MR. LORENZINI: Yes. 40 41 MADAME CHAIR ENTSMINGER: You probably 42 have the same question as me. 43 44 Go ahead, Andy. 45 46 MR. BASSICH: No, I doubt it. I'm just 47 curious, how do you calculate your CPU? 48 49 MR. LORENZINI: It -- so that -- I 50

Page 323 probably should have taken that off and I intended to. 1 2 It's skewed right now because we don't have all the 3 reports back for this year because the season's open until April 30th. And it's computed on the subsistence 4 5 permit website. I do not do that, that's a number they 6 do. 7 8 MR. BASSICH: But I guess I'm just 9 curious. Is it something where you take the -- when 10 the report comes in it says how many days hunting and 11 then whether there's.... 12 13 MR. LORENZINI: Correct. 14 15 MR. BASSICH: Okay. 16 17 MR. LORENZINI: Yeah. So they --18 that's why they ask for how many days you hunt even if you did hunt and were not successful they ask for how 19 20 many days so they can use that as part of that 21 calculation. As far as what the equation is, I'm an 22 outreach guy, I'm not a biologist. 23 24 MR. BASSICH: And do you see that 25 number going up or down in there? 26 27 MR. LORENZINI: You know, it's fairly 28 stable because I got -- I just took a chunk of that 29 Excel file that you see there, but it's fairly stable 30 over the years. And, you know, when the -- the 31 Nelchina herd is kind of finicky on where they're going to winter. And I looked back at old reports going back 32 into the '90s when this hunt started. It used to be 33 bulls only for the early part of it and over time 34 changed to any caribou. In some years the Nelchina 35 36 herd are very accessible, they're hanging around in 37 areas where people can access them, other times they 38 stick in unit 11 or in unit 12 off the Nabesna Road 39 where people can hunt them or they shoot through into 40 20E or Yukon territory where again they're either very unaccessible in that 20E hunt or they're in the other 41 42 country. So can't hunt them over there. 43 44 MR. BASSICH: Thanks. So I quess maybe 45 to clarify for me, is that an average of 24.2 days for 46 a harvest? 47 48 MR. LORENZINI: I don't know. 49 50

Page 324 MR. BASSICH: Okay. That's what I'm --1 2 I'm trying to figure out what the correlation is there, 3 what that number really means. 4 5 MR. BAYLESS: I told -- I told him to 6 take that off, but he didn't.... 7 8 (Laughter) 9 MR. BAYLESS: .....he didn't listen to 10 11 me. 12 13 MR. BASSICH: I think it's 14 actually.... 15 MR. BAYLESS: 16 Now.... 17 18 MR. BASSICH: .....very interesting. I mean, I think it's..... 19 20 21 MR. BAYLESS: Yeah, it is. 22 23 MR. BASSICH: .....it's interesting to 24 track over time how much -- how much harder people have 25 to work to harvest. I think it's interesting, I just 26 don't understand how it's calculated and what the 27 meaning of it is. But I think it's an interesting stat 28 to keep track of. 29 30 MR. LORENZINI: Here's what -- here's what I can tell you about it. That it -- it's right 31 now when it -- when it's green like that, that means 32 it's higher than previous years. But I caution to rely 33 34 on that right now because there might have been people 35 who hunted 10 days in December, won't hunt again and 36 that will drop that down. And it could also go way up 37 if people go out for one day in April and come home, 38 you know, with a caribou there. So right now that 39 number -- it's going to change between now and June 40 when we finally get our reports back. 41 42 MR. BASSICH: Okay. 43 44 MR. BAYLESS: It's pure magic how 45 that.... 46 47 MR. BASSICH: Keep it in there. It 48 gives me a chance to ask you more questions later. 49 50

Page 325 MR. LORENZINI: Yes. You see the 1 2 average down there and that's averaging since the 3 beginning of the hunt. You know, I just kept like I 4 said the 2019 year in there. And some of those years 5 the hunt had been closed, like some years like I said was bull only and a lower harvest those years. And so 6 7 the average -- some years there's much more harvest than others, but even on the greatest year I think it 8 9 was 75 caribou. Yeah, so it's.... 10 11 MADAME CHAIR ENTSMINGER: That 12 average's the whole time the hunt's existed? 13 14 MR. LORENZINI: Correct. Since 1994. 15 16 MADAME CHAIR ENTSMINGER: Hey, Pippa, 17 could you move your ruff..... 18 19 MS. KENNER: I'm -- oh, yeah. 20 21 (Laughter) 22 23 MADAME CHAIR ENTSMINGER: There's a 24 corner there and there's a figure I want to see. Oh. 25 Uh-huh. Okay. 26 27 MR. LORENZINI: If we go to the next 28 slide, please. 29 30 And so there's -- if Randy's still here he could probably speak about this much more eloquently 31 and intelligently than I could. But we worked with 32 Randy as well as TCC this year and we hired a couple of 33 34 local folks for the Humpback Whitefish Project. 35 36 And if you could go to the next slide. 37 38 Collected a bunch of samples here. I 39 like pictures, I think they're -- they help explain what's going on here. If you look in the newsletter I 40 wrote a small article about this, that they're up on 41 42 the table there. 43 44 Go to next slide. 45 46 Bandy who is probably going to talk at 47 some point, Brandy Baker from Fish and Game, took these 48 pictures here which I just thought was interesting, 49 documenting grizzly bear and wolf on the spawning 50

Page 326 grounds of humpback whitefish. This is kind of during 1 2 freeze up time. And they're definitely pulling those 3 whitefish out and eating them and kind of the ripples where they're spawning, in between the spawning 4 5 grounds, kind of like they do with salmon. And most 6 places in Alaska we don't have anything significant 7 that we know about salmon runs in the Upper Tanana so 8 it looks like the fish eaters are still taking 9 advantage of what's there. It was kind of interesting 10 this last fall. 11 12 Next slide. 13 14 So again the findings here were kind of 15 interesting that, you know, we heard from local folks 16 that the fish were smaller and they were concerned and 17 the data backed that up. And to summarize it, they're 18 actually living longer than they were 20 years ago. 19 And that could be for a number of reasons, but when 20 they -- they're growing slower than the were 20 years ago. And that could be because there's fewer of them 21 22 being caught and they're becoming density dependent. 23 Basically there's enough fish to compete for food that 24 they're growing slower than they were 20 years ago. 25 26 And I think I have some charts if you 27 go to the next slide. 28 29 Next slide, please. 30 31 And here's the charts. So the higher line there, that's from 20 years ago, that black, 32 dashed line. And this is your length by their age. 33 And if you look at the lower solid gray line you'll 34 35 notice it kind of flattens out as they get older, in that older age class fish and they just kind of stop 36 37 getting longer once they get older. 38 39 Next slide, please. 40 41 And one of the reasons that my -- my 42 understanding of Randy's report was that the -- when you want to look at environmental conditions you look 43 44 at the weight of the fish and they don't seem -- they 45 seem like they're fat enough, but they're just not growing as fast. So their -- that's their weight by 46 47 their length. 48 49 So you can see how those crosses, they 50

Page 327 used to be getting older versus the blue circles. 1 2 3 Yes. 4 5 MR. BASSICH: Do you have much 6 information on the harvest patterns 20 years ago and I 7 guess what I'm asking is were the people in the area 8 much more dependent upon that population of fish for 9 subsistence 20 years ago than they are now. 10 11 MR. BAYLESS: That's a good question 12 for Randy 20 years ago when he did this study. And I 13 don't know what he saw as far as people out with set 14 nets and things like that, but very few people today on 15 the Refuge do that. I mean, they're -- a few do, but 16 not many. And maybe Randy can weigh in back in 2000, 1999. 17 18 19 Did you see a difference? 20 21 MR. BROWN: Madame Chair and Council. 22 So most of the information we have from -- is from subsistence documents that have documented the harvest 23 24 back in the -- I think it was '80s and '90s. And then 25 recently there was another done. And it was substantially less harvest was estimated more recently. 26 27 Not quite down to half as much, maybe 60 percent as 28 much now appears to be being used than it was. So I 29 think the harvest is definitely down now than it was 30 earlier. 31 32 MR. BASSICH: And just a follow-up. 33 34 MADAME CHAIR ENTSMINGER: Andy. 35 36 MR. BASSICH: So just to follow that 37 line of thought then, it's not really a question, I'm 38 just trying to get it on the record. So basically following that line of thought the density dependency 39 40 could be a factor of just less harvest in the area from 41 local communities or subsistence activity which might 42 be able -- might be creating this density dependence 43 decline and growth at age. 44 45 MR. BROWN: Yeah, I think that's true. So these fish live beyond spawning, they're not like 46 47 salmon that die. 48 49 MR. BASSICH: Right. 50

Page 328 MR. BROWN: And a lot of these fish are 1 2 in their 20s. And so if they are not harvested then 3 they just -- they keep building up. And these are -this is really a terminal population so the juveniles, 4 5 you know, hatch and go downstream and rear somewhere 6 else. It's almost exclusively adults in the Upper 7 Tanana. But what we found from the radio telemetry 8 study 20 years ago is that they migrate up and then 9 they stay. They feed in the wetland system, winter in 10 the river, spawn in a couple areas there. And that's --11 and so they would just get to be -- there would get to be more and more of them. And we think there's a high 12 likelihood that it's a density issue that is -- because 13 14 their survival is great..... 15 16 MR. BASSICH: Uh-huh. 17 18 MR. BROWN: .....but they're just not 19 quite getting as much to eat now as they did before and 20 so they don't grow quite as big. 21 22 MR. BAYLESS: I have to say this 23 project came about about four years ago. We were asked by Northway to look into this. And right away we 24 25 started talking to Randy and I think the following year we did the first sampling on the Nabesna River in the 26 fall. Last year we did it on the Chisana River. So 27 28 we're good for three or four years, we might resample 29 it again, but it was a great cooperative effort and we 30 sure do appreciate all the help we got from the locals and Randy. And it was really kind of a fun project 31 32 with good results, useful results. 33 34 MR. BASSICH: Uh-huh. 35 36 MR LORENZINI: Next slide. 37 38 I took some of these recommendations 39 out of the report which I assume will be published 40 sometime soon. I think it's in its final editing 41 stages. But other than that no fishing restrictions 42 because it -- they don't seem to -- they're living long 43 enough and that's actually causing some of density 44 dependence. 45 46 Next slide. 47 48 So I'm going to talk about the lynx 49 project, Mr. Firmin. I think I might have some of 50

Page 329 those lynx stuff -- some lynx stuff that you might have 1 2 asked for the last time. 3 4 So this is just this year, we have our 5 crews moving from Tetlin Refuge over to Kanuti Refuge. 6 Right now in that part of the state there's a lot fewer 7 lynx than the year before. They have nine collared, 8 nine new ones and that didn't say so it's supposed to be nine out there. And of the females that they had 9 10 collared they didn't have -- they didn't have any 11 denning activity and I'll have a slide here in a little bit that will show how they kind of figure out when 12 they're denning, just -- there's a bunch of dots moving 13 14 around and when they stop -- when they keep going back 15 to the same place they assume it's a den. And then they've proven that by several times they've gone to 16 17 these dens and actually put ear tags in kittens and 18 they're able to track some movements just from those 19 few day old kittens from that. 20 21 And we've had several mortalities, 22 natural mortalities. And there's actually been some 23 trapper/hunter mortalities. A lot of them down in the Copper River. And I don't know that all of those are 24 ours yet, we haven't got the collars back. Some of 25 them are not, some of them may be. So we don't know 26 where those cats are coming from. They could be from 27 28 Kluane, there's been a couple of Canadian collared lynx 29 that have been this way the last few years and looks 30 like maybe there might be more. 31 32 Next slide, please. 33 34 So why are we doing this. This began 35 kind of asking the question of, you know, do lynx die out when the hares die out or do they follow their prey 36 37 as that hare cycle falls and rises in different parts of the boreal forest. Simultaneously you're going to 38 learn about some of the basic things that we know 39 40 already about caribou and moose, name your big game 41 species that have been studied in depth for the last 42 hundred years that haven't been done and haven't been 43 able to be done until this new technology, GPS collars, 44 have been available. You know, for this project 45 they've had to kind of redesign GPS collars to fit a 46 lynx with a battery that would last long enough to provide enough data. So this is new information for a 47 48 species that should help us in the future manage the 49 species in a way that keeps it around. 50

Page 330 Next slide, please. 1 2 3 So this is just to kind of show you the 4 different study areas. I'll talk more about partners 5 in a little bit, but you can kind of see where some of 6 them are making really big movements, some of them 7 don't go any -- hardly anywhere at all. And so you'll see more of that in a little bit. 8 9 10 Go to the next slide. 11 12 And some of them going all the way down 13 to British Columbia, Northwest Territories, places like 14 that. 15 16 Next slide. All right. If you could 17 hit play. 18 19 So this kitten, the blue dot here, this 20 is in March of 2018, she was ear tagged when she was just a few days old. This is on Tetlin Refuge. And so 21 22 she's following around mom and this is in March. And that male, that green -- you're going to see him kind 23 24 of follow them around a little bit. It's kind of 25 mesmerizing. And right there was a breeding event, you just saw it for a second there. 26 27 28 (Laughter) 29 30 Okay. Next slide, please. 31 32 So that kitten's going to stick with mom for a little longer, but she's becoming a little 33 34 more independent. So she's kind of following her 35 around, but she's not right next to her as often, but 36 sticking in the same area. 37 38 And that male, you can kind of ignore 39 that green dot because he's not important to the rest 40 of the story. 41 42 MR. BASSICH: He's had his moment. 43 44 MR. LORENZINI: Yeah, he's not 45 interesting anymore. But just remember this kitten, it's a pretty interesting individual. So we're getting 46 47 into.... 48 49 MR. BASSICH: Denning season, right. 50

Page 331 1 MR. LORENZINI: Yeah, it's end of May 2 and suddenly.... 3 4 MR. BASSICH: She stops. 5 6 MR. LORENZINI: .....she's not going 7 very far, right. And so what the biologists back at 8 the office, all of a sudden they're looking at that and then they're talking to Shawn, hey, we need to get 9 10 flown out here because they want to go put ear tags out 11 on those kittens. You know, you only have so long. 12 13 Next slide, please. 14 15 So same kind of general area. And we 16 see her going back and forth. Now she's -- and she's 17 actually going to move that den eventually for whatever 18 reason. But she's just kind of going back and forth 19 feeding those kittens. And that kitten that's now a 20 year old, you know, she's kind of just wandering around at this point. That's that second denning site there. 21 22 And I think they're getting a signal every four to six 23 hours, something about there. 24 25 And we got I think two more slides of this kitten here. So now we're at the end of June in 26 27 2018. 28 29 Next slide, please. 30 31 So this is kind of the whole Refuge. 32 So now that kitten is quite a bit north of mom and she's just kind of -- you're going to see a sudden 33 movement and then she's going to come right back. 34 35 We're in October. She's going to go up to Northway 36 Airport, come right back. I don't know why. I don't 37 think she did either. But here's what's interesting about that, we're getting to the end of October. 38 39 40 Next slide, please. 41 42 So this is that same kitten and go ahead and hit play. So this is 2019, March of 2019. 43 44 And all of a sudden now she's up by Northway, now she's 45 getting -- she's in Eagle now. 46 47 MR. BASSICH: I saw her. 48 49 (Laughter) 50

Page 332 MR. LORENZINI: You know, so now we're 1 2 in May, 2019. Now she's on Arctic Refuge up there. 3 And she -- we're in June, 2019. And she's almost to the coast and she turns around and on the 24th the 4 5 collar died so we don't know what happens to her. 6 7 (Laughter) 8 9 MR. LORENZINI: Yeah, so a kind of 10 anticlimactic ending there. And this is just an 11 interesting story and it doesn't -- this is -- by itself it doesn't mean anything significant 12 13 biologically, but I -- this was put together by the 14 biometrician that's working with us. And it's -- you 15 can -- if you get a lot of these stories you can then 16 begin to learn something significant. If this is a one 17 off, never happens again, well, then it's just kind of 18 a cool story. But if you can put it all together in several places across the State and Canada then it can 19 mean a lot more. 20 21 22 Next slide, please. And if you click it it should make a bunch of movement. Just click the 23 screen. Oh, no. Never mind. Well, no, no, if you 24 25 would have hit the next slide it all would have gone at 26 the same time. 27 28 Anyway what this slide's showing is 29 that there's a synchrony of denning activity throughout 30 Alaska about at the same time. So that's again adding to some of that basic knowledge that we already know 31 32 about, that we typically understand with moose and 33 caribou and a lot of other species of breeding 34 behaviors, but just hasn't been done on a larger scale 35 with this species. 36 37 Next slide, please. 38 39 So here's another interesting one. 40 This one was collared out of Galena, Brad Scott and the 41 biologist out there. So it's just north of Galena 42 there, around the flats it looks like. And he's got a 43 home range. This is a male and he's just kind of 44 hanging out there. And here we are in June, 2018. Now 45 it's July in south Allakaket. Now it's August and he's up in Arctic Village. Now it's September, he's back at 46 Allakaket already. And by September he's right back in 47 48 his original home range. And he kind of followed the 49 same route. Again I don't know why he did that, maybe 50

Page 333 he just wanted to see Arctic Village. I don't know, 1 2 but he did it. 3 4 (Laughter) 5 6 All right. Next slide. Go ahead and 7 click and it should start showing the different sites. 8 9 We start a little bit earlier than some 10 of the other Refuges so you see ours turn out. So 11 Wiseman and Yukon Flats and Kanuti and then you have Galena. And so now in April -- it's going to show 12 13 throughout this year here they're starting to move 14 east. And that's one of the things they're trying to 15 get with this study to get enough data to see do they 16 all move east at the same time or is there a certain 17 percentage that move east. And I don't have an answer 18 yet to those questions, I'm just proposing some of 19 those. 20 21 MR. FIRMIN: Looks like an inchworm. 22 23 MR. BAYLESS: And we're in the decline 24 phase of the hare right now so keep that in mind. 25 26 MR. LORENZINI: That one that shot to 27 Fairbanks I think was dead, that one didn't fly to 28 Fairbanks. So.... 29 30 MR. FIRMIN: That little yellow one's 31 in Charlie's front yard. 32 33 MR. BAYLESS: So there's November of 34 '18, that's when the hare started declining. 35 36 MR. LORENZINI: So we got the next one 37 is 2019. I think this one's more interesting. So you 38 have these collars that are already online, I think more will probably be added at some point in here. 39 40 There's last winter when we were collaring. 41 42 It's going to look like a -- someone hit a pool ball and suddenly a bunch of them just 43 44 scattered out. See that. Watch that red one on the 45 north there, it's going to go hit the coast, it's going to go over to Point Hope. See the one from Flats 46 heading over to the Yukon Territory. 47 48 49 MR. FIRMIN: Mosquitos driving them 50

Page 334 1 nuts. 2 3 MR. LORENZINI: It's middle of summer 4 right now. So now that one's by Barrow. And now it's 5 on the Haul Road. One of the Yukon Flats' one's down there by Bethel. I didn't know about that one. 6 7 And so that's November of 2019. 8 9 So this project's still ongoing. As I 10 said -- as I started and at least another year or two. 11 And they're trying to get enough data to make it significant -- to have enough data to make significant 12 conclusions. And that's for biometricians with a lot 13 14 more education and intelligence than I have. But they 15 need a certain amount of data points before they can 16 start to make assertions about what all this means. 17 18 MR. BAYLESS: And we have a doctorate student who's going to put it all together and will 19 20 probably come up with a manuscript in the next two or three years. So that's Derek Arnold. 21 22 23 It's interesting to note the 11 mortalities, about half of the mortalities that we had 24 25 this year, those 11, they were all on the Refuge. And we were able to go out and find those mortalities. 26 27 Most of them were whole animals, they hadn't been 28 bothered, they hadn't been killed by anything other 29 than probably starvation and cold. So, you know, they --30 two of them were right around a dead caribou calf so they were subsisting on the caribou calf and they 31 32 basically just perished in place. Very interesting. 33 34 MADAME CHAIR ENTSMINGER: So they were 35 skinny, they -- I mean..... 36 37 MR. BAYLESS: We sent them off for a 38 necropsy, we don't have the results back, Madame Chair. 39 But they -- yeah, they weren't in good shape. Yeah. 40 They got to have that snowshoe hare resource, we've 41 known that all along. But now just seeing it actually 42 happen, it's just fascinating. 43 44 MR. LORENZINI: Next slide, please. 45 46 So these are some of our partners 47 there. As he mentioned, you know, Derek Arnold is a 48 UAF student who has been a biotech for us and a volunteer beginning in 2015, 2016. He's been around 49 50

Page 335 for a while and he'll eventually have a Ph.D. and he'll 1 2 be able to hopefully answer some of these questions I 3 proposed in the future to this -- to this Board. 4 5 Next slide, please. 6 7 MADAME CHAIR ENTSMINGER: I have a 8 quick question. 9 10 MR. LORENZINI: Oh, go ahead. 11 12 MADAME CHAIR ENTSMINGER: The -- how 13 much do those collars weigh? 14 MR. LORENZINI: I don't know the weight 15 16 exactly, but it's -- they have -- it's -- they have a -it can only be so much of the weight of the lynx. And 17 18 so one thing they did to -- was they actually developed 19 a kitten collar because they were catching a lot of 20 these, you know, nine month old kittens in March and 21 they would have to just let them go, you know, without 22 a collar and then they developed a new collar with a smaller battery that could -- that wouldn't be a burden 23 24 to the animal. 25 26 MADAME CHAIR ENTSMINGER: And how long 27 does the battery last normally? 28 29 MR. LORENZINI: About two years, around 30 two.... 31 32 MADAME CHAIR ENTSMINGER: Two. 33 34 MR. LORENZINI: .....years. 35 36 MADAME CHAIR ENTSMINGER: Uh-huh. So 37 is it transmitting any waves that could kill them? 38 39 MR. LORENZINI: I don't think so. Ιt 40 wouldn't be anything that your phone in your pocket isn't emitting as far as a GPS signal. So if it is I 41 think we're all in trouble. 42 43 44 Next slide, please. 45 46 We've been -- we've banded some ducks and, you know, we have quite a few returns this year 47 48 which was kind of surprising. A couple were local, 49 but.... 50

Page 336 Go to the next slide. 1 2 3 We'll get a map and I'll have some 4 closer up images of this Google Earth snapshot I took 5 here. 6 7 If you'd go to the next slide. 8 9 A lot of the birds that are using 10 Tetlin Refuge are ending up in the Pacific Northwest. 11 A lot of the mallards and some pintails there. 12 13 Go to the next slide. 14 15 One of our pintails -- some were 16 reported back from Mexico which was kind of exciting. 17 And green-winged teal are ending up in East Texas, 18 Louisiana. So if you're wondering where these birds 19 are coming from and we'll be seeing them hopefully in 20 the next couple of months if spring ever comes. They 21 were -- that's where they spent their winter. 22 23 Next slide. 24 25 MR. BAYLESS: There's a current push --26 two years ago we got the request to start banding more 27 birds. We used to do a lot of banding in Alaska to inform managers -- waterfowl managers our season 28 29 setting processes and we just -- we were -- we dropped 30 the ball, we weren't providing enough banded birds in Alaska, that are produced in Alaska basically in a 31 nutshell. So we kind of ramped up and we're going to 32 33 be doing that annually from now on. 34 35 MR. LORENZINI: So visitors services, now I'm talking about something I know about. This is 36 37 my job. I'm a one man show there as far as outreach 38 goes as far as year round. But as far as hunter education I've been hearing talk about that. I run the 39 40 -- I run a lot of the local classes for the basic 41 hunter education. I also have a bowhunter education 42 occasionally. But I found it to be a pretty big accomplishment, I've been to every school and every 43 44 middle and high school right now has at least had the 45 opportunity and most have actually taken the class. And they have their basic hunter education card. 46 47 48 And then in Tok I usually offer them to 49 the public as well. For those folks hunting in unit 20 50

Page 337 which are a lot of folks, if you're a few years younger 1 2 than I am you have to have your hunter education card. 3 So I offer it to the public a couple times in Tok every 4 year. 5 6 And the last piece here as a Refuge and 7 also with several partners including the Tok Chamber, 8 National Park Service, Bureau of Land Management, we've been working on an MOU to work together to provide 9 10 visitor services in Tok itself. So there's the Tok Chamber of Commerce has ran a visitor center in town 11 for 25 years, a little more and we're looking to make a 12 13 partnership. And it hasn't been finalized yet, but 14 we've met a lot about it and we are I believe close to 15 finalizing that partnership and providing visitor services to the traveling public in the summer months 16 17 primarily in Tok. 18 19 MADAME CHAIR ENTSMINGER: So you'd do 20 that in the Civic Center, in that.... 21 22 MR. BAYLESS: The Visitors Center. 23 24 MADAME CHAIR ENTSMINGER: The 25 Visitors.... 26 27 MR. BAYLESS: It's called the Visitors 28 Center. 29 30 MADAME CHAIR ENTSMINGER: Oh. We had But the one where the Tok Chamber is. 31 Civic up once. 32 33 MR. BAYLESS: Yes, ma'am 34 35 MADAME CHAIR ENTSMINGER: Uh-huh. 36 37 MR. BASSICH: Yeah, if you -- if you do 38 get that up and running I think some of these videos that you sent would be great public outreach. I think 39 anybody would be fascinated by what we just saw with 40 the lynx movements and some of the banded ducks. And 41 42 that's really great work, it's really cool to see it 43 expanded to such a large area. You know, oftentimes 44 we're always locked into these small areas and the -- I 45 think it's really enlightening to see that these animals move just like humans do all over the place. 46 So, yeah, the ducks kind of remind me 47 48 of Alaskans, you know, we're -- a lot of Alaska is made 49 up from people all around the Lower 48 and Mexico and 50

Page 338 1 everything else, right. Yeah. 2 3 Thank you. Good presentation. 4 5 MR. BAYLESS: Yeah, I stress the 6 Visitor Center project's been ongoing for two, two and 7 a half years. I see Greg's here. So Yukon-Charley, 8 Wrangell-St. Elias, Tetlin Refuge, the Fortymile Wild and Scenic Corridor, State lands, it's going to be a 9 true multiagency, interagency visitor center. So we're 10 11 excited about it. It's mandated under ANILCA by the way specifically for Tok. It just never has happened, 12 13 so we're making that happen hopefully. Knock on wood. 14 15 MADAME CHAIR ENTSMINGER: I would say 16 that it was called the APLIC Center in the past and 17 they did have stuff going on there with public lands, 18 yeah. 19 20 MR. BAYLESS: Yeah, and they defunded --21 the State defunded that position, pulled it all back. 22 So they actually abdicated their responsibility to our partnership. So we're going to -- still going to 23 24 provide the same services, even APLIC information to 25 the traveling public in addition to the other 26 conservation unit specific areas. 27 28 MADAME CHAIR ENTSMINGER: And the 29 Chamber's going to be involved? 30 31 MR. BAYLESS: Yes, ma'am. 32 33 MADAME CHAIR ENTSMINGER: That's great. 34 Glad to hear it. 35 36 Any other questions. 37 38 MR. WRIGHT: Thank you guys very much. 39 40 MR. McMANUS: Good job. Thank you. 41 42 MADAME CHAIR ENTSMINGER: I knew you'd 43 like that lynx one. They showed it at the Upper 44 Tanana. 45 46 MR. BASSICH: Travel more than I do. 47 48 (Laughter) 49 50

Page 339 MADAME CHAIR ENTSMINGER: Yeah. 1 All 2 right. That's Fish and Wildlife Service. Next is --3 we don't have any. You want to take a break, a short 4 break. Okay. Let's go for.... 5 6 MR. BASSICH: Five minute break. 7 8 MADAME CHAIR ENTSMINGER: Which turns 9 to 10. Short break. 10 11 (Off record) 12 13 (On record) 14 MADAME CHAIR ENTSMINGER: .....could 15 16 put her next. 17 18 MS. BAKER: Sure. 19 20 MADAME CHAIR ENTSMINGER: And it's just 21 a quick report so for a quick report we can allow her 22 to speak so she can get home to Delta today. 23 24 MS. BAKER: Madame Chair and Council 25 members, thank you for the opportunity to speak to you 26 today. My name is Brandy Baker and I'm with the Alaska 27 Department of Fish and Game, Division of Sportfish. 28 29 I have the project number 18-250 which 30 is one of the Fisheries Resource Monitoring Program's. It sort of mirrors YRDFA and TCC's project in the Upper 31 Yukon Flats documenting the anadromous waters catalog 32 and verifying new spawning or rearing grounds for 33 34 salmon. So in this project we focus on the Upper 35 Tanana River drainage. So although the projects are separate and funded separately we've been mirroring 36 37 their techniques and coordinating. So I've been 38 talking to Brian McKenna with TCC and then I work with the Division of Subsistence, they're a cooperator on 39 this project as well. And they have been working with 40 Catherine Moncrieff with YRDFA. So the projects are 41 42 separate, but they're also similar. And it's kind of interesting to be able to work together in this aspect. 43 44 So I thank you for coming up with that priority 45 information need a couple years ago and allowing us to put this project in. 46 47 48 I just wanted to give you a guick 49 update. We're in the last phase of this project. 50

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We'll be looking for some chum salmon juveniles out-1 2 migrating this spring. So it's been interesting, in 3 the fall I see from your report that you have priority 4 information needs on habitat changes. And through the 5 TK component of this and talking to the locals, there 6 is definitely some habitat changes that have been 7 occurring in the Upper Tanana. And areas where we 8 already have streams documented for chum salmon 9 spawning for whatever reason I have not in the last two 10 fall seasons been able to find them or document them. 11 I did recently have reports in 2017 of coho salmon in the area, but coho are kind of sporadic. In the last 12 13 two years we seem to have some low coho runs. As a 14 manager on the Tanana River drainage for Sportfish I 15 monitor the Delta-Clearwater River which is the only or the biggest spawning escapement for Coho salmon on the 16 17 Yukon. And so we've had limited numbers coming back to 18 that drainage which then therefore means there's 19 probably not a surplus going back to some of these 20 Upper Tanana drainages. 21 22 But it's been interesting because in 23 working with the Refuge and working with the community of Northway our first question is, you know, they know 24 25 we're up there looking for salmon and their first response is that there's no salmon. And I understand 26 27 what they mean because they don't specifically fish for salmon. They wouldn't fish on spawning fish. But 28 29 their -- they have caught salmon in the past with their 30 whitefish nets. And so we've also found that like with the component of Randy Brown's whitefish project that 31 32 he did with the Refuge that their harvest patterns have 33 changed. It seems like a lot of the people we talk to, 34 there's very few people who fish there anymore and then 35 the ones that do fish were kind of reluctant to talk to 36 us too for whatever reason. There seems to be some 37 disconnect within the community over time. But it was 38 pretty interesting some of the stuff that we have found 39 as far as finding other juvenile fish, finding the 40 whitefish spawning grounds where grizzly bears and 41 wolves -- I mean, it looked like the Tok Flats spawning 42 grounds for bears, they were eating those whitefish 43 just like they would eat salmon. So it was kind of 44 interesting. You're -- I'm getting a lot more information and hopefully we'll document some juvenile 45 46 chums out-migrating this spring and I'll have a full 47 report for you probably next spring after everything is 48 written up. 49

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Page 341 So thank you for the opportunity to 1 2 talk and I really appreciate you guys' time and I know 3 it takes a lot from you to come in here and be away from your families. So appreciate it and good to see 4 5 all of you again. 6 7 MADAME CHAIR ENTSMINGER: Any 8 questions. 9 10 MR. WRIGHT: Madame Chair. 11 12 MADAME CHAIR ENTSMINGER: Robert. 13 14 MR. WRIGHT: I got one for you. I 15 lived at the mouth of the Tanana River for a lot of 16 years and there is a lot of juveniles at the mouth of 17 that river in the spring. We put in the seining net for the small whitefish right when the river opens and 18 19 they'll be a hundred in the 20 foot net, there could be 20 up to like 10 -- 10 fish in every small section of it. 21 You just pick it up and it's plumb full. So there's a 22 lot of them down there if you -- if you look -- I don't know where you're looking at them on the river or want 23 24 them from, but if you need them you let me know, I can 25 help you catch them. 26 27 MS. BAKER: Thank you for that. Yeah, unfortunately this is in the upper, upper section. 28 So 29 I'm sure a lot of those down towards the mouth are 30 coming from some of the bigger Delta spawning grounds 31 that we have in the area around Delta Junction. 32 33 MR. WRIGHT: But they're very thick and 34 there's a lot of them in that river. Holy cow, it's 35 unbelievable. 36 37 MR. McMANUS: Madame Chair. 38 39 MADAME CHAIR ENTSMINGER: Tim. 40 MR. McMANUS: 41 Thank you, Madame Chair. 42 Do you think that the bears and stuff are just eating those because that's all there is out there to eat, 43 44 there's no salmon? 45 MS. BAKER: That's kind of what it 46 47 appeared to be because in all of the aerial survey work 48 and foot survey work I've done on salmon streams, I was 49 -- as soon as I saw blood spots on the snow which this 50

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fall was different than last fall, so fall of 2019 1 2 there was snow on the ground and 2018 there was no snow 3 on the ground for a long time. And so I was able to see that this year which last year I may have missed, 4 5 but this year it's evident that there was just blood 6 spots all over the snow and these beat down trails. Ι 7 mean, like they were -- they were walking them every 8 night and they were fresh, fresh trails. 9 10 But then what cued me in was like I --11 I didn't know exactly where the spawning grounds were from Randy Brown's work, I knew -- had kind of an idea, 12 13 but it wasn't -- I didn't have a pinpointed location. 14 So when I stopped and saw the blood spots I was like 15 well, this is weird because normally the bears will 16 leave like a head or the tails or spine, you know, so 17 there should be some evidence and as soon as I could 18 find any evidence it was these scales, these big 19 scales. I was like well, these aren't salmon, these 20 are -- these are whitefish scales. And so I think 21 they've just adapted or evolved. Whether they used to 22 eat salmon in some of those same areas a long time ago, 23 there is historical reports of salmon being up in that area, but nowadays it's not -- they're not as 24 25 consistent. 26 27 And so the best data we have is from the Commercial Fish Division does a subsistence sur --28 29 not survey, permit. So they have a permit and we just 30 aren't seeing that many people from Northway who get 31 the subsistence salmon permit anymore or just a 32 subsistence permit really for that region. So the 33 numbers I can see are just incidental harvest of chum 34 or coho salmon in their nets from like the '80s and 35 '90s, but lately we haven't had that permits come back, 36 to have any information. And so I think it's part 37 just, you know, a lot of the old timers that I was speaking with were saying that, you know, they catch 38 them a while ago, but they haven't seen some since. 39 And I saw visual pictures, you know, they had pike, 40 41 they had whitefish, they had burbot and then a chum and 42 a coho salmon spawning colors. So where these salmon 43 were going we don't know because they intercepted them 44 before their spawning grounds. 45 46 The Chisana and the Nabesna are just 47 like the glacier rivers that are the Tanana basically, 48 they clear up in the winter and you have great 49 visibility through the water when you would have coho 50

Page 343 and chum spawning, but unfortunately they're just not 1 2 there right now. And there's beautiful upwelling areas in some of these documented for chum salmon spawning up 3 4 near Sheep Creek by the mountains and on the Chisana. 5 And, I mean, I was expecting to find something there 6 and it's just not there. It looks exactly like the 7 pristine Delta-Clearwater and just nothing right now. 8 So whether these were a fluke, whether these are a 9 relic of old historical bigger runs, time will tell, 10 but, yeah, there's definitely some changes. 11 12 MR. McMANUS: Madame Chair. 13 14 MADAME CHAIR ENTSMINGER: Go ahead. 15 16 MR. McMANUS: Okay. Now I got another 17 question. They did some -- Tanana Chiefs came to 18 Nenana and they were doing spawning creeks up the 19 Nenana River and they noticed a couple of the clear 20 creeks that the salmon were spawning got breached by the muddy waters so the mouth of that creek that the 21 22 salmon were going up is now full of mud and gravel and 23 stuff. And then she noticed that there was a -- more fish were going into other creeks to spawn because of 24 25 that. Did you -- are you guys seeing the same thing? 26 27 MS. BAKER: So unfortunately I'm not 28 familiar with what Tanana Chiefs is doing, but they're --29 salmon will choose areas where -- you know, they have 30 delayed spawning time frames so like you notice in most 31 of our rivers that we'll look at they'll come in kind 32 of a varied cycle, they -- they have a peak and then 33 they have the front part of the run and the back part 34 of the run. And that's probably due to some of those effects where, you know, say a habitat issue occurs and 35 36 you can have some spawning still be viable. But I 37 don't know if -- you know, coho are known to kind of search out some of these other areas and so if that was 38 39 a coho species I guess it would depend on which ones 40 they were looking at. I could say that they might 41 have, you know, found them in another spot that had an 42 upwelling that was similar to the one they were at 43 because it's not straying very far from where they were 44 originally. 45 46 MR. McMANUS: Thank you. 47 48 MR. BASSICH: Madame Chair. 49 50

Page 344 MADAME CHAIR ENTSMINGER: 1 Andy. 2 3 MR. BASSICH: Hi. Has there been any 4 discussion given that there were runs reportedly from 5 people in the past of trying to reintroduce or do some 6 outplanning in any of these streams? 7 8 MS. BAKER: Mr. Bassich, through the 9 Chair. No, there hasn't been. They actually were 10 hoping we don't find salmon kind of in the area. And 11 so there hasn't been any talk of like hatch reproduction and then relocating any eggs. I know that 12 13 the -- there's a rumor of the Tok River drainage having 14 done that a long time ago through the Salmon in the 15 Classroom Program, they'd done some incubation of eggs in that stream and that's why there's a run there, but 16 17 I haven't been able to find valid proof of that. 18 19 MR. BASSICH: Can you elaborate why you 20 would not want to see salmon there? 21 22 MS. BAKER: Not necessarily. Thank 23 you. 24 25 MR. BASSICH: I'll catch you in the 26 hallway. 27 28 MADAME CHAIR ENTSMINGER: Any other 29 questions. 30 31 (No comments) 32 33 MADAME CHAIR ENTSMINGER: Okay. Thank 34 you, Brandy. Have a safe drive home. 35 36 All right. Pat, you're patiently 37 waiting. 38 39 MS. OWEN: Madame Chair, the Council. 40 Good afternoon. My name is Pat Owen, I'm a wildlife biologist at Denali National Park and I have a bit of a 41 42 wildlife update to give to you in addition to just a little bit of an update on a couple of projects from 43 44 the Denali SRC that Amy Craver asked me to pass on to 45 you as well. 46 47 The handout that I gave you is very 48 similar to what I provided last October and it has 49 pretty the same projects on it. What I did with this 50

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Page 345 is there's a number of projects that there is some updated information, those are the ones that I'll be talking about. The rest of them on here are marked as such that there are not updates. Basically the information there is the same as what I had provided previously. So to start out talking about bear We've had a grizzly bear movement study in monitoring. the northeast corner of the Park since about 2010. The funding for that project ran out last year. So we still got a handful of collars in the field and we're waiting for the next two years for those collars to continue to collect data and then they will release, the last one by September of 2022. After we get the rest of those collars back we'll finalize that project and get all of the data together. But we have started looking at some of the data. Right now we've got movement data from 42 bears. Of those 42 bears 23 of those went outside of the Park at some time during the monitoring. Some really interesting movements, some things that we weren't really expecting to see. Eight of those bears had what we considered minimal locations outside the Park. It means they either didn't go very far out or they didn't spend very much time outside the Park boundary. But 15 of those bears made some pretty extensive forays out the north boundary of the Park and spent some of them a considerable amount of time. A lot of -- a couple of them with some really long forays out and back, a couple of them just went outside the Park just a little ways, but spent a fair amount of time out there. The one thing that is not reflected in here that was a bit of a surprise to us because in my career of working with bears for almost 30 years, you know, we sort of talk about bears as having a home range and that's where we're going to be expecting to find them. And we had two male bears that did some really interesting movements. They both stayed within the Park, but they made what looked like and we're sort of dubbing it right now a migratory movement, where they actually went west in the Park over the course of the season, got to a point out west and then made their way right back to what we would have considered to be like their starting point by the end of the season, by denning time. Something that we just weren't used to

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Page 346 seeing. We know that male bears tend to do a lot of 1 2 forays, but this was not a number of little spikes out 3 and back, it was one long trip, kind of in a big loop and coming back from where they started. So it was a 4 5 little bit of a surprise for us there. So hopefully 6 we'll get the rest of the data from the last few bears 7 there and then have a whole lot more to say after we 8 are able to analyze the rest of those. 9 10 The bear DNA citizen science study, I 11 talked about this one a little bit last October. We were able to have 106 samples from 2018 analyzed for 12 13 DNA. Of those 106 samples, 32 individual bears were 14 identified. And now we'll take those individual 15 identifications and link those to the location information that we have for where those samples were 16 17 collected and we'll start to get a little bit more 18 robust sample. 19 20 In 2019 the number of samples that we 21 collected went way up, 272 samples collected. Out of 22 that 235 of those were deemed to be good samples for 23 analysis. We'll be sending those samples off here 24 probably in the next couple of weeks for analysis. 25 26 We've got one more year of data collection so we'll continue to have folks in the 27 28 backcountry collecting scat samples for us. By this 29 time next year we'll be analyzing the 2020 samples and 30 then after that we'll be able to relate all of those to 31 the location data that we have and hopefully have 32 something to say about the number of bears that we're 33 seeing out there and where they're at and what they're 34 doing. 35 36 Bear management. As you're probably 37 well aware being in a National Park one of our biggest challenges I think certainly from where I sit is 38 39 educating people about how to live, work and recreate 40 safely where bears exist. And we have a pretty robust 41 bear management -- actually I'll broaden it, a wildlife 42 safety management program and a wildlife safety 43 education program. We do a lot of outreach with our visitors, also with our own staff, basically anybody 44 45 that asks for wildlife safety information we're there 46 to provide that. 47 48 We do keep track of interactions 49 between bears and people with something called our BHIM 50

system, it's a bear human incident management system 1 2 and it's a form that folks can fill out pretty easy, 3 it's a bunch of check boxes and some really short narratives about what their interaction with a bear in 4 5 the field might have been like. And that helps us to track patterns in bear behavior out on the landscape 6 7 and kind of gives us a clue when we need to be really 8 paying attention to where things might be happening. 9 10 The one thing that I will say about 11 this is there's -- in terms of the reporting that we've been getting, nothing really stands out a lot except 12 13 for the fact that we're starting to see or I shouldn't 14 say starting, we have been over the past few years 15 seeing what we're calling tolerant behavior by bears 16 more and more in the backcountry which could be 17 concerning, we're kind of keeping an eye on things. 18 And again with the BHIMS reporting we're able to track 19 that pretty well. 20 21 The one thing that I will mention about 22 our bear management program is that we have -- you 23 know, we have a lot of tools in our toolbox when it 24 comes to managing wildlife in a Park and in a situation 25 where a lot of people exist. And one of the brand new 26 tools that we just added to our toolbox this last fall is the acquisition of a Karelian bear dog. One of my 27 28 staff members just acquired a puppy, he's now six 29 months old. We expect that in the next couple of years 30 we'll get that dog trained up and we think that that 31 dog's going to be a really great asset for us, not just 32 in terms of the actual management of bears, but just in 33 terms of the ability to do outreach, you know, you walk 34 around with a lot of folks in the Park and people see 35 you with a dog and everybody wants to know about the 36 dog. And so it gives us a really great opportunity to 37 talk to a lot of our visitors and explain why we have the dog and what the dog is for. 38 39 40 The other thing that I will say is in 41 addition to bear management one of the biggest 42 challenges and I might have mentioned this last 43 October, one of the biggest challenges that we have 44 recently is with moose and we're now calling them 45 nuisance moose. I just completed a nuisance moose 46 management program or plan, I'm sorry, and last winter we did have an opportunity to test out an older dog, 47 48 Karelian bear dog from here in Fairbanks, with trying to move moose out of an area where there's a lot of 49 50

people. It was in the headquarters area where our own 1 2 dog kennels are, the Denali Park kennels. The moose 3 was a bit more than a nuisance, it had actually caused 4 a couple of injuries, had gotten mixed up with the 5 kennel dogs. We wanted to get that moose out of the 6 area and I will tell you that from experience with 7 moose recently every single tool that we have ever 8 tried with bears has absolutely no affect on moose. But the dog -- the dogs were really pretty effective. 9 10 We're not sure of what the long term effect would be 11 with dogs, but we do know that the immediate effect was 12 very promising. So having this dog on our staff I 13 think is going to be a real boon for us. 14 15 Let's see. The next thing on this list 16 is moose monitoring. The data that's presented here is 17 from our Cantwell survey. The Cantwell survey on the 18 south side of the Park is one that we do with 19 subsistence funding. And that survey was again the 20 same one that I reported on last year. We are on 21 schedule this year to get funding for a full north side 22 survey. We'll see whether or not that happens, but 23 that's the plan as of today. 24 25 Caribou monitoring. Lane Adams who's a 26 USGS biologist who has run our caribou monitoring program for many years is stepping away from that 27 28 project and the Park is now assuming that project in 29 total. We're just about there. Lane has agreed that 30 he will still help us with a little bit of the fieldwork, he gets to do the fun stuff. He's turned 31 32 over all the rest of it to us. But he's going to 33 continue with us through this year and then it'll --34 he'll probably be done with it. But he did provide me 35 with some of the numbers from this past year's 36 monitoring. The herd -- estimate of the herd size is 37 down slightly, looks like that's because of reduced female survival and a bit of a drop in calf 38 recruitment. I won't go through all of the numbers on 39 40 this, basically things look to be a little lower than 41 average, but we'll see how that shapes up in the next 42 couple of years. 43 44 Sheep surveys. Again nothing new on 45 the sheep surveys from what I reported last time except 46 that we did get this nice color summary of our sheep survey that I did attach in there. This was not 47 48 available last October when I spoke to you so I've included that there. 49 50

Wolf monitoring. One thing that I will 1 2 say is if you read this first paragraph on wolf 3 monitoring, the fourth sentence in there that starts out with in 2019 staff captured, would you please just 4 5 delete that entire sentence. We just switched over to 6 the new version of Word, this new Outlook 365, and what 7 we're finding is that we're all having serious 8 difficulty with editing documents. And things that we either thought we put in or thought we took out of 9 10 documents are doing things we weren't expecting. So 11 that sentence shouldn't be in there, it's kind of repetitious and doesn't make any sense. So other than 12 that wolf numbers are -- you know, no big changes 13 14 there. Fourteen wolf packs monitored in 2019. We had 15 evidence that six of those packs denned, it looks like five of those packs recruited somewhere around 19 pups. 16 17 So that work will continue. There is also a website if 18 you want the latest and greatest about wolves in 19 Denali. 20 21 The Alpine Wildlife Project will 22 continue this summer. That is a project mainly looking 23 at pica, ground squirrels, hoary marmots, dall sheep and ptarmigan in the alpine reaches of the Park. That 24 25 project will continue to collect data and they will 26 continue to collect data and they will implement their citizen science component of that project this year, 27 28 probably with figuring out a way of getting people in 29 the Park, visitors to the Park, to help out with 30 collecting data. 31 32 Arctic ground squirrel project is the 33 fieldwork anyway on that one is finished up and there's really not any update on that as with the collared pica 34 35 surveys, no updates on that since I spoke to you last. 36 37 There's a very long section in here that summarizes some of the bird related projects 38 coming up for 2020. And just one thing in particular, 39 40 I'm not going to go through every one of these because 41 the list is rather extensive, but the one project or 42 the one thing that I would like to point out to you 43 because it's a good segue into something else that I 44 just want to mention is if you look under the list of 45 bird related projects the second bullet right there 46 that talks about quantifying annual cycle movements of golden eagles in Denali, it talks about how we detected 47 48 recently a mortality in January due to lead toxicosis. And, you know, we know that lead poisoning in eagles in 49 50

Page 350 particular and in a lot of other wildlife species 1 2 throughout the country is a big deal. 3 4 And I will mention that these three 5 little pamphlets, there are some on the back table, the 6 Park Service has for some number of years been working 7 on a campaign to try to encourage folks to move away 8 from lead ammunition. And these give information about why that's a really good thing and what some of the 9 10 alternatives are. This has been sort of the brainchild 11 of one of our staff in Fort Collins, Colorado, David Trevino. And I've been talking with him. He's been 12 really encouraging about the possibility of providing 13 14 our SRC members, actually providing them with non-lead 15 ammo to try it out, to test it, to see how they like 16 it, to get used to using it because it does -- it does 17 function a little differently than -- or I should say 18 perform a little differently than lead ammunition. But 19 just in an effort to try to encourage moving away from 20 lead ammo we've got some information about that. 21 22 Let's see, what else. There's a number 23 of other bird related projects. I quess the other big one for us is under the list of new projects here. 24 25 Carol McIntye, who is our avian biologist, talks in 26 here about the continuation of trumpeter swan surveys. We'll be doing those again in 2020. And then this 27 28 nesting ecology of shred nesting passerines is going to 29 be another big project for us. We're going to have a 30 lot of folks in the field looking at some common 31 passerines like white crowned and American tree 32 sparrows, trying to quantify the role of nest predation on nesting success of a number of different species. 33 34 And there's a lot of cooperators on that project. 35 36 No updates on the information I 37 provided about fish. And I think for the wildlife update, that is the entire list there if anybody has 38 any questions about that. Otherwise I will move into 39 40 the couple of things that Amy asked if I would just 41 cover on the SRC. 42 43 MR. McMANUS: Madame Chair. 44 45 MADAME CHAIR ENTSMINGER: Tim. 46 47 MR. McMANUS: Thank you, Madame Chair. 48 When I was down at Denali Commission one of the 49 gentlemen from the Park Service gave a report on the 50

Page 351 red breast robins when they put bands on them and then 1 2 they were able to put a little microchip inside 3 them.... 4 5 MS. OWEN: Uh-huh. 6 7 MR. McMANUS: ....on their back. And 8 I was pretty amazed to where they migrated to. 9 10 MS. OWEN: Yes. And I'm wondering if --11 I'm trying to remember if that's even..... 12 13 MR. McMANUS: Still amazed. 14 15 MS. OWEN: Yeah. And I don't remember 16 off the top of my head..... 17 18 MR. McMANUS: I do. 19 20 MS. OWEN: .....the data from that. Yeah. And, you know, if -- we could certainly ask 21 22 Carol to come and present that again if that's 23 something that.... 24 25 MR. McMANUS: Well, it just stuck with 26 me because of where they went. 27 28 MS. OWEN: Yeah. 29 30 MR. McMANUS: Just for you guys' information, they did a survey, they had some houses up 31 there and they -- they had a project where they did 32 band them, they put a microchip in the..... 33 34 35 MS. OWEN: Yeah. 36 37 MR. McMANUS: ....red breast robins 38 and when they flew off a pair came back again and 39 nested in that same house. But they follow them, they 40 went to Brazil. 41 42 MS. OWEN: Yeah. Yeah. 43 44 MR. McMANUS: I said, man, that's a 45 place to go for the winter.... 46 47 MS. OWEN: Yeah. 48 49 MR. McMANUS: .....to Brazil, man. 50

Page 352 (Laughter) 1 2 3 MR. McMANUS: Birds got smarts. So I 4 just wanted to throw that out there. I was -- I was 5 amazed by that. I mean..... 6 7 MS. OWEN: It is, it's pretty 8 incredible where some of these things are headed to, 9 veah. 10 11 MADAME CHAIR ENTSMINGER: You wonder 12 how long it takes them. 13 14 MR. WRIGHT: All winter. 15 16 MADAME CHAIR ENTSMINGER: Yeah. 17 18 MS. OWEN: Yeah. Yeah. 19 20 MADAME CHAIR ENTSMINGER: To turn 21 around and come back. 22 23 MR. BASSICH: Madame Chair. 24 25 MADAME CHAIR ENTSMINGER: Andy. 26 27 MR. BASSICH: Yeah, just maybe a quick 28 comment. You know, your comments about the Karelian 29 bear dogs, very effective dogs, very cool dogs. But, you know, traditionally living out in the Bush sled 30 dogs do exactly the same thing, it can be done -- can 31 be trained to do exactly the same thing as Karelian 32 33 bear dogs. And they have been in existence and used in 34 Alaska in the remote areas for centuries. So and I do 35 know that the Park does have larger does now than they 36 used to. 37 38 MS. OWEN: Yeah. 39 40 MR. BASSICH: And actually a lot of them are from my line of dog originally and they are 41 42 excellent bear dogs and are very, very trainable with 43 the disposition that they have. 44 45 MADAME CHAIR ENTSMINGER: And they're 46 for sale. 47 48 MR. BASSICH: No. 49 50

Page 353 (Laughter) 1 2 3 MR. BASSICH: They already have their 4 own. 5 6 MS. OWEN: Yeah. Actually I don't 7 doubt that at all. The one thing that I will say is 8 that in our experience anyway, I'm not quite sure why, but the moose that we tend to have issue with around 9 10 headquarters at least when those dogs are chained at 11 the kennels, are not in the least bit deterred about getting in among those dogs. Now I'm sure that if we 12 13 pulled individuals out of there and trained them as 14 moose dogs..... 15 16 MR. BASSICH: Yeah. 17 18 MS. OWEN: .....so to speak..... 19 20 MR. BASSICH: That -- that's what.... 21 22 MS. OWEN: .....they probably -- yeah, 23 they'd probably be.... 24 25 MR. BASSICH: .....that's what it 26 takes, both with bears..... 27 28 MS. OWEN: Right. 29 30 MR. BASSICH: .....and with the..... 31 32 MS. OWEN: Right. Absolutely. 33 34 MR. BASSICH: .....with the moose. 35 36 MS. OWEN: Absolutely. 37 38 MR. BASSICH: They're extremely 39 trainable. 40 41 MS. OWEN: Yeah. The one thing that I 42 will say is that I would imagine that our kennel 43 manager would not be real keen on the idea, but you 44 never know. 45 46 MR. BASSICH: Well, if the Park Service 47 is trying to emulate to a certain extent the cultural 48 practices that take place in remote Alaska over the 49 centuries like what has happened in, you know, oh, 50

Page 354 what's the area at the end of the Park.... 1 2 3 MS. OWEN: In Kantishna. 4 5 MR. BASSICH: ....in Kantishna. 6 7 MS. OWEN: Yeah. 8 9 MR. BASSICH: Those practices I 10 quarantee you were in place..... 11 12 MS. OWEN: Uh-huh. 13 14 MR. BASSICH: .....back then. So..... 15 16 MS. OWEN: Oh, sure. 17 18 MR. BASSICH: ....just kind of an 19 interesting observation. I'm not putting down the 20 Karelian bear dogs because I've been around them, 21 they're really cool..... 22 23 MS. OWEN: Yeah. 24 25 MR. BASSICH: .....but the sled dogs do 26 exactly the same thing. 27 28 MS. OWEN: Yeah. 29 30 MR. BASSICH: And then the other 31 comment I had was did you know that hairy marmots make 32 really good banjo skins? 33 34 (Laughter) 35 36 MS. OWEN: I did not know that. 37 38 MR. BASSICH: They do. I just wanted to share that just to kind of -- I know it's getting 39 late in the evening, but the very first banjo I ever 40 made, I tried to go to a humane shelter where they put 41 42 away cats because that was recommended..... 43 44 MS. OWEN: Oh, yeah. Yeah. 45 MR. BASSICH: ....and when I went in 46 47 to get a cat the woman asked me why I wanted a dead cat and I told her I needed a banjo skin and she threw me 48 out of there. And so I.... 49 50

Page 355 (Laughter) 1 2 3 MS. OWEN: I can see that. 4 5 MR. BASSICH: .... I went up and I 6 found a hairy marmot and I dispatched him and skinned 7 him and dehaired him and believe me it made a really 8 beautiful sounding banjo. It's just one..... 9 10 (Laughter) 11 12 MR. BASSICH: ....one of those things 13 that when you're out in the Bush and you're in a 14 survival mode.... 15 16 MS. OWEN: Uh-huh. 17 18 MR. BASSICH: ....you need to know 19 these types of things. 20 21 (Laughter) 22 23 MADAME CHAIR ENTSMINGER: I would think 24 more for my hat. 25 26 (Laughter) 27 28 MR. STEVENSON: The record will reflect 29 those recommendations. 30 31 MS. OWEN: Oh, goodness. Okay. All right. Well, then moving on for just a couple minutes. 32 33 A couple of projects that Amy Craver had asked me to 34 just describe to you from the recent or the last Denali 35 Subsistence Resource Commission meeting. 36 37 Let's see, in partnership with Ahtna, 38 Alaska Geographic and Denali organized a lecture on 39 Ahtna history for the communities of Healy, McKinley Village and Cantwell and the Park staff and the Denali 40 SRC. This happened at our last SRC meeting. The 41 42 lecture was given by anthropologist, Bill Simone and Ahtna president and CEO, Michelle Anderson in Cantwell 43 after the SRC -- the last SRC meeting that we had, 44 45 traditional subsistence practices and transference of knowledge to younger generations. This is a project 46 that focused on the upper Kuskokwim and Dena'ina 47 48 Athabascan peoples of Denali National Park and Lake 49 Clark National Park and Preserve, helping to understand 50

Page 356 the environment around them. During the first year of 1 2 this project our focus included preparation and 3 planning including identifying what our needs were for 4 the forthcoming year. There was a review and 5 discussion and documentation of current methods, goals 6 and challenges as researchers working with rural 7 communities on subsistence and cultural related topics. 8 9 The second year of the project the team 10 conducted fieldwork in Nondalton and in Nikolai. And 11 to date they've conducted and transcribed 24 interviews and are working on developing a draft booklet as the 12 13 result of those interviews. 14 15 And then the third project is the 16 subsistence place names and oral tradition, 17 translations of tribal narratives into the Alaska 18 Range, the Upper Kuskokwim River people. This project 19 returns ancient knowledge of the people of the Upper 20 Kuskokwim back to modern day people of the Upper Kuskokwim. Subsistence stories, travel narratives and 21 22 additional place names tell the importance of places in 23 a yearly cycle as well as show how they have been accessed in the past. Ten elders have been interviewed 24 25 and their traditional subsistence stories were 26 transcribed and given to the Park. Our place names inventory has grown from little more than 300 to over 27 28 800 place names. Audio recording were uncovered during 29 this process that were previously unknown. Five or six 30 of those recordings are detailed travel narratives from the 1920s and 1930s. And so far four of those have 31 32 been translated. The fifth one is in progress. And FY20 will take us into creating a final product of 33 34 those travel narratives. 35 36 So three projects that are all related 37 to the Denali SRC. And that's everything I have. 38 39 MADAME CHAIR ENTSMINGER: Any 40 questions. 41 42 (No comments) 43 44 MADAME CHAIR ENTSMINGER: Thank you, 45 Pat. 46 47 MS. OWEN: And thank you. And if 48 anyone is interested in any of these pamphlets there 49 are some on the back table. I'll leave a handful of 50

Page 357 each one of them back there if you want to take a look. 1 2 3 Thank you. 4 5 MADAME CHAIR ENTSMINGER: Thank you. 6 7 MR. BASSICH: And hairy marmots taste 8 good too. 9 10 MADAME CHAIR ENTSMINGER: Yes, I'm 11 aware. It's really good if you burn the hair off and then roast it over a fire. I learned from my Native 12 13 friends. 14 15 Next is Yukon-Charley. 16 17 Marcy. Oh, it says Marcy, but we got 18 the superintendent also. 19 20 MS. OKADA: Good afternoon, Madame 21 Chair, Council members. My name's Marcy Okada. I'm 22 the subsistence coordinator for Yukon-Charley Rivers 23 National Preserve. I'm just going to provide a quick 24 update, handouts were passed around. 25 26 We recently met with the Eagle 27 Subsistence Working Group on February 24th in Eagle and 28 we shared information about the compendium for Yukon-29 Charley and then we also had a discussion on cabin use 30 permits within the Preserve unit. We talked about a 31 17B easement and provided updates on staffing and hiring and then also updated folks about wildlife 32 33 projects and surveys, including the next two that I'm 34 going to share with you. Unfortunately our biologists 35 couldn't be here today, they're getting ready to go out 36 in the field tomorrow. 37 38 So our long awaited moose survey was 39 conducted this past November. Biologists completed the eighth annual moose survey for the Preserve. 40 In 41 addition to the regular survey they were also able to 42 complete an aerial stratification survey in which they 43 first flew the entire study area prior to their moose 44 survey and then classified all survey units as either 45 high or low density moose habitat. Due to both the addition of the aerial stratification and consistently 46 47 inclement weather this was the longest moose survey on 48 record for the Preserve. The 2019 fall estimate for 49 Yukon-Charley area is 873 moose with a 90 percent 50

Page 358 confidence interval and a density of .28 moose per 1 2 square mile. The extra work to fly an aerial 3 stratification appears to have paid off as the estimate was the most precise of any survey to date. The 4 5 results suggest that the moose population in this area appears to be fairly stable over the last 10 years and 6 7 a technical report will be forthcoming. 8 9 Any questions? 10 11 MR. BASSICH: When you surveyed, I know in the past you've given presentations from Park 12 13 Service on -- they have different areas that they 14 survey at various times of the year. Which area did 15 they survey this year or was it the entire Preserve, it 16 was just one area, wasn't it? 17 18 MS. OKADA: It was the entire Preserve 19 and it came out of the stratification work they did. So they were primarily focusing on areas that had good 20 moose habitat, but it was mostly the entire Preserve. 21 22 23 MR. BASSICH: Just for the record .28's 24 not that great of a moose density. That's got to be 25 one of the lowest in the State or close to it I would think, isn't it, it's pretty low. I mean, I understand 26 27 what you're saying, it's stable, but it's pretty poor 28 density for the area. Is that because of the habitat? 29 30 MS. OKADA: So historically it's never 31 been good moose habitat and so it's -- it's a stable 32 population in comparison to previous surveys, but 33 overall the moose habitat isn't the greatest. 34 35 So I'll move right along to wolf 36 studies that are being conducted. The Park Service is 37 currently monitoring six packs. Five packs 38 successfully denned and raised pups this past fall, 39 with one pack successfully raising 12 pups as of last 40 October. Pack ranges or pack sizes range from two to 41 18 wolves. The fall pack count averaged nine wolves 42 which is higher than the long term average of 7.7 43 wolves. 44 45 Park Service is working on studies evaluating how wolf death in the pack affect pack 46 structure and productivity, how prevalent disease is, 47 48 how wolves use the landscape and what their winter diet 49 consists of. Additionally we are quantifying wolf 50

Page 359 population dynamics, so survival, reproduction, 1 2 immigration after cessation of lethal wolf control 3 activities over 10,000 square miles in the Upper Yukon 4 River basin. This is a five year study so funded for 5 2019 through 2024. And it's a collaborative effort between ADF&G and the Park Service. 6 7 8 So currently our biologists are getting ready to get -- go out into the field and it's to 9 10 conduct more wolf radio collar work and to track the 11 wolves that are currently radio collared. And then also to capture moose and to do some radio collar work 12 13 on moose. So they want to maintain 30 moose in the 14 Preserve as collared. And then that's going to collect data on demographics, reproduction and survivability of 15 16 moose within the Preserve. 17 18 MADAME CHAIR ENTSMINGER: Any 19 questions. 20 21 (No comments) 22 23 MADAME CHAIR ENTSMINGER: Maybe the 24 wolves are eating the moose. 25 26 MR. BASSICH: Certainly a little more caribou.... 27 28 29 MADAME CHAIR ENTSMINGER: More of them. 30 31 (Laughter) 32 33 MR. GLANZ: Madame Chair. 34 35 MADAME CHAIR ENTSMINGER: Bill. 36 37 MR. GLANZ: I was just wanting to 38 comment on your moose survey, you got to realize how much territory, you know, Yukon-Charley is 39 40 uninhabitable by moose. I mean, with mountain ranges and the Hannah Creek area and all -- there's no moose 41 that can live up in those hills I don't think. There's 42 nothing to eat and it's pretty steep country to crawl 43 44 in and out of. 45 And then I went over the top of Charley 46 47 and down the Goodpaster and another trip down the 48 Chisana, there's not good moose habitat until about a 49 third of the way down from both them rivers. There's 50

Page 360 nothing in there, it's just all -- and in the winter 1 it's all ice and so there's not much growing going on 2 3 there from what I can observe. 4 5 But it's still a good job, guys. 6 Thanks. 7 8 MADAME CHAIR ENTSMINGER: Any other 9 questions. 10 11 (No comments) 12 13 MADAME CHAIR ENTSMINGER: Thank you, 14 Marcy. Anything else. 15 16 (No comments) 17 18 MADAME CHAIR ENTSMINGER: No. Okay. 19 Next is Wrangell-St. Elias. 20 21 MS. CELLARIUS: Thank you, Madame 22 Chair, Council members. For the record I'm Barbara 23 Cellarius, I'm the subsistence coordinator and cultural 24 anthropologist for Wrangell-St. Elias National Park and Preserve. And I'm going to be tag teaming this report 25 26 with Caroline Ketron who can introduce herself a little 27 more when we get to her part of the report. She'll do the wildlife report and I will do the other topics in 28 29 the handout. But we'll do them in order because that's 30 probably the easiest thing for you to follow along 31 with. 32 33 The first report is from our -- Mark 34 Miller, he's our team lead for research, stewardship 35 and science. Does everybody have it, it's got a logo 36 with -- on the front, mine's in color, but it's a logo 37 with a drum, a piece of DNA and a salmon. 38 39 MR. STEVENSON: Through the Chair. 40 There were handouts provided to each member which you 41 should have at your work -- in front of you. 42 43 MS. CELLARIUS: Yes, that one. 44 45 MR. STEVENSON: There are two of them. 46 That's -- the one that Tim -- Mr. McManus is holding up 47 right now is the first. 48 49 MS. CELLARIUS: Yes. 50

Page 361 MR. STEVENSON: That's the one, yes? 1 2 3 MS. CELLARIUS: Yes. Yes. So it has the Park logo, but then it also has the logo for the 4 5 Copper River Basin Symposium. And so Karen actually 6 talked about this, this was an event that we had two 7 weeks ago. The Park hosted it at the Park visitor 8 center, but it involved Copper River Watershed Project, 9 Wrangell Institute for Science and Environment, the 10 Ahtna Intertribal Resource Commission and the Alaska 11 Department of Fish and Game. And so Karen talked about it so I will move on unless there are questions about 12 13 that. 14 15 (No comments) 16 17 The Park is looking for some natural 18 resource funding to do a couple of subsistence related 19 projects. The Natural Resource Advisory Committee is 20 actually meeting in Anchorage this week so we might 21 know more soon about a project to apply genetic 22 analysis of Copper River sockeye salmon stocks to 23 inform in-season decision-making. And then there's a second project they're looking for that would quantify 24 25 river ice conditions to inform decisions about winter 26 access to subsistence resources. 27 28 So Karen talked about this a little 29 bit. The fact that it had -- it's a topic that has 30 come up in discussions with our Subsistence Resource Commission. The Ahtna Intertribal Resource Commission 31 32 is -- their staff and their anthropologist, Jim Simon, 33 are working at a project to do local and traditional 34 knowledge interviews about how snow and ice conditions 35 are affecting winter access. 36 37 I am working -- I have -- I currently 38 have funding to work with the -- Dana Brown and Todd 39 Brinkman at the University of Alaska Fairbanks to use 40 remote sensing data to also look at sort of 41 historically at river ice conditions and then also sort 42 of try to take a closer look with more recent, higher 43 quality, higher resolution data sort of at different 44 spots on the river. And then this would -- this 45 project that we're seeking funding for is sort of the 46 third year of that project to collect additional 47 information on that topic. 48 49 And then the next report is the 50

Page 362 fisheries report. And I will just draw your attention 1 2 to the fisheries report. So most of the fisheries 3 report has to do with the Copper River, but we do -the Park has funding from the Fisheries Resource 4 5 Monitoring Program to -- for a project that's designed 6 to gather baseline data of burbot populations in lakes 7 of the Upper Tanana, Upper Yukon drainages. In 2019 8 they went to Black Hill Lake in the Upper Beaver 9 drainage, they did some fieldwork in June and put in a 10 bunch of hoop traps for 48 hours and did not catch any 11 burbot or anything else. They did some hook and line 12 sampling and confirmed the presence of Arctic grayling. 13 14 15 There is one more year of fieldwork 16 planned for this study. They're looking at potentially Ptarmigan Lake or one of the Welsey Lakes in Tetlin 17 18 National Wildlife Refuge. And then they might also go 19 out to Rock Lake and do some basic assessments. 20 21 And once this project is done Dave is 22 going to -- plans to come to an Eastern Interior RAC meeting and give you a presentation on the project. 23 24 25 So that's all I'm going to tell you 26 about the fisheries report unless you have questions about what's going on in the Copper River. And if not 27 I am going to turn it over to Caroline who's going to 28 29 give you the wildlife report. 30 31 MADAME CHAIR ENTSMINGER: Anv 32 questions. 33 34 MR. McMANUS: I got another one. 35 36 MADAME CHAIR ENTSMINGER: Go ahead, 37 Tim. 38 39 MR. McMANUS: All right. Thank you. 40 My question is when did you guys start dropping your mesh size from -- because I know I've heard things that 41 42 you used to have eight inch mesh on the Copper River 43 and now it's down to six inch. Do you have any data on 44 that and how long you been doing it and what's the 45 return size on the fish? 46 47 MS. CELLARIUS: So the mesh size would 48 apply to the commercial fishery that's at the mouth of 49 the river, outside the mouth of the river. And I don't 50

Page 363 have -- that would be something that Fish and Game 1 would have information on. I don't have specific 2 3 information. Once you get inside the -- into the river 4 people are using dipnets, rod and reel and fish wheels 5 to harvest salmon. 6 7 MR. McMANUS: Thank you. 8 9 MADAME CHAIR ENTSMINGER: Andv. 10 11 MR. BASSICH: I think Tim brings up an interesting point. It might be really interesting next 12 13 year or if you have some to pull some information 14 together just to look at if there's been any studies in 15 declining size of salmon on the Copper River. 16 17 MADAME CHAIR ENTSMINGER: Yeah, you can 18 get that from her. 19 20 MR. BASSICH: I think you'll find that 21 it is, but, I mean, it's always good to look back over 22 time and it would be really interesting to know what some of the data sets are, how long they are and I'm 23 24 sure the commercial fisheries has it going way, way 25 back. It's just in-river might be a little bit more difficult to tease that information out. But that 26 27 might be pretty interesting information to get a report 28 on. 29 30 MS. CELLARIUS: There are projects 31 going on, I wrote it down and I'll check with our 32 biologist. 33 34 MR. BASSICH: Thank you. 35 36 MADAME CHAIR ENTSMINGER: Okay. Very 37 good. Thank you. 38 39 Okay. Go ahead. 40 41 MS. KETRON: Thank you, Madame Chair. 42 For the record I'm Caroline Ketron, I'm a biologist technician at Wrangell-St. Elias and I'm giving our 43 spring wildlife report on behalf of Judy Putera who I 44 45 believe is at the Southcentral RAC. I have updates on the Chisana caribou herd, dall sheep surveys, brown 46 47 bear surveys and moose surveys. 48 49 Table one in the handout which is in 50

the wildlife section of the whole big packet summarizes 1 2 Chisana caribou data from survey work done in 3 collaboration with Fish and Game and with the Yukon Department of Environment. We completed October sex 4 5 and age composition counts for the Chisana herd and the 6 combined calf ratio for the whole herd on both the 7 Alaska and Yukon sides of the border was pretty good, 8 17 calves per 100 cows. This is above the desired 9 threshold for the Chisana Caribou Herd Management Plan 10 to allow continued subsistence harvest based on that 11 metric. For bulls per 100 cows, the decision threshold 12 is 35 per 100. And on both sides of the border the bull to cow ratio was well above that. So those are 13 14 both good. 15 16 The next section, a dall sheep survey 17 project over the past few years has covered multiple 18 National Park Service units including Gates of the 19 Arctic, Denali, Western Arctic and also Wrangell-St. 20 Elias. The objective is to understand why dall sheep 21 productivity is different in different Parks. This 22 year's survey in Wrangell-St. Elias only covered a 23 couple of survey units, units 3 and 4. So they don't 24 necessarily represent the entire Park and Preserve. 25 26 For table two Judy summarized these data specifically to Wrangell-St. Elias from 2016 to 27 28 2019 and then compared them to a 2010 sheep survey that 29 used the same distance sampling technique. The 2010 30 survey did cover the entire Park and Preserve, but in 31 order to compare these data she parsed out those same 32 survey units. So from just this -- these sample areas 33 the sheep population or excuse me, dall sheep 34 productivity in the Park has been relatively stable 35 over time, but again this applies just to that -- just 36 to that section. 37 38 We also received funding for a one time survey project to study brown bear densities in the 39 Park. The method used multiple observers in aircraft 40 41 flying over a sample of the survey grid which is figure 42 two in your packet. Many of the sample units were 43 survey -- surveyed twice. The second time by a 44 different pilot and observer team to determine 45 sightability of bears. So whether or not bears are 46 there and we're just not seeing them or whether they 47 are really visible and to use that to estimate bear 48 population density. 49 50

The table shows two different models 1 2 estimating density using different assumptions about 3 the sightability of bears. The results are similar between the two different models and they are within 4 5 the range of bear densities that have been documented 6 elsewhere. So that's our preliminary result using this 7 method. 8 9 We had moose surveys scheduled last 10 fall and we plan to use the GSPE, the geospacial 11 population estimate method which is commonly used by Fish and Game and Federal agencies. This method relies 12 13 on snow cover for sightability of moose, so being able 14 to spot brown moose on white snow and before the bull moose antlers drop. Conditions were too patchy in 15 16 Wrangell-St. Elias so we canceled that survey. Instead 17 we did a minimum count survey in the Upper Cooper River 18 area. So table four is the result of that. 19 20 It's a single survey area. The calf to cow ratio is very low, it's only 3.8 to a hundred 21 22 compared to previous surveys, but it's essentially a 23 sample size of one. So it doesn't account for variability in moose density over the large spacial 24 25 area we have in the Park. So I don't -- I don't know 26 that we're taking much from that until we have more 27 data. 28 29 So are there any questions for me, I'll 30 try to answer them and probably I will defer them to Judy, but I can at least note them down. 31 32 33 MADAME CHAIR ENTSMINGER: I just have 34 one. 2018 on the sheep.... 35 36 MS. KETRON: Uh-huh. 37 38 MADAME CHAIR ENTSMINGER: .....the lambs, 2018 was 131 and then 620 before and 727 after. 39 40 Is there any explanation to that, is it bad surveys 41 or.... 42 43 MS. KETRON: I would..... 44 45 MADAME CHAIR ENTSMINGER: 46 .....conditions. 47 48 MS. KETRON: ..... would suspect it 49 has to do with the areas they were able to survey, but 50

Page 366 1 I will note that and make sure Judy gets back to you. 2 3 MADAME CHAIR ENTSMINGER: Okay. Thank 4 you. 5 6 Anything else. 7 8 MR. WOODRUFF: Madame Chair. 9 10 MADAME CHAIR ENTSMINGER: Go ahead, 11 Don. 12 13 MR. WOODRUFF: Thank you, Madame Chair. 14 I'm curious if you in your moose surveys are looking at 15 the twinning rate at all because Fish and Game is doing 16 that in 20E south. 17 18 MS. KETRON: I don't know, but I will 19 ask that and..... 20 21 MR. WOODRUFF: Okay. 22 23 MS. KETRON: .....get you the answer. 24 25 MR. WOODRUFF: Thank you. 26 27 MR. FIRMIN: It's interesting that you 28 guys didn't catch any of the burbot in any of those 29 projects too. It's just -- I guess if there were none 30 there historically or the migration or, you know..... 31 32 MS. CELLARIUS: And that was just that 33 one lake that we went to. There were other lakes that 34 were surveyed in other years where burbot were found. And so when Dave comes and gives you the presentation 35 he'll -- this -- he just provided the data for this 36 37 last.... 38 39 MR. FIRMIN: Okay. 40 MS. CELLARIUS: .....the last summer. 41 42 So there were other years he visited other lakes and did found burbot -- find burbot. So we'll get the 43 44 combined total for that project when he comes and does 45 a presentation. 46 47 MADAME CHAIR ENTSMINGER: Barbara, was 48 that the lake -- was it Grizzly -- no, what was the 49 name of that lake that -- no, I'm asking a question 50

Page 367 about remember the -- where people had snowmachined in 1 2 and took a lot of burbot all at once, a big group of 3 people. Is that the same lake that was surveyed? 4 5 MS. CELLARIUS: No, this is a -- this 6 is a totally different..... 7 8 MADAME CHAIR ENTSMINGER: Okay. 9 10 MS. CELLARIUS: ....lake. 11 12 MADAME CHAIR ENTSMINGER: All right. 13 14 MR. WRIGHT: Between that one I flew, 15 but I wouldn't know. 16 17 MADAME CHAIR ENTSMINGER: Uh-huh. 18 19 MS. CELLARIUS: He -- Dave has gone 20 back to that lake and done some sort of follow-up work 21 on that lake. That one actually I believe is in the 22 Copper River drainage and this project is in the Yukon 23 River drainage. They're -- that lake is just like just 24 over the line, but.... 25 26 MADAME CHAIR ENTSMINGER: Yeah. 27 28 MS. CELLARIUS: ....this project 29 focuses on lakes in the Tanana Yukon River drainage. 30 31 So if there's no more questions about 32 wildlife I just have one -- there's one..... 33 34 MADAME CHAIR ENTSMINGER: Any more 35 questions on wildlife? 36 37 (No comments) 38 39 MADAME CHAIR ENTSMINGER: All right. 40 Go ahead. 41 42 MS. CELLARIUS: Okay. The last -- the 43 last four pages -- well, the last -- there's three pages discussing Federal subsistence hunt -- hunting 44 45 permits that are issued for Wrangell-St. Elias National Park and Preserve. The majority of them are actually 46 for unit 11, but I'll just give you an update on a 47 couple of the hunts in unit 12. 48 49 50

Page 368 So the Chisana caribou herd hunt takes 1 place in the far, sort of southeast corner of unit 12 2 3 and the hunt was established in 2012. We set a harvest quota based on the management plan that Caroline 4 5 referred to earlier, that harvest quota has been seven 6 bull caribou for several years and a total of four 7 permits were issued, two people hunted and one caribou 8 was harvested. This is a pretty difficult area to 9 access so most of the hunting is by the local residents 10 who actually live in the hunt area. 11 12 And then the other table I will bring your -- call your attention to is table two, the joint 13 14 State/Federal permits for the fall moose hunt in 15 portions of unit 11 and 12. 16 17 So the top table is all hunters. This 18 permit is available both to Federally-gualified 19 subsistence users and anyone else who can hunt under 20 State of Alaska regulations. So in 2019 277 permits were issued, 159 people hunted and 21 animals were 21 22 harvested. Fourteen of those harvests were in unit 11 23 and seven were -- of the harvest were in unit 12. 24 25 The table below is for Federallyqualified subsistence users. And we had 171 -- 172 26 permits issued to Federally-gualified subsistence 27 28 users. And it turns out that all of the animals 29 harvested were by Federally-qualified subsistence users 30 this year. That's not always the case, but that's 31 happened -- that was the case this year. 32 33 And then on the back page -- and if you 34 have questions about the other tables I can answer 35 them, I'm just trying to move through this quickly and focus on unit 12. On the back page there's just a 36 37 summary of some projects that are going on. Karen mentioned the Ahtna Ethnographic Overview and 38 39 Assessment that I'm working on with the Ahtna Tribal 40 Resource Commission. There are two traditional and 41 local knowledge projects we're working on with Ahtna 42 Intertribal Resource Commission. I mentioned the local 43 knowledge of winter environmental conditions and the 44 impact of subsistence access. And then there's one 45 looking at the caribou herds in the Park. We're doing 46 -- in-house we're working on taking a manuscript on the ethnohistory of the Chisana River basin and turning it 47 48 into a publication. 49 50

Page 369 And then the -- and then I already 1 2 talked about the remote sensing project related to snow 3 and ice. 4 5 So that completes our report. If you 6 have any questions. 7 8 MADAME CHAIR ENTSMINGER: Any 9 questions. 10 11 (No comments) 12 13 MADAME CHAIR ENTSMINGER: Okay. 14 15 MR. WOODRUFF: Thank you. 16 17 MADAME CHAIR ENTSMINGER: Thank you 18 very much. 19 20 Are there any ADF&G, we did that BLM 21 one already, people that want to speak. 22 23 MR. HERRIGES: Madame Chair, I 24 have.... 25 26 MADAME CHAIR ENTSMINGER: You have 27 more. 28 29 MR. HERRIGES: Yeah, just.... 30 31 MADAME CHAIR ENTSMINGER: Okay. 32 33 MR. HERRIGES: ....a brief 34 presentation. 35 36 MADAME CHAIR ENTSMINGER: Sorry. Ι 37 thought we covered it. 38 39 MR. HERRIGES: Madame Chair and 40 Council, how's that sound? 41 42 MADAME CHAIR ENTSMINGER: Good. I saw 43 you stacking it, I thought you were taking them home. 44 45 (Laughter) 46 47 MR. HERRIGES: Making good use out of 48 these. 49 50

Page 370 1 MADAME CHAIR ENTSMINGER: Yeah. Fire 2 starter. 3 4 MR. HERRIGES: I'll show a few videos 5 actually shortly, but -- is why I'm sitting here. I'm 6 Jim Herriges with the Eastern Interior Field Office of 7 BLM. I'm just going to provide you a brief update and 8 you can see by the handout it should be pretty brief. 9 10 I'll just mention -- we've talked about 11 caribou pretty well I think. I would just mention that this year is the heaviest use of the White Mountains 12 13 area in the winter that we've seen of caribou. 14 Possibly as much as half of the herd has been hanging 15 out in that area which is -- and further west than the 16 White Mountains which is fairly unusual. 17 18 I'll mention just briefly that I 19 encourage and would like you to encourage subsistence 20 users to if they have any input to contact BLM, me directly. And I -- I mean, I rely mostly on you guys 21 22 and being in Fairbanks I'm not necessarily out amongst 23 the users a lot. So please encourage them to feel free to contact me with any preferences or issues that come 24 25 up. Or my other biologist -- BLM's other biologist, 26 Craig Townsend. 27 28 We are still working on a Tribal 29 Management Plan for the Steese Conservation Area and 30 the White Mountains Recreation Area. We're expecting 31 we'll have public meetings sometime in 2020. 32 Another planning topic, the Central 33 Yukon Resource Management Plan which includes the 34 35 Dalton Highway is still ongoing. And the draft EIS 36 should be available sometime in 2020 as well. 37 38 Future fieldwork plans include -- we're 39 planning to begin a moose study in the Upper Draanjik 40 and Upper Little Black River collaring moose and 41 looking at movements and distribution. And we'll be doing that -- we're planning to do that in coordination 42 43 with Yukon-Charley National Preserve and so we'll have 44 kind of dual things going on there at the same time. 45 That study was one that was proposed in response to input from local residents during our resource 46 47 management plan process. 48 49 And that's all I have for kind of those 50

updates. I wanted to give you guys a chance to share 1 2 in the fun of some of our caribou camera video collars. 3 And these are only nine seconds long each and so they go pretty quickly. But if we're real short of time we 4 5 can cut it short on a few so you can wave at me or if 6 we carry on too long. 7 8 This is something that we're doing with 9 the University of Montana. Students are basically 10 dealing with the hundreds of thousands of clip -- video 11 clips that we have now from two summers worth of collaring. And I should say that this project is 12 13 something that we're doing with ADF&G and the Yukon 14 government. And the primary focus is to identify 15 caribou diet. And the first phase has been for the 16 2018 collars has been done which is a basic 17 classification of how -- what's the quality of the 18 video, what's the activity of the caribou and any 19 special behaviors or as well as identifying the 20 habitat. We're relying mostly on college student 21 volunteers for that and we're broadening that out 22 somewhat. If folks know of qualified, dedicated folks 23 who are interested in spending some time looking 24 through videos and doing this initial classification 25 work, there's a contact person and email in that 26 handout and I also left a -- some flyers on the table. So that's a fairly -- yeah, that -- we're -- that's 27 basically open to anyone who's dedicated, probably 28 29 upper high school would be the lower limit in terms of 30 age. And they'd have to be fairly serious folks. So 31 with that said I'm going to show you some of these. 32 First just some results of our initial 33 34 classifications that caribou eat -- spend most of their 35 time eating, 45 percent of their time, 25 percent 36 ruminating, 12 percent walking, that's pretty much most 37 of their life. 11 percent stationary, but awake and 38 about 5 percent sleeping and about three out of a 39 thousand videos they are drinking. 40 41 This graph shows the number of calves 42 seen in videos and it peaks right at the end of May as 43 you would kind of expect. We'll see a fair number of 44 calving videos. 45 46 And then insect avoidance behavior. Looks like it peaks in the latter half of July which is 47 48 past the peak mosquito season. And so that's probably in -- at least in 2018 probably botflies were bothering 49 50

Page 372 caribou more than mosquitos were. Or at least the 1 2 behavior is more visible on videos. 3 4 Of course I had it all set up and it 5 working fine and now something's going on here. One 6 second, please. 7 8 Use of mushrooms is one thing we have a big interest in and so I've got a few -- more than a 9 10 few videos here of caribou focusing on mushrooms. Thev 11 really snarf them down when they're available. 12 13 This is a burn. Mushrooms seem to be 14 The camera's on the collar. Face -more abundant. 15 it's hanging around their neck and facing forward. And 16 this is just an example of how good of -- how much they 17 appreciate scenery. 18 19 (Laughter) 20 21 MR. HERRIGES: There's a collar you can 22 see on that shadow. They like to spend time on 23 snowbanks even in May which this video is in. 24 This is -- some of these are different 25 26 I have four or five caribou mixed in here. caribou. 27 Foraging on willows, these look pretty well foraged on. So probably in the core summer range. They suffer with 28 29 smoke just like we do. Closeups of friendly bulls. 30 Having a bite of willow and then mixing it up with some 31 fireweed flowers. Pretty selective foraging on lichens there, going from little patch to little patch. 32 Getting some small mushrooms as well on -- in the 33 alpine areas. And in some places really dense like --34 35 this probably isn't anywhere in the core of the summer 36 range where lichen is pretty well used. This caribou 37 kind of turned up that past ripe mushroom and went to 38 another one. 39 40 (Laughter) 41 42 MR. HERRIGES: Taking photos of their 43 friends as they stand in the river. This is a pretty 44 new calf here, still wet. Twenty minutes later, this 45 is the 21st of May, it's standing. And then cleaning up after the -- cleaning up the site afterwards. This 46 47 caribou had that calf, yeah, that's the same calf. And 48 that was the placenta and everything it was consuming. 49 And that month and a half old already. This is the 50

same calf here. Eating some horsetail. More nice 1 2 scenery shots. More really heavy lichen there. Same calf, August, so she survived -- the calf survived that 3 long. Yeah, and through the -- into September. 4 5 Success. Again pretty selective looking for bits of 6 lichen in that case. It's traveling through black 7 spruce which they do a lot of. I think this one is 8 going for some young blueberry leaves which they don't 9 normally eat very much of. This is an area where 10 lichen is very sparse, but probably once existed, but 11 yet it's -- caribou are still looking for those bits. Fun walking through some tussock tundra and what looks 12 like a burned -- black spruce burn. Lots of forage 13 14 there, but it's focusing on the willows there. More willow foraging. Early July nap in a snowfield. More 15 early July bug avoidance type behavior. Little 16 17 bluebell, little bit of dwarf fireweed. Caribou at 18 Eagle Summit about a day before the season started. 19 It's calm right now. This caribou, yeah, crossed the 20 highway before the season. 21 22 And I think we're getting close to the 23 end of them. Another calf -- another cow with another calf. And more shots of that calf and other cows' 24 calves. Crossing an ATV trail, but didn't actually 25 26 want to use it. Nose down, probably -- looks like it's just kind of keeping it down out of the -- away from 27 28 the bugs. 29 30 MR. WOODRUFF: They go through there a 31 lot faster than I can. 32 33 (Laughter) 34 35 MR. BASSICH: Faster than any of us 36 can. 37 38 MR. HERRIGES: Walking on a game trail, 39 probably a caribou trail, created -- a recently created caribou trail. Eating some dirt, just kind of in a 40 41 little base of a tree root, but we also see them using 42 some big muddy licks as well. Early June there, still 43 young calves. Still the 2nd of June. These calves are 44 pretty mobile already. You'll see in a minute 45 they're.... 46 47 MR. McMANUS: Did you catch any 48 pictures of caribou with predators or not? 49 50

Page 374 1 MR. HERRIGES: No, except for a 2 scavenger on a dead one. 3 4 There's Joseph Creek there. We do know 5 the locations because there's a GPS location. Some 6 calves playing, take off running, circle back. That's 7 the 13th of June and they are already pretty mobile. 8 9 And with that I'll call that good and 10 see if there's any other questions on anything I 11 mentioned. If not, I'll say thanks for another good 12 meeting and we'll see you next time. 13 14 MR. GLANZ: How many -- how many are up 15 there in the Crazies and the Whites, the caribou, are 16 the majority of them over there in the new grounds or --17 the only reason I'm stating is why I keep trying to 18 tell Jeff let's take a break here and don't start 19 taking three or four a person at this time because 20 they've still been hanging around the same point for a 21 million acres burned, that's where they come in every 22 summer by us and they're hanging around there. But now 23 I see they're going to Fort Yukon, they're going up in the Crazies and the Whites and they're going in a 24 country where they probably grazed a hundred years ago 25 or 50 years ago. And, I mean, they're going back into 26 those areas now because everything's burned down where 27 28 they usually hung around every summer in our 29 neighborhoods. So I just.... 30 31 MR. HERRIGES: Yeah, well, there's 32 really -- with all the satellite collars that are out 33 we have really good information on where the herd in 34 general is going. I mean, we don't have a collar on 35 every animal obviously, but the -- yeah, they're 36 getting up to the ridges of the Crazies. In the 37 wintertime they are fairly restricted to areas that don't have a lot of burned areas. They pretty much 38 stick to the unburned areas. Not exclusively, but they 39 40 focus in the unburned areas. So that kind of limits 41 how far they'll go in some -- in some areas where 42 there's fairly continuous past fire history of burns. 43 44 MR. GLANZ: Yeah, because, I mean, we 45 started this caribou stuff in '91 with the coalitions 46 and everything and I just hate to see all that go to --47 go to heck after.... 48 49 MADAME CHAIR ENTSMINGER: Yeah. 50

Page 375 MR. GLANZ: ....how many years of 1 2 getting them up to where they're now in the thousands 3 instead of -- 30,000 instead of like 12 or 1,500 or 25 -no, how much did we have, 3,500 I think in '91 total 4 5 in that herd, you know. 6 7 MR. HERRIGES: Yeah. I think in '90 --8 yeah, more than that. 9 10 MADAME CHAIR ENTSMINGER: I think ..... 11 12 MR. HERRIGES: The minimum in the '70s 13 was like 6,500. So.... 14 15 MADAME CHAIR ENTSMINGER: Yeah, that's 16 what I remember.... 17 18 MR. HERRIGES: And in the.... 19 20 MADAME CHAIR ENTSMINGER: .....65. 21 22 MR. HERRIGES: .....in the mid '90s or 23 early '90s it was about 22,000. So but, yeah, that's 24 up to 85,000 from that is a pretty significant growth. 25 26 MR. GLANZ: So, I mean, but if their 27 weights are going down I understand, but they're not down enough where they're starving yet. But you could 28 29 still recover I'm sure. 30 31 MADAME CHAIR ENTSMINGER: Keep after 32 them, Bill, because my husband agrees with you. 33 34 MR. GLANZ: Right. You know, that's 35 what.... 36 37 MADAME CHAIR ENTSMINGER: Uh-huh. 38 39 MR. GLANZ: ..... mean, it's -- we're 40 a little premature starting to take three or four per 41 person, I mean. 42 43 MR. HERRIGES: I don't think there's 44 any plans for multiple caribou immediately. 45 46 MR. GLANZ: Okay. Good. Okay. 47 48 MR. HERRIGES: I think there's plenty 49 of opportunity to get a lot of harvest with..... 50

Page 376 MADAME CHAIR ENTSMINGER: Yeah. 1 2 3 MR. HERRIGES: .....one per person. 4 Yeah, they've shown that..... 5 6 MADAME CHAIR ENTSMINGER: With the 7 quota, uh-huh. 8 9 MR. HERRIGES: .....demonstrated that. 10 11 MR. WRIGHT: I -- yeah, we are seeing 12 some caribou in some funny places that they haven't 13 been in in a long time like you said. They ran from 14 the White Mountains down towards the Minto and Manley 15 this fall, hanging around the flats. And I've seen 16 some come into town and I just -- they've always been 17 behind Tanana a little bit, the Ray Mountains here, but 18 a few inland ones. But they've been being seen in some funny places that they haven't been seen in a long 19 20 time. 21 22 MR. HERRIGES: Yeah, I'm -- I'd 23 definitely be interested in getting -- yeah, hearing 24 about some of those more distant things that we may not have -- may not be enough caribou where there happens 25 26 to be a collar in the group, yeah. 27 28 MADAME CHAIR ENTSMINGER: Anything 29 else. 30 31 (No comments) 32 33 MADAME CHAIR ENTSMINGER: Okay. All 34 right. Thanks a lot. 35 36 MR. GLANZ: Nice show. 37 38 MADAME CHAIR ENTSMINGER: There -- I 39 quess I'll just make sure. No one from Fish and Game to speak. Is there anyone left that wants to speak. 40 41 42 MR. BURCH: Madame Chair, this is Mark Burch. I'm still hanging on here. And I am not aware 43 44 of any additional biologists that expected to give 45 reports to you. 46 47 Thank you. 48 49 MADAME CHAIR ENTSMINGER: With the 50

Page 377 permission of the Council could I ask him a question. 1 2 3 (No comments) 4 5 MADAME CHAIR ENTSMINGER: Mark, I am 6 interested in the protocol for data. I've had so many 7 people come up to me and say we got to go through so 8 and so, we got to go through George Pappas, we got to 9 go through Mark. What is the protocol for us as a RAC 10 to get information from Fish and Game? 11 12 MR. BURCH: Yes, Madame Chair. We're 13 working closely with George Pappas to work on 14 communication and we expect to work out more details 15 after the Federal Subsistence Board meeting. But for 16 now the protocol is for George to send requests to me 17 and I route them back through the management 18 coordinators and they consult with the area biologists 19 from there as necessary. So that's the protocol that 20 we're using. And we're trying to manage the time and be aware of the demands on the time of the area 21 22 biologist especially. 23 24 MADAME CHAIR ENTSMINGER: Well, it's 25 not working. I just want to let you know because there's a lot of things that have fallen through the 26 27 cracks here. We didn't have AC minutes that we could have had and there's a -- people are coming up and 28 29 saying they can't talk directly to someone and when all 30 we need is a report. So it just seems like it should be a little simpler. And I just want.... 31 32 33 MR. BURCH: Yeah, one of the things that we do is that we encourage OSM biologists and 34 35 others to use the reports that we publish. And the AC 36 request for instance, that information is posted to the 37 Department of Fish and Game, Board of Game page. So those are all available online in a couple of different 38 39 formats. 40 41 MADAME CHAIR ENTSMINGER: But in the 42 case of the Board of Game and the ACs meeting last 43 week, none of that was posted, we couldn't find any of 44 it. So I'm just letting you know that it doesn't seem 45 to be working. There's got to be some other system that when we need something we can get it rather 46 47 quickly. It's not happening. And I can talk to you 48 about it further. 49 50

Page 378 MR. BURCH: I'm happy to talk with you 1 2 more about trying to make things more efficient. 3 4 MADAME CHAIR ENTSMINGER: Okay. I 5 would love to do that. 6 7 Thank you. 8 9 MR. BURCH: You know how to get ahold 10 of me anytime. Feel free. 11 12 MADAME CHAIR ENTSMINGER: Okay. 13 14 MR. KRON: Madame Chair, members of the 15 Council. The OSM report is included in your 16 supplemental materials packet. Earlier in this meeting 17 Thomas Doolittle covered the first part of this report 18 so I will only be addressing the latter points. 19 20 As many of you know Gene Peltola 21 vacated the assistant regional director position at OSM in June, 2018. Over the past 21 months Tom Doolittle 22 did an outstanding job leading OSM as the acting ARD 23 24 for OSM. 25 26 And thanks to Tom. 27 Susan Detwiler was recently selected to 28 29 be the new ARD for OSM. She expects to be here by the end of March. Susan has over 25 years of experience 30 working in Alaska with the U.S. Fish and Wildlife 31 Service and the U.S. Forest Service. 32 33 34 She first went to work for OSM and the 35 Fish and Wildlife Service in 1989 when the subsistence program consisted of just two people. After leaving 36 37 OSM in 2000 Susan went to work in other areas with the 38 Fish and Wildlife Service, including the congressional and Native American liaison and endangered species 39 40 coordinator in Alaska and the Wildlife and Sportfish 41 Restoration Division chief in Region 8 down in 42 California and Nevada. 43 44 Susan has over 30 years in Federal 45 Service. She has a master's degree in natural resource policy from the University of Alaska Fairbanks and a 46 47 bachelor's degree in wildlife management from Humbolt 48 State University. Most recently Susan came from the 49 U.S. Environmental Protection Agency as the director of 50

Page 379 the Alaska Operations Office. She says she enjoys her 1 2 time -- she enjoyed her time in the subsistence program 3 and is very happy to be coming back. 4 5 Please join us in welcoming Susan back 6 to OSM. 7 8 Since the fall, 2019 Council meetings 9 there have been a number of staffing changes at OSM. 10 Tom Evans, one of our wildlife biologists retired while 11 another wildlife biologist, Megan Kosterman, left OSM for a position with the National Park Service. Our 12 13 budget analyst, Durand Tyler, took a promotion with a 14 new Joint Administrative Operations Division or JAO. 15 Over his -- even in his new position Durand has 16 continued to help arrange travel and logistics for 17 these Council meetings. OSM's executive secretary, Pam 18 Raygor, left for a promotion at the Bureau of Safety 19 and Environmental Enforcement. Our pathways 20 anthropologist student, Christine Brummer, left to 21 finish her master's degree and Jarred Stone, a 22 fisheries biologist took a promotion with the Alaska 23 Fish and Wildlife Service, Marine Mammals Protection Program. With these departures OSM staff was down 24 25 about 40 percent. 26 27 The good news is that OSM filled four 28 vacancies this past month. Tina Baker took a lateral 29 transfer from the JAO Division to become OSM's 30 administrative specialist. Michelle St. Peters 31 returned to OSM after working for the Wildlife and 32 Sportfish Restoration Program for about a month to resume her duties as the grants and agreement 33 34 specialist, while Sabrina Schmidt and Catherine Avery 35 were selected to fill two vacant administrative 36 assistant positions. 37 38 With these new arrivals OSM is still 39 down about 35 percent. However by the end of the 40 calendar year we hope to fill at least three to four 41 additional vacancies. OSM is currently waiting on 42 Human Resources to advertise one fishery biologist 43 position and the anthropology and council coordination 44 supervisor positions leaving us down 28 percent. 45 46 Thank you, Madame Chair. I'd be happy 47 to answer any questions that you have. 48 49 MADAME CHAIR ENTSMINGER: Any 50

Page 380 1 questions. 2 3 (No comments) 4 5 MADAME CHAIR ENTSMINGER: All right. 6 Thank you, Tom. 7 8 MR. KRON: Thank you. 9 10 MADAME CHAIR ENTSMINGER: There's been 11 a request to bring Michael up here. He's standing in 12 the back. 13 14 Would you come up. 15 16 MR. KOHLER: You guys obviously know 17 something I don't. Why am I here. 18 19 (Laughter) 20 21 MR. KOHLER: I wasn't planning on being 22 here for several years. 23 24 (Laughter) 25 26 MR. BASSICH: Thank you, Madame Chair. 27 Yeah, Michael, I asked her to call you up here because I wanted to express to you from not only myself, but 28 hopefully from the RAC here, I think everybody's in 29 30 agreement, that we really value your input and your time on the RAC and we're hoping that you continue to 31 keep reapplying because we think this situation will 32 33 change and we would love to have you back on our RAC. 34 I was actually quite shocked to see that you weren't 35 approved. There was -- we've got quite a bit of 36 discussion during this meeting, you weren't here for it 37 early on, trying to explain to us why we're in the 38 situation we're in. But the bottom line is the recommendation for you would be to just keep applying 39 and we would really love to have you back on here. 40 41 We're really -- I personally really valued your 42 enthusiasm and your commitment to it and I know you were really interested in working on some of the hunter 43 44 ethics and education programs and we'd really love to 45 have you back. 46 47 So thank you for your service and I'm 48 hoping that we can say continued service into the 49 future. 50

Page 381 MR. KOHLER: Thank you very much, Andy. 1 2 And I was listening over the teleconference yesterday 3 and I really appreciate you guys' input on the -- on this process and how it works and how we can make it 4 5 better. Because I think what you talked about very 6 passionately which is so true is what I found is just 7 being on here in the years that I have been it's a very 8 complex process and unless you guys, you mentors, are teaching us younger generation then there's going to be 9 10 a bunch of new people coming on here that have no idea 11 what to do in the future. So, no, I really appreciate 12 what you said. 13 14 MR. BASSICH: I guess the most 15 important thing to me is don't feel discouraged by it. 16 That's -- I mean, if I was removed from it I be pretty 17 discouraged. So maybe I'd be a little relieved too, I 18 don't know. 19 20 (Laughter) 21 22 MADAME CHAIR ENTSMINGER: I think I'd 23 be relieved.... 24 25 MR. BASSICH: Who wants to know how you 26 do.... 27 28 MADAME CHAIR ENTSMINGER: .....to see 29 if someone like that was in there. 30 31 (Laughter) 32 33 MR. BASSICH: But, you know, really please, stay engaged, we really need you engaged. 34 And 35 even if it's not in -- on the RAC, we really need to 36 keep you engaged in the process, whether it be through 37 the AC or any other thing that you become kind of 38 passionate about because I do know you have the passion 39 for fish and wildlife and the lifestyle and the 40 protection of what's needed for that lifestyle up here. 41 So stay engaged, you're really valuable and you've got 42 a good head on your shoulders and the enthusiasm and that's rare to find in people of your generation. 43 44 And.... 45 46 (Laughter) 47 48 MR. BASSICH: That's a compliment, a 49 heavy compliment to you. And that's not a cut to the 50

Page 382 others, it's just the facts, my friend, just the facts. 1 2 3 So thank you and it's good to see you 4 here, I'm glad you were able to come in and stop by and 5 visit us. 6 7 MR. WOODRUFF: Thank you. 8 9 MADAME CHAIR ENTSMINGER: Yes. Don. 10 11 (Applause) 12 13 MR. BASSICH: Hold on, Mike. 14 15 MADAME CHAIR ENTSMINGER: Don wants to 16 comment. 17 18 MR. WOODRUFF: I want to thank you for when I was off the RAC for a while and you stepped up 19 20 to the plate and took my seat at the Fortymile Coalition. I really appreciate the fact that you just 21 22 slid right in there and gave your input. 23 24 Thank you very much. 25 26 MR. STEVENSON: Madame Chair. 27 28 MADAME CHAIR ENTSMINGER: Yes. 29 30 MR. STEVENSON: I also wanted to thank you too, Michael. You showed a level of initiative 31 that is a real example for many of us and you were 32 33 always prepared and asked engaged questions. And I was 34 delighted to see that -- I did get your application at 35 11:45 p.m. this past Sunday. 36 37 So thank you. 38 39 (Laughter) 40 41 MADAME CHAIR ENTSMINGER: Yeah. And if 42 you ever need recommendations I'm there for you. 43 44 MR. BASSICH: All of us would be. 45 46 MADAME CHAIR ENTSMINGER: Yeah. Uh-47 huh. Yeah, I don't know if they let you do more than three, but that's -- I think you would have all of us. 48 Uh-huh. 49 50

Page 383 1 MR. FIRMIN: For sure. 2 3 MADAME CHAIR ENTSMINGER: Yeah. All 4 right. Hang in there, get your degree and we'll look 5 forward to see if you can get back on. 6 7 Thanks for all your enthusiasm. It was 8 awesome. 9 10 (Applause) 11 12 MADAME CHAIR ENTSMINGER: Okay. So we 13 have the annual report. But before I forget it, we 14 just need to finish up on Board of Game. We didn't say 15 who's going and we didn't -- I think just by nod of 16 head or motion, whatever, that we're taking --17 someone's taking the -- what we did at this meeting to 18 the Board of Game. 19 20 So a lot of times that's what I do, we just get a nod of head. Yeah, uh-huh. That kind of goes without saying that we're going to be taking our 21 22 23 position to the Board of Game. 24 25 And I wanted to say that I'm willing to 26 stay and represent the RAC unless somebody else wants 27 to do it. We're going to tag team because he's going 28 to be here for his AC. If you guys want me to do it, 29 I'm willing to do it. 30 31 MR. BASSICH: I second that. 32 33 MR. WOODRUFF: Yes, three. 34 35 (Laughter) 36 37 MADAME CHAIR ENTSMINGER: So we'll get --38 he's been typing away all day almost getting all our 39 stuff done for it. So we covered that. 40 41 MR. GLANZ: Thanks for doing that, Sue, 42 because.... 43 44 MADAME CHAIR ENTSMINGER: Uh-huh. I'm 45 going to stay for another day. 46 47 MR. STEVENSON: Madame Chair. 48 49 MADAME CHAIR ENTSMINGER: Go ahead. 50

Page 384 MR. STEVENSON: Sue, the Office of 1 2 Subsistence Management will cover your lodging and per diem for the extra time you're here. We thank you for 3 your being here, we really appreciate that. And I will 4 5 have composed for you this evening the notes regarding 6 the Board of Game proposals. 7 8 MADAME CHAIR ENTSMINGER: Okay. We'll 9 go over that together. 10 11 MR. STEVENSON: Thank you. 12 13 MADAME CHAIR ENTSMINGER: Uh-huh. 14 Okay. We've covered that. 15 Now the annual report. Does anyone 16 have any added things. It's on page 14 in the -- in 17 this -- our meeting book. 18 19 MR. STEVENSON: I think Mr. Woodruff 20 had two items. 21 22 MADAME CHAIR ENTSMINGER: Uh-huh. And 23 I did talk to Don, he had a couple items. 24 25 Don. 26 27 MR. WOODRUFF: Yeah. Thank you, Madame 28 Chair. We talked earlier about having geographic and 29 regional representation on our Council. And I think 30 that's a pretty important issue. 31 32 And the other thing is the training and 33 the type of training that we could receive at all 34 Council -- at an all Council meeting. For me 35 personally I think it's a really good step towards 36 leadership training for us. We don't get that any 37 other way really. And the one class that I remember 38 very vividly that I took at the last thing was the 39 Federal Indian Law taught by a Rabbi. It was totally awesome. Had no clue when I went in there and I was 40 41 really happy that I took the time to take that class. 42 43 Thank you. 44 45 MADAME CHAIR ENTSMINGER: So, Council, there's two topics. Would -- can we just agree or do 46 47 you want to do a motion, agree that -- to add these two 48 topics to our annual report. Can we just get a nod of 49 the head and we'll agree that we'll add those two 50

Page 385 1 topics in the annual report. 2 3 (Council nods affirmatively) 4 5 6 MADAME CHAIR ENTSMINGER: Okay. 7 MR. BASSICH: But can I -- can I.... 8 9 MADAME CHAIR ENTSMINGER: Uh-huh. 10 11 MR. BASSICH: .....maybe add in an 12 addition, you know, the topic of regional 13 representation. I think it would be incumbent upon us 14 to be a little bit more specific as to what we're 15 referring to in that. 16 17 MADAME CHAIR ENTSMINGER: Okay. 18 19 MR. BASSICH: It's not just this broad 20 oh, we want to be represented by everyone or whatever 21 and what came up was -- I guess what you're referring 22 to, Don, is the people up in Arctic Village and that 23 area. 2.4 25 MR. WOODRUFF: (Nods affirmatively) 26 27 MR. BASSICH: So maybe something more 28 specific to a seat from the people up in the Arctic 29 Village.... 30 31 MR. WOODRUFF: Or Venetie. 32 33 MR. BASSICH:....Venetie, Chal -- I 34 can't pronounce it, Chalkyitsik..... 35 36 MADAME CHAIR ENTSMINGER: Chalkyitsik. 37 38 MR. BASSICH: ....region, somewhere up in that northeast region be appointed as well. 39 40 41 MADAME CHAIR ENTSMINGER: Yeah, that's 42 good. 43 44 MR. BASSICH: I think it needs to be 45 more specific.... 46 47 MADAME CHAIR ENTSMINGER: Yeah, uh-huh. 48 49 MR. BASSICH: .....so that they can 50

Page 386 address that. 1 2 3 MADAME CHAIR ENTSMINGER: Tom. 4 5 MR. KRON: Madame Chair. The other 6 thing I heard discussed yesterday and Andy talked about 7 a lot was good age representation, younger folks, middle aged, older folks, but particularly making sure 8 we've got the younger folks here and you talked about 9 10 that a bunch yesterday. 11 12 MR. BASSICH: Yeah. I wasn't sure what 13 the outcome of that was, whether I was being age 14 discriminate or not though. So..... 15 16 (Laughter) 17 18 MR. BASSICH: .....but, yeah, 19 certainly. Put that in there as a request by the 20 Council. 21 22 MR. STEVENSON: Through the Chair. On 23 that last point, Andy. Are you suggesting that we look 24 at perhaps developing a youth seat? 25 26 MR. BASSICH: No, negative. 27 28 MADAME CHAIR ENTSMINGER: No. 29 30 MR. BASSICH: It's just about -- it's about getting people like Michael and Charlie here as 31 regular seated members that -- so that they can spend 32 33 the years, you know, benefiting from at least some of 34 the knowledge that we have here. 35 36 MADAME CHAIR ENTSMINGER: Encourage 37 youth. Just use those terms. 38 39 MR. BASSICH: Okay. Encourage. 40 41 MADAME CHAIR ENTSMINGER: Uh-huh. 42 43 MR. FIRMIN: Or young people. 44 45 MADAME CHAIR ENTSMINGER: Young people. 46 47 MR. BASSICH: Yeah. 48 49 MADAME CHAIR ENTSMINGER: Uh-huh. 50

Page 387 MR. FIRMIN: Or to just have a broad 1 2 spectrum. Just not even specify regions, just to say 3 give preference to maybe somebody of an age group that is missing on the Board or if we -- I think at one time 4 5 we had two Fort Yukon people, two Tanana people and two people from Eagle. And then there was like, you know, 6 7 that's.... 8 9 MR. BASSICH: Nothing else. 10 11 MR. FIRMIN: Yeah. It would be good 12 to, you know, let's give preference to somebody from an 13 area that's not there that has applied, you know, let's 14 throw somebody in from Beaver or Chalkyitsik on the RAC 15 rather than -- or, you know, from down Sue's way rather 16 than everybody being grouped in one area. 17 18 MR. STEVENSON: Thank you. 19 20 MR. BASSICH: I think, Zach, there 21 would be certainly on the transcripts, you know, what I 22 was talking about as far as youth and the need for youth to spend time on the panel. I shouldn't say 23 youth, young members, to spend time on the panel 24 25 gaining confidence and knowledge from people who have been on for a long time. 26 27 28 MR. STEVENSON: Understood. Thank you. 29 30 MADAME CHAIR ENTSMINGER: Okay. Any 31 other.... 32 33 MR. STEVENSON: Sue. 34 35 MADAME CHAIR ENTSMINGER: .....yeah, 36 I'm trying to think too. 37 38 MR. STEVENSON: Sue. Did you want to --39 did you want to also mention in the annual report the need to resolve the issue of information sharing 40 41 with.... 42 43 MADAME CHAIR ENTSMINGER: Yeah, I was 44 thinking about that. As, you know, when -- all this 45 meeting was so weird with people telling me oh, I didn't get this notice and I didn't get -- I didn't 46 hear back and then I got to go through so and so on the 47 48 State side. Maybe we could write better communication 49 and some kind of protocol that we know so we know how 50

Page 388 to get information. Because it's crazy that that can't 1 2 happen. You guys met and then it oh, it's got to be 3 through George Pappas or oh -- yeah. 4 5 MR. BASSICH: Didn't we used to always 6 have a liaison from the State at our meetings? 7 8 MADAME CHAIR ENTSMINGER: That's Mark 9 Burch. 10 11 MR. BASSICH: Okay. 12 13 MADAME CHAIR ENTSMINGER: And he was 14 online and he's probably still online. 15 16 MR. BASSICH: Okay. But we used to 17 have people present in the room. 18 19 MADAME CHAIR ENTSMINGER: Uh-huh. 20 Funding. But was there -- the other one that we'll 21 just include our concerns about communicating with 22 Arctic Village in that letter that we or that motion, 23 just include that. Yeah, I think it's -- they need to 24 know that that's what we think, the Federal Board. 25 26 MR. WOODRUFF: That's what it was. 27 MADAME CHAIR ENTSMINGER: That's what 28 29 it was. Okay. 30 31 MR. FIRMIN: And would the other one that we're -- I know our hunter ethics is already on 32 there, the initiative to continue that or we can add or 33 34 -- anything to that aspect of it. 35 36 MADAME CHAIR ENTSMINGER: Well, would 37 you want to have our letter -- that motion just put in 38 as a separate topic or because we have it continuation of the hunter ethics and education initiative and 39 40 dialogue with rural communities. I mean, that's the 41 broad spectrum and then this other one is specific. 42 43 MR. GLANZ: That would do it, yes. 44 45 MADAME CHAIR ENTSMINGER: Yeah, just 46 add it to it. Uh-huh. 47 48 And we're going on a nod of heads here. 49 If you don't like what we're suggesting you need to 50

Page 389 tell us and then we'll vote on it. 1 2 3 That was the ones I had. Do you guys 4 have anything else. 5 6 (No comments) 7 8 MADAME CHAIR ENTSMINGER: All right. 9 We got that covered. 10 11 Do you have any questions, Zach. 12 13 MR. STEVENSON: Nope, got it. 14 15 MADAME CHAIR ENTSMINGER: All right. 16 17 MR. STEVENSON: Thank you, Madame 18 Chair. 19 20 MADAME CHAIR ENTSMINGER: Uh-huh. And 21 the next thing ..... 22 23 MR. STEVENSON: Future meeting dates. 24 25 MADAME CHAIR ENTSMINGER: .....is 26 future meeting dates. First is 2020 and that's in the 27 back of your book. There's a calendar on pages 38 and 39. So we'll do the fall, 2020 meeting. Date and 28 29 location. We're already in there for Eastern Interior 30 Fairbanks on October 14 and 15th. 31 32 MR. BASSICH: That works good. 33 34 MADAME CHAIR ENTSMINGER: Is there any 35 changes? 36 37 MR. BASSICH: That works good. 38 39 MADAME CHAIR ENTSMINGER: Okay. 40 Charlie. 41 42 MR. JAGOW: I think as we discussed and 43 this is probably totally not feasible, but doing a meeting at some point in Arctic. 44 45 46 MR. McMANUS: Yes, Madame Chair, I was 47 going to try to request that. If we can find out some information on it maybe we could have our next meeting 48 in Arctic Village because we were invited there. And I 49 50

Page 390 know -- Paul says we would be welcome there also. 1 So 2 if there's some way we could look into that. 3 4 Other than that Fairbanks would do for 5 me. 6 7 MADAME CHAIR ENTSMINGER: Well, let's 8 qo Arctic first? 9 10 MR. BASSICH: Yeah. 11 12 MADAME CHAIR ENTSMINGER: Yeah, 13 Arctic's first choice and backup is Fairbanks if --14 because they'll evaluate if they can send us up there. 15 16 MR. McMANUS: Thank you. 17 18 MADAME CHAIR ENTSMINGER: Uh-huh. 19 20 MR. McMANUS: That'll work. 21 22 MADAME CHAIR ENTSMINGER: Okay. That 23 all works. Okay. 24 25 Andrew. 26 27 MR. FIRMIN: My only other thought was 28 should we wait until that or go -- either go while --29 strike while the iron's hot or should we wait until the time that there's other topics on the table that we'd 30 like to hear from them. If we go up there during a 31 fishery cycle, you know, would we be better off going 32 33 to.... 34 35 MADAME CHAIR ENTSMINGER: What I was thinking was, you know, we have a work session with 36 37 them where -- a round table and just forget the mics 38 and whatever and just have a little work session and 39 start talking to them about this hunter ethics and how it's going and what we -- what we -- it mean -- you 40 know, means to them. Get a whole bunch of information. 41 42 We might have to take an extra day, but I think it -that's the only way we're going to get anything done is 43 44 to -- and see it get started. So that would be my 45 suggestion to..... 46 47 MR. FIRMIN: I just mean at the timing 48 of it.... 49 50

Page 391 MADAME CHAIR ENTSMINGER: Well, I think 1 2 it's.... 3 4 MR. FIRMIN: .....because the Board of 5 Game's going to be over, the Board -- you know, the 6 Board cycle's, the.... 7 8 MADAME CHAIR ENTSMINGER: But then.... 9 10 MR. FIRMIN: .....wildlife cycle's going 11 to be over so we're going to be having fish -- we're going to go up there and talk about king salmon on the 12 13 Yukon River and chum salmon, you know what I mean, it's 14 going to be kind of off topic to go there and talk 15 about bycatch and.... 16 17 MADAME CHAIR ENTSMINGER: Yeah, so 18 it'll be fisheries proposals. 19 20 MR. FIRMIN: Yeah, that's what I mean. 21 So wouldn't -- wouldn't it be better to..... 22 23 MADAME CHAIR ENTSMINGER: .....so we 24 should go when there's wildlife. 25 26 MR. FIRMIN: .....go when it's wildlife 27 and just wait or go now and discuss something ..... 28 29 MADAME CHAIR ENTSMINGER: Okay. 30 31 MR. FIRMIN: .....that's off topic is my 32 point. 33 34 MADAME CHAIR ENTSMINGER: I get that. 35 36 MR. BASSICH: That point is probably 37 valid. 38 39 MADAME CHAIR ENTSMINGER: So let -- so 40 we could do it in the winter, 2021. 41 42 MR. FIRMIN: Or we can farther out. 43 44 MADAME CHAIR ENTSMINGER: Farther out. 45 Well, it's -- the wildlife proposals come up again then. But you still could have this work session. 46 47 48 MR. FIRMIN: Yeah. I just know when --49 when does the wildlife cycle come up again, right now 50

Page 392 we're taking -- we're talking fish proposals. 1 2 3 MADAME CHAIR ENTSMINGER: Well, the 4 proposals will come up winter, 2021. 5 6 MR. FIRMIN: But we do need that 7 initial meeting to get the information going. 8 9 MADAME CHAIR ENTSMINGER: Tom. 10 11 MR. KRON: Madame Chair, members of the 12 Council. Again there was discussion about fish 13 proposals, but I don't think that I heard anyone say 14 they wanted to do fish proposals at this meeting. I 15 didn't hear any from Eastern Interior. 16 17 MADAME CHAIR ENTSMINGER: No. 18 19 MR. KRON: I don't know what will 20 happen.... 21 22 MADAME CHAIR ENTSMINGER: You mean 23 Western. 24 25 MR. KRON: Anyway she just said they're 26 talking about possibly having a meeting in Arctic 27 Village and I guess my comment is I don't think we're 28 going to have many proposals unless you know of things 29 that we don't. And basically -- again it's up to you 30 when you want to do it, but Arctic Village I think is a 31 really good plan. 32 33 MS. KENNER: Madame Chair, actually I 34 want to double down on what Tom just said in that our 35 fishery proposal cycle, we usually get about half the proposals we get during the wildlife. So wildlife 36 37 meetings tend to be full and we can barely get done. 38 Fishery meetings are less full. 39 40 MADAME CHAIR ENTSMINGER: And Virgil's 41 not here to make a bunch. 42 43 MR. GLANZ: Yeah. And I feel when we 44 go there.... 45 46 MADAME CHAIR ENTSMINGER: Sorry, 47 Virgil. 48 MR. GLANZ: ....all they're going to 49 50

Page 393 want to do is talk and talk about the wildlife, the 1 sheep, I mean, when we get there. I don't care when we 2 3 go there, that's all they're going to want to talk 4 about is.... 5 6 MADAME CHAIR ENTSMINGER: But we'll 7 still have to go through our agenda. 8 9 MR. GLANZ: Yeah, right. 10 11 MADAME CHAIR ENTSMINGER: Unless it's better for a couple of us to be -- have the Fish and 12 13 Wildlife Service take us up there and talk to them, you 14 know, like it -- what we wanted to do. But.... 15 16 Donald. 17 18 MR. WOODRUFF: I think that if we do 19 have a meeting in Fort Yukon and it's..... 20 21 MADAME CHAIR ENTSMINGER: You mean..... 22 23 MR. WOODRUFF: .....a call for wildlife 24 proposals, we could probably develop a proposal with 25 those folks to help them out. 26 27 MADAME CHAIR ENTSMINGER: You said Fort 28 Yukon, but you meant.... 29 30 MR. WOODRUFF: Yeah, I meant Arctic 31 Village. Sorry. 32 33 MADAME CHAIR ENTSMINGER: Yeah, okay. 34 Yeah, I know. 35 36 MR. STEVENSON: Madame Chair. 37 38 MADAME CHAIR ENTSMINGER: Zach. 39 40 MR. STEVENSON: Thank you, Madame Chair. Catching you on the question that Mr. Woodruff 41 42 just raised, can -- Tom, do you know when our -- Mr. Kron, do you know when our next wildlife cycle is 43 44 scheduled? 45 46 MR. KRON: Yeah, Madame Chair, Zach. The -- basically the wildlife cycle will be starting a 47 48 year from now. So that basically the meeting to 49 develop proposals will be a year from now. And that'll 50

Page 394 1 start the process. 2 3 Thank you, Madame Chair. 4 5 MADAME CHAIR ENTSMINGER: I get what 6 you're saying. 7 8 MR. FIRMIN: First.... 9 10 MADAME CHAIR ENTSMINGER: I know. It 11 was 30 below when we were up there last time. In the middle of the day in March. 12 13 14 MR. GLANZ: And my coat was in 15 Fairbanks. 16 17 MADAME CHAIR ENTSMINGER: Yeah. 18 19 (Laughter) 20 21 MR. GLANZ: We'll put that here for 22 you. 23 24 REPORTER: I had a coat for you. I had 25 a coat for you. 26 27 MR. GLANZ: Yes, yes, Tina did have a 28 jacket for me. 29 30 (Laughter) 31 32 MR. GLANZ: And they did bring my parka 33 right back when they come to pick us up. 34 35 MADAME CHAIR ENTSMINGER: Okay. And 36 then we got stuck up there or was that Fort Yukon. 37 38 MR. FIRMIN: Fort Yukon. 39 40 MADAME CHAIR ENTSMINGER: Oh, that was Fort Yukon. Yeah. Two days I think. Yeah, that fog. 41 42 43 Yeah, pick some -- so then we'll stick with the 14th and 15th in Fairbanks and then we're 44 45 going to go -- but I would like to see the Fish and 46 Wildlife Service and the people, you know, keep --47 start working on something, you know, to talk to Arctic Village and them. And that might happen. And we might 48 49 -- some of us might get asked to go up there. So we'll 50

Page 395 see what goes up there. So pick the dates and then is 1 2 it Arctic Village in the 2021 winter. I like March to 3 tell you the truth. 4 5 MR. BASSICH: I hate going to meetings 6 in March. 7 8 MADAME CHAIR ENTSMINGER: Yeah, because 9 it's so beautiful. Well, let's go in January. No. 10 11 I'm open for dates. 12 13 Charlie. 14 15 MR. BASSICH: The earlier the better. 16 17 MR. JAGOW: How about March 4th 18 and.... 19 20 MR. BASSICH: 14th? 21 22 MR. JAGOW: No, no. March 4th and 5th. 23 24 MADAME CHAIR ENTSMINGER: That's a 25 Friday -- Thursday, Friday. 26 27 MR. JAGOW: It's a little difficult for 28 somebody trapping to pull traps and, you know, be in 29 Arctic the next day. 30 31 MR. BASSICH: It's going to be too cold 32 and windy to be trapping anyway. 33 34 MR. JAGOW: No way. 35 36 MR. BASSICH: It is for guys my age. 37 38 MADAME CHAIR ENTSMINGER: You got to be 39 sympathetic to the young people there, Andy. 40 41 MR. BASSICH: Not when it comes to 42 scheduling my time I don't. 43 44 (Laughter) 45 46 MADAME CHAIR ENTSMINGER: Too bad, so 47 sad. 48 49 MR. WOODRUFF: Well, would March 9th 50

Page 396 1 work for you, Charlie? 2 3 4 MR. JAGOW: Yeah. What's that? 5 MR. WOODRUFF: Would March 9th or 10th 6 work for you? 7 8 MR. JAGOW: Well, that might -- that's 9 starting to get late for him. 10 11 MR. BASSICH: I won't come if it's that 12 I'm just not going to come. I'm not late. Sorry. 13 going to give up all of March. Because I end up with 14 Yukon River Panel meetings and AC meetings are usually 15 late and then if we put this there, my whole March is 16 gone and that is the one month that I live for all 17 year. So I -- if it's too late in March I'm not going 18 to come. I'm fine with the first week, like what we're doing now.... 19 20 21 MR. JAGOW: Okay. So.... 22 23 MADAME CHAIR ENTSMINGER: So 4th and 24 5th is good? 25 26 MR. JAGOW: .....4th and 5th? 27 28 MR. BASSICH: Yeah, that's tolerable. 29 30 MADAME CHAIR ENTSMINGER: Okay. Let's just circle 4th and 5th, Arctic Village. And do we 31 have any -- do we need an alternative for ..... 32 33 34 MR. BASSICH: For a location. 35 36 MADAME CHAIR ENTSMINGER: .....whenever 37 OSM says you can't do that. 38 39 MR. BASSICH: Just back here. 40 MADAME CHAIR ENTSMINGER: Just back 41 42 here. Okay. Then Fairbanks is the alternative. 43 44 All right. And I think that's it. Do 45 you have -- anybody have any closing comments. 46 47 Go ahead. 48 49 MR. WOODRUFF: I really appreciate the 50

Page 397 staff and all the people that are giving us 1 presentations and they're very succinct. 2 The only 3 problem I have with it is the data, it confuses me a 4 little bit. But that's sort of a joke. 5 6 (Laughter) 7 8 MR. WOODRUFF: And I really appreciate all the Council members being here and Tina and the 9 public. The public was here pretty good today, we got 10 some good testimony and I really appreciate that. It's 11 12 heartfelt testimony. 13 14 Thank you. 15 16 MR. McMANUS: Yeah, I'd like to thank 17 the staff and all you guys for taking your time out for 18 doing this. And, you know, we're trying to work for 19 the people and stuff and that -- that's something 20 that's always helped drive what I do and stuff. So I 21 just want to thank you guys very much and everybody 22 that's here is working for the same thing is try to 23 resolve our issues. 24 25 Thank you. 26 27 MR. WRIGHT: I too also would like to 28 thank everybody for their sacrifice on the Board and 29 everybody that makes it happen and puts it together and 30 everybody that comes to present and all you guys' time 31 and hard work. I really appreciate everything that 32 everybody does. 33 34 Thank you. 35 36 MR. FIRMIN: Ditto. 37 38 (Laughter) 39 40 MR. FIRMIN: But, yeah, we do have a 41 lot of -- sitting here listening to us argue for two 42 days. It's a little -- it's gets -- I'm sure it can -has its ups and downs, but thank you for putting up 43 44 with us and accommodating us. 45 46 MR. GLANZ: I appreciate somebody like 47 from Arctic Village coming in here and spending their 48 own money or village money to come in here and spend 49 two or three days to converse with us and I appreciate 50

Page 398 all of our members and trying to participate and help 1 2 them people. 3 4 So thanks guys, and thanks our team, 5 the leaders. 6 7 MR. BASSICH: Yeah, I want to say thank 8 you for Sue, it's a big job to be a Chair on these RACs and at times kind of a thankless job. It's a lot to 9 10 keep in your head, it's a lot to organize..... 11 12 MADAME CHAIR ENTSMINGER: Uh-huh. 13 14 MR. BASSICH: .....it's a lot to just 15 memorize everybody's names that shows up here and she's 16 amazing at that. I'm always so blown away by how she 17 remembers everybody's names over the years. 18 19 MADAME CHAIR ENTSMINGER: That would be 20 horrible. 21 MR. BASSICH: And of course Council 22 23 members. I think we have a really good mix, a really 24 good diversity here. And I like the fact actually that 25 sometimes we're not unanimous on a vote. I think that 26 shows that we think about what we're doing and I think 27 we do a pretty good job of trying to represent the 28 people that we're supposed to represent and help to 29 protect their lifestyle. And we couldn't do that 30 without the support of the staff and the different 31 agencies that contribute through data and through their 32 observations or recommendations. 33 34 So and then once again for William or Michael, I'm sorry, thanks again for being a part of 35 36 this and you as well, Charlie. I really -- it really 37 makes me feel good to see young people get involved. 38 It doesn't matter what it is, but especially in 39 something like this that's often very dry and very slow 40 moving and you have to be very dedicated and very 41 methodical. And but stick with it because, you know, 42 there -- I want to share something. 43 44 There are times, you know, being 45 engaged in fishery stuff as much as I am that I often go home from a meeting and wonder what the heck am I 46 47 doing, why am I spending all my time on this. And I've 48 done that at this meeting -- these meetings some years 49 and I get on a plane and I go home and I think, man, 50

Page 399 really, why am I spending my time on all this. And 1 2 then if I really sit down and reflect on where were we 10 years ago or where were we five years ago, I realize 3 4 we've made changes and we made good changes for people. 5 And I think we have to be watchdogs here to make sure 6 that this lifestyle continues because we're all here 7 because we love the lifestyle and I would hate to see 8 that go away in this State. I think it's the heart of 9 what this State is. And I don't want to see that lost. So I always come back because I do try and take the 10 11 time to reflect about what we talk about at these 12 meetings. 13 14 And the other thing I really value is 15 the friendships that I've developed over the years. I 16 often say when I go to the Yukon River Panel meeting 17 that's my second family because I've been working with 18 those people 20 years now. And same with this RAC, 19 it's Bill and Sue and Andrew, I -- you know, it's almost like a family, we've been working together for a 20 long time. And that -- I think that's why we work well 21 22 together and I think that's a really valuable part of 23 this RAC. 24 25 Thank you. Good meeting. 26 27 MR. GLANZ: I echo the same thing, 28 Andy. We maybe get a little upset at each other at the 29 meeting, but we're just like a family. Oh, well. Go 30 in and have dinner and everybody's laughing and I'm 31 going to get you a beer. And.... 32 33 MADAME CHAIR ENTSMINGER: I disagree 34 with my husband sometimes, but I still love him. 35 36 MR. GLANZ: Oh, I won't even go there 37 with mine. 38 39 (Laughter) 40 41 MADAME CHAIR ENTSMINGER: Charlie. 42 43 MR. WRIGHT: Well, I'm sure everybody 44 wants to go home so thank you and goodnight. 45 46 MADAME CHAIR ENTSMINGER: All right. I 47 just want to thank all of you guys. I think we all 48 have our own special thing that we bring and I really 49 appreciate you guys very much. And Andrew, Andrew, 50

Page 400 you're -- you keep things moving and that's really 1 2 important I think. Sometimes it's like gosh, what do I do, do I just turn the mic off or..... 3 4 5 (Laughter) 6 7 MADAME CHAIR ENTSMINGER: I might use 8 that, that worked pretty good. 9 10 MR. GLANZ: Where was your little 11 hammer, Sue. 12 13 MADAME CHAIR ENTSMINGER: My little 14 hammer, do you know about my little hammer, Zach? 15 16 MR. STEVENSON: It's packed in a box in 17 my office right now. 18 19 MADAME CHAIR ENTSMINGER: That's where 20 it is. 21 22 MR. GLANZ: Oh, okay. 23 24 (Laughter) 25 26 MADAME CHAIR ENTSMINGER: At any rate 27 I'm probably not real good at thanking everybody like I 28 should and I think that comes from being a country 29 bumpkin I call it, raised on a dairy farm and, yeah, my 30 dad would say you can't cuss, but there was one word we could say and I won't say it on the record, but it's 31 poop and then you'd have the -- but you couldn't live 32 33 on a farm without saying that. So there's times I want 34 to say that. I don't. 35 36 But I'm really thankful for the support 37 from you guys, all of you, and thank the staff. 38 39 So everybody.... 40 41 MR. GLANZ: Okay. See you in the 42 spring if not sooner or fall.... 43 44 MR. FIRMIN: Move to adjourn. 45 46 MR. McMANUS: Second. 47 48 MADAME CHAIR ENTSMINGER: All in favor. 49 50

	Page	401
1 IN UNISON: Aye.		
MR. FIRMIN: All opposed.		
IN UNISON: Aye. MR. FIRMIN: All opposed. MADAME CHAIR ENTSMINGER: None. Th you. Bye. Good one. (Off record) 9	nank	
8 (Off record)		
9 (011 FECOLI)   10 (END OF PROCEEDINGS)   11 12   13 14   15 16   17 18   19 20   21 22   23 24   25 26   27 28   29 30   31 32   33 34   35 36   37 38   39 40   41 42   43 44   45 46   47 48   49 9		
50		

CERTIFICATE UNITED STATES OF AMERICA ) )ss. STATE OF ALASKA ) I, Salena A. Hile, Notary Public in and for the state of Alaska and reporter for Computer Matrix Court Reporters, LLC, do hereby certify: THAT the foregoing pages numbered 02 through contain a full, true and correct Transcript of the EASTERN INTERIOR FEDERAL SUBSISTENCE REGIONAL ADVISORY COUNCIL MEETING, VOLUME II taken electronically on the 4th day of March 2020 at Fairbanks, Alaska; THAT the transcript is a true and correct transcript requested to be transcribed and thereafter transcribed by under my direction and reduced to print to the best of our knowledge and ability; THAT I am not an employee, attorney, or party interested in any way in this action. DATED at Anchorage, Alaska, this 16th day of April 2020. Salena A. Hile Notary Public, State of Alaska My Commission Expires: 09/16/22