0150	
1	NORTHWEST ARCTIC SUBSISTENCE
2	REGIONAL ADVISORY COUNCIL
3	
4 5	PUBLIC MEETING
6	
7	
8	VOLUME II
9	TELECONFERENCE
10 11	November 2, 2021 9:01 a.m
12	9.01 a.m
13	
14	COUNCIL MEMBERS PRESENT:
15	
16 17	Thomas Baker, Chairman Barbara Atoruk
	Elmer Armstrong
	Wilbur Howarth
	Michael Kramer
	Robert Schaeffer
22 23	Enoch Shiedt
24	
25	
26	Regional Council Coordinator, Katya Wessels (Acting)
27 28	
28 29	
30	
31	
32	
33 34	
35	
	Recorded and transcribed by:
37	
38	Computer Matrix Court Reporters, LLC
39 40	135 Christensen Drive, Suite 2 Anchorage, AK 99501
41	907-227-5312; sahile@gci.net
42	
43	
44 45	
45 46	
47	
48	
49	
50	

PROCEEDINGS (Teleconference - 11/2/2021) (On record) CHAIRMAN BAKER: Good morning, everyone, it's Thomas Baker. It is now 9:00 o'clock. I'd like to call the meeting to order and if Mr. Elmer Armstrong could get a brief roll call of the Council please. MR. ARMSTRONG: Enoch Shiedt, Sr. (No comments) MR. ARMSTRONG: Attamuk. (No comments) MR. ARMSTRONG: I just heard him a few minutes ago. MS. ATORUK: I heard a ding, maybe he got disconnected. MR. ARMSTRONG: Thomas Baker. CHAIRMAN BAKER: Here. MR. ARMSTRONG: Michael Kramer. (No comments) MS. ATORUK: Michael Kramer is not going to come on until 1:30. MR. ARMSTRONG: Okay. Calvin Moto, II. (No comments) MR. ARMSTRONG: Wilbur Howarth, Sr. MR. HOWARTH: Here. MR. ARMSTRONG: Robert Schaeffer.

0152 1 MR. SCHAEFFER: Here. 2 3 MR. ARMSTRONG: Elmer Armstrong, Jr., 4 here. 5 6 Brian Lee Jones. 7 8 (No comments) 9 10 MR. SHIEDT: I think we're having 11 connection problems, Attamuk here, I called in third 12 time now. 13 14 MR. ARMSTRONG: All right, got you 15 down, Attamuk. 16 17 MR. SHIEDT: Here. 18 19 (Teleconference interference 20 participants not muted) 21 22 REPORTER: Okay, Enoch, mute your phone 23 now because I can hear your TV. 24 25 CHAIRMAN BAKER: Brian Jones said he 26 won't be able to attend today. 27 28 MS. WESSELS: I'm sorry, I would like 29 to ask everyone to mute their phones by pressing star 30 six if they're not speaking currently. Please star 31 six, dial star six. Okay, thank you. Please, you 32 know, remember if you're not speaking put your phones 33 on mute. 34 35 REPORTER: Thank you. 36 37 MS. ATORUK: This is Barbara, I'm here 38 too, this morning. Good morning. 39 40 MR. ARMSTRONG: Okay, got you down, 41 Barbara. 42 43 CHAIRMAN BAKER: So it appears we have 44 a quorum. At this time for those Council members that 45 weren't present yesterday morning for the Council 46 member reports, I was hoping we could do Council member reports, but it seems that it's just Mr. Robert 47 Schaeffer is here and, Bob, if you have any report 48 49 you'd like to give now the floor is yours. 50

1 MR. SCHAEFFER: Yeah, I guess it would 2 be a good time if the Council would just indulge, it 3 might be kind of a lengthy one.

0153

4

34

5 But I've been involved with this global 6 warming issue for a lot of years, the six years I was 7 with the Borough back in 2006 to 2012 I did a lot of studying and keeping up with trends as the Earth keeps 8 9 up and trying to put in to perspective how it's 10 affecting us up here. And it just so happens that 11 during that particular decade it affected the Northwest Alaska more than any place in the state. So I became 12 And I think the biggest concern 13 quite concerned. 14 happened when we started having bird die-offs on a 15 regular basis. And after talking with some of the local elders, you know, it was easy for us to determine 16 17 their cause of death, you know, it was no mystery, the 18 waters are just heating up too much especially around 19 the mouth of the Buckland or Echols Bay, Kobuk Lake, 20 We had a huge salmon die-off in 2014 all the rivers. 21 and there was no mystery why they died, after 22 Department of Fish and Game did an analysis of Salmon 23 River area where they -- the -- Kobuk runs usually 24 spawns and found that the waters there were just too 25 hot and that the oxygen levels were very, very low and 26 they couldn't support salmon life. And the entire 27 Kobuk River and Noatak River that year, I drove both of 28 those rivers constantly with my charter business and there were millions of dead salmon everywhere. 29 In 30 fact, the entire Noatak River, when we were going up to 31 Noatak stunk, you know, of decaying fish. So that was 32 an example of global warming at its worst, I think, you 33 know, and how it's affecting our resources up here.

35 And just recent, to put it into recent 36 perspective we had a die-off of herring two years in a 37 row. Last year it happened in December and this year 38 it happened just a couple of weeks ago where millions 39 And that, too, after talking with some of have died. the elders and some of the local folks, that, you know, 40 we had probably one of the wettest summer, Kotzebue 41 42 ever had probably in recent history, you know, it 43 rained for three months for Godssake and, you know, 44 water -- the entire of Northwest Alaska was pretty much saturated with water from the top of the mountains down 45 46 to the rivers and the rivers were extremely high all 47 summer. They were pretty much at flood stage the 48 entire summer, it just got to be commonplace that --49 because of the amount of rain that we had -- that fell. 50

1 And then of course when the falltime came everything sort of settled in but the water was still on the land, 2 3 it was still seeping down into the creeks and the 4 creeks stayed pretty much high throughout the entire 5 fall. But there was tremendous amount of freshwater discharge that came out of the Selawik, Noatak, and 6 7 Kobuk Rivers and all the drainages. So, you know, just commonsense would tell you that when you get that much 8 water going out into the lakes, if there's any salt 9 10 left in Kobuk Lake, which normally there is, when they 11 have a lot of storm surge it'll get pretty salty up there and that, of course, is really important for 12 13 herring. Anyway, all that discharge pretty much took 14 all the saltwater that was in Kobuk Lake and shoved it 15 out in the ocean. I had a survey fellow that stopped by Inivikin (ph) and did their analysis and the salt 16 17 content on the lake, on Inivikin found that there was 18 no salt and he drank the water and he said this is 19 fresh water, he said .006 percent salt, almost no salt 20 at all whatsoever. So later on what happened, of 21 course, we had that massive die out of herring and, of 22 course, herring are saltwater fish because they live 23 and grow and feed out in the saltwater and they come 24 in, not only in the spring to spawn, but they come in 25 in the fall to feed because Kobuk Lake is just so rich 26 because of all the -- all the small, the Kobuk Lake 27 shrimp, they're real tiny ones and then there's also 28 tremendous amount of, not only, herring but the 29 whitefish and spawn all throughout the lake in the 30 grassy areas so it's really a rich area for them to 31 come into the lake and into Kotzebue Sound and to go 32 over and feed and then continue to grow because these 33 are the smaller species that are still -- I think they 34 hatch last spring and they were just on their growth 35 period. 36 37 But I guess what our assumption was is 38 that they went into -- the freshwater -- saltwater 39 setting out in the Arctic Ocean, Chuckchi and Kotzebue

that they went into -- the freshwater -- saltwater setting out in the Arctic Ocean, Chuckchi and Kotzebue Sound straight into freshwater and when I observed and took some photos of all the fish that were dying it was like they were in shock, they were swimming around sideways, you know, and -- and like they lost -- like they were in total shock and then we picked up a bunch and -- anyways, you could pick -- have pickled herring because they were there.

48 But anyway that's just an example of 49 what I saw the last 20 years or so that I've really 50

1 been involved in global warming issues.

3 The other, of course, is doing work 4 the university on observing some of the with environmental changes out there, out on the lands 5 around Kotzebue and Kotzebue Sound and Kobuk Lake and 6 7 some of those changes. Of course you all know about 2018 and 2019 when we had record warm years for winter 8 9 and there was just no ice that formed that was 10 permanent, between the end of the Kotzebue Sound and 11 the Chuckchi. And there was a tremendous amount of 12 effect that it had not only on the seal but on our ability to subsist out there because we couldn't get 13 14 out there without any kind of -- it was just too 15 doggone thin, you have to have safe ice out there to go 16 out there and hunt seal and that never happened those 17 two years because people were just -- the hunters were 18 just so afraid to venture past, you know, the last ice 19 around Kotzebue and Sisolik, after that it was all 20 pretty much open water the entire winter. 21

22 But I was also involved in the sea ice 23 study that was consummated pretty much in 2018/2019 and 24 2020 so that was done by the university. There was 25 also other universities that were involved in this and then on a national level -- but there was a number of 26 27 scientists that came up and we took them out and they 28 did their studies out in the ice and it was hard to 29 find ice at the time, probably -- it was -- acting as a 30 guide it was kind of difficult to get out there and 31 keep them safe because the ice was not safe. But we 32 did -- they did a lot of work out there, mostly around 33 (indiscernible) and Sisolik and I was able to take them 34 out to the Kobuk Sound safely just following the 35 sandbars, they did some work out there. But they also 36 had -- had a drone that they flew for a couple of 37 weeks, where they finally got it going and did a lot of 38 analysis on the ice, studies on the ice with the 39 different -- different pieces of equipment that they 40 had.

42 But, anyway, those were massive changes 43 that were recognizable. But that was just sort of the 44 tip of the iceberg, because my dad, you know, talked about that back in the '60s even in the '70s about the 45 changes that he saw at that time. And -- because he 46 47 was an Inupiaq hunter and those people, that's all they 48 knew was how to observe and how the hunting went that 49 year, they talked about it amongst themselves, you 50

0155

2

1 know, the elders and they -- they talked about the changes that they were seeing and, you know, he was 2 3 born in 1916 so his hunting career started back in the 4 '20s, you know, and late '20s and early '30s so, you know, he -- that we were -- written -- or our language 5 6 importance of was not written so the sharing 7 information was part of our culture. They talked about it and then, of course, they never forgot like we did 8 9 because, you know, we got so much doggone stress in our 10 lives today that remembering things that are really 11 important are not as important as they were back in the 12 day when that's all you had. So anyway they talked 13 about it a lot and he talked about the changes that he 14 saw, the waters rising, he always talked about the 15 waters rising because there was massive erosion that started back in the '60s and especially got into the 16 17 '70s. He talked about the massive storms that came up 18 here, they never had that kind of intensity and the 19 severity of those storms. Some of the storm events 20 were quite scary especially living around the whole 21 Peninsula area and observing and seeing the massive erosion that are taking place because of two things, of 22 23 course, the water rising and the intensity of the 24 storms that were hitting us, you know, during those 25 years. So it's been around for a long time but -- and 26 so as we started delving into it, as I got into delving 27 into it further, you know, I started noticing that not only I was concerned about where this thing was going 28 29 with global warming, but the scientific community did a 30 lot of studies and, you know, to us, you know, you go 31 down to the beach and you look at all this massive 32 erosion stuff and you just -- your heart -- my gosh, what is happening on this land. 33 And then -- but 34 there's more to it than meets the eye, you know, you 35 never see it. So when you don't see it you don't think about it but when they start delving into it, the 36 37 massive emissions of carbon dioxide that is happening in our tundras and especially around those areas where 38 39 the erosion is really taking place. And you go into those areas and you can smell, you know, the methane 40 41 gas that's coming out of it and it's constant. And so, 42 you know, you talk about global warming and the 43 atmosphere and the greenhouses gases, you know, you 44 talk about this and -- this is -- this is just what you can observe in front of you. But their studies were 45 46 done with airplanes and they did a lot of studies and 47 they determined that most of the Arctic tundra is 48 melting at such a rapid pace that the emissions of 49 carbon dioxide are really high. And he said, no, 50

1 that's not the worst part because you got the emissions of carbon dio -- not carbon but methane gas, and 2 methane gas is 20 times as lethal in the atmosphere as 3 4 carbon dioxide. So you got natural carbon dioxide and 5 natural methane gas emissions and then you talk about the low -- the lake up there on -- right below the 6 7 hatchery, you know, where they've been studying that now for the last 10 years trying to figure out why the 8 intensity of that thing is increasing, you know, and 9 10 using that as an example of our -- within the Northwest 11 Arctic Borough that have a massive emissions of methane 12 gas in a lot of the lakes. 13 14 And so those are the killers. That is 15 what is probably affecting the atmosphere most and when you talk about carbon dioxide emissions world-wide, 16 17 because as the population grows the demand for services 18 grows so there'll be more jets, more cars, more trucks 19 so the burning of fossil fuels and increases tremendously and then you have more stress on the atmosphere because of unchecked amounts of carbon 20 21 dioxide flowing into the air because of the burning of 22 23 fossil fuel. 24 25 So all that, in a nutshell, you know, it's affecting us big time. You know it's affecting 26 27 our environment big time. It's affecting where our 28 fish go, it's affecting where our subsistence fish 29 resources are pretty much all affected and I'm sure 30 it's affecting the caribou and the moose and everything 31 else and all the animals that we use, and not only that 32 but the plants that we eat, that we harvest as part of 33 our subsistence diet. So there's a lot of things that 34 are happening that doesn't meet the eye and if you 35 haven't had the chance to observe and think about it 36 you should make a -- because it's going to affect 37 everything. 38 39 So as time goes on, I'm still an observer for the University of Alaska-Fairbanks. 40 I 41 give my observations and I sit down and talk to some of 42 the elders. Talk to John Goodwin and, you know, I 43 think we talked about some of the events that are 44 happening and at some point or another, and at times, and (indiscernible) studious kind of a guy, too, so it 45 46 was Yorkmans and Hall and we do sit down and talk about 47 some of those things sometimes and see where it's

going, you know, where this thing is going.

is it going to get any worse, and, of course, it is

You know

1 going to get worse. It seems like every time you plant a tree to absorb the carbon dioxide that's put in the 2 3 air because of the burning of fossil fuel, you know, 10 4 trees die because, you know, certain parts of the Earth 5 are warming up hotter, getting hotter, the Northwest -or the North -- or the West Coast of Alaska -- or the 6 7 West Coast of the United States is getting so hot that every year there's so many fires, so many trees and so 8 9 many shrubs that absorb carbon dioxide naturally are being burned and just destroyed. And you got portions 10 11 of the other part -- where you go to the East Coast 12 where it's getting wetter and wetter and the storm 13 events are getting stronger, the hurricanes are getting 14 stronger, so the whole world, and in our -- you know, 15 it's not just what's happening in America but it's happening world-wide. You know Russia, just two years 16 ago lost six million acres of trees and you think 17 18 about, you know, an entire forest area that burned six 19 million acres and you couldn't count the number of 20 trees that burned. And those are -- those are the most 21 important part of the world. The Amazon was on fire, you know, two years ago. 22 Things of that nature that 23 you look at in the global perspective that you can't 24 see here and so since there's a lot -- like I said 25 there's a lot to it and a lot that meets the eye and 26 it's affecting us and it's going to affect us even 27 worse as time goes on. We're just lucky that the last couple of years we've had the cool summers and so we 28 29 haven't had die-offs like they had in Bethel last year 30 where it got so hot that a whole bunch of their fish 31 and whitefish and their streams and lakes -- you know, 32 started dying and, of course, belly up. So, you know, 33 that can happen again. And as time goes on and they 34 predict that, that this is what's going to happen as 35 the world heats up. 36

37 You know, if you haven't tried to keep 38 up -- you know, go on to the NOAA website on climate 39 and you download that into your system so you can observe because NOAA has been doing this for a long 40 41 time and their pictorial maps and graphs are really 42 interesting to see observe to see where the world is 43 going when it comes to heating up the world due to 44 climate change. 45

So anyway I just wanted to try to bring this out in a perspective in the way, at least the way I look at it, and how it's affecting us, you know, we talked -- remember I talked to you about what's 50

1 happening out in the lack of ice out there -- the lack of -- the lack of thick ice -- in 2018 we were out 2 3 there and the poor seals had no way to -- no place to 4 make a lair because there was no ice piled, so they 5 were making lairs just in ice that was a foot and a half thick. And the foxes had an easiest feed year 6 7 ever -- ever there -- there was foxes all over out on the ocean out there and they'd go to these makeshift 8 9 lairs that the poor seals had because they had no other place to go and they just pick up these -- the young 10 11 like it nothing and then -- and then -- you know hada --12 had an easy meal but there was foxes all over out on 13 the ocean that year when we were out there observing 14 and doing some work out there. But that's an example So the predation 15 of what happened two years running. for poor seals was really bad for those two years, it 16 17 was -- it was -- for the seal pups and -- and so that's 18 how it affected the seal. Of course, you can really 19 look out in front the last couple of weeks, you know, 20 wondering, god, where'd all the seals come from but 21 there are a lot of seals out there, you know, it's just that -- it's just that -- what's in store for them in 22 23 the future remains to be seen. Are -- are we going to 24 have a repeat of 2018/2019 to where it does affect the 25 seal, you know, and the polar bear and whatever animals 26 species are out there.

28 So it's -- it's -- and we talk about 29 the oogruk and then we start discussing the issue of 30 why they're getting a little skinnier and -- and when I 31 was out to do some work over in Shamisol (ph) we ran 32 into a herd of oogruk out there and they were 20 miles 33 from the ice and they went into -- they went -- they 34 went into one area that we know of that's really rich 35 in shrimp and bottom fish and that's what they were --36 that's what they need to survive, so we ran into a herd 37 of them out there and there was no ice to be seen 38 anywhere but there was feeding and then when they got 39 done feeding, of course, they had to find -- they had to go 20 miles, you know, to go to the ice, to -- to 40 41 haul out of the ice so that they can rest and digest 42 their food. But they were going so far, you know, that 43 by the time they get filled up with the rich resources 44 of the Kotzebue Sound they had to go find ice to haul 45 out on sothat they can rest and -- and that was norm --46 it was different that year because there was just --47 there was just no ice. You know the hunters had an 48 easy time because the only -- the only solid fast ice 49 is the land fast ice was right in front of Kotzebue 50

0159

1 right here and -- and over in Espenberg and, of course, the ice that comes out of Buckland Bay and those --2 3 those were -- where hundreds and hundreds of oogruks 4 went because that's the only place they can get out to haul out and rest. And not only does this affect them 5 but as -- as June rolls along it started affecting the 6 7 seals, we started finding more dead seals on the beaches and -- and these were full grown seals that 8 drowned out there. They're -- they're used to hauling 9 10 out in June and -- and we had a big storm in June that 11 lasted for -- for, what, four or five days, maybe even 12 longer as the west winds blew 35 to 40 miles an hour, I 13 remember that day. But Ross said just between -- my 14 brother Ross said that just between (Indiscernible) 15 Creek and Cape Blossom he counted 10 adult seals that 16 had perished, that had drowned out there because they 17 had no place to go, they couldn't sleep because of the 18 waves were, you know, six to eight foot tall and they 19 couldn't rest and so they ended up drowning. And of 20 course there was a lot of small, younger ones that were 21 born that spring that had perished as well. 22

23 So all those, in a nutshell, is 24 affecting us. And as we're kind of wondering, you 25 know, how this is going to affect us in the futureas --26 as -- as climate change does take even a greater hold 27 on the environment and the weather and so -- but those 28 wanted to mention because when it comes to Ι 29 subsistence, not only for fish, or for crab, and for 30 the resources out there the importance of -- of the 31 smaller fish to feed the larger -- the larger -- a lot 32 of the larger mammals -- the sea mammals that we have out there, are they going to be around, you know, are 33 we going to have a point in time to where we -- to 34 35 where, you know, you're going -- it's going to get so 36 bad that we're going to see more repeat of mass die-37 outs of not only fish but of seabirds, you know, of 38 seals, you know, of all those resources that we were so 39 accustomed to and enjoying for so long and living up here, you know, for thousands of years. 40

42 So, anyway, I hope I put it into 43 perspective where you can think about it and know that 44 our subsistence resources, not only on land but in the 45 waters are affected by what's happening and be more 46 observant when you're looking at it and look at it more 47 in a different perspective because with this global 48 warming -- global warming is a real thing and it's 49 happening and it's hitting us really hard and it's 50

0160

0161 1 still hitting us hard up here. 2 3 Anyway, that's pretty much my report on 4 what's been happening in my little world of observing 5 global warming. Thanks Tom. 6 7 CHAIRMAN BAKER: Thank you, Bob. Do we 8 have any other Council members who might have joined 9 since we started that weren't able to give their report 10 yesterday morning. 11 12 (No comments) 13 14 CHAIRMAN BAKER: Hearing none, we will 15 continue on from where we ended last night. 16 17 MR. SHIEDT: Could I ask Bobby a 18 question, Attamuk here. 19 20 CHAIRMAN BAKER: Yes, Attamuk. 21 22 MR. SHIEDT: Bobby, how many degrees 23 did you see by warm up the waters? 24 25 MR. SCHAEFFER: It was amazing, I'm 26 glad you asked that question because, you know, a 27 couple years ago we had the University of Alaska 28 brought out a drone that was powered by a new saltwater 29 jet, I think it was called a jet. But what it did was 30 absorbed saltwater and it created power and they could 31 stick that drone in the water and they can control the 32 drones with the satellites and they could go and do all 33 the different studies throughout -- in fact they just 34 got done using that up in the North Slope and they were 35 going to try it in Kotzebue so I took them out here, with my boat, 40 miles out in the ocean out here and 36 37 that was in 2019 and we went out there trying to find 38 the right amount of salinity and the right temperature 39 so we could launch that thing and it would go and leave 40 Kotzebue and go up and do all these studies and go up 41 to the North Slope and they'd pick it up in Barrow. 42 But we got out there in 40 miles between Espenberg and 43 Sealing Point (ph) and the waters out there was 64 44 degrees, 40 miles. 45 46 MR. SHIEDT: Wow. 47 48 MR. SCHAEFFER: We could not get over 49 that, the salinity out there wasn't enough to propel 50

1 the drones. They tried numerous times for a couple of hours, two, three hours and couldn't get that thing to 2 3 work because the salinity was not -- was not -- was not 4 strong enough to do -- you know to do -- to do what it was supposed to do to propel that thing. But, anyway, 5 that's an example of what happened that year when we 6 7 had, you know, the birds die-off in Shamisol and Cape Thompson and a number of places, when it gets that warm 8 9 all that little fish that usually are on the beaches 10 coming out of Echols Bay or Buckland Bay had to escape 11 because the waters was too warm so they had to go out 12 in the deeper ocean where the water was cooler. So 13 what it did, basically, was all the puffins and murres 14 and then all the birds that nested in the Shamisol and 15 those other areas -- nesting areas up here had nothing 16 to feed on so they all starved to death and of course 17 that was corroborated by the Fish and Wildlife Service 18 at the time because they couldn't find nothing, no 19 reason other than starvation that -- that caused the 20 death of these hundreds, probably even thousands of 21 birds. But the temperatures are important and they are 22 -- they are rising and, you know, I think as humans 23 that -- living out in the Arctic we used to get 55 24 degrees, that was the norm in Kotzebue, right, back in 25 the day and it was comfortable. 26 27 MS. ATORUK: Yep. 28 29 MR. SCHAEFFER: And all of a sudden we 30 start getting 70 degrees up here and the villages in 31 some places it gets 100 degrees now. And, you know, so 32 we're noticing those changes, we're enjoying them 33 because you don't have to go to Hawaii to get heat, we 34 go -- you know, just right in our backyard now. So 35 people are enjoying going to the beaches and spending a 36 lot of time in the water, but, you know, this is the 37 telltale sign of what's to be, you know. It's 38 happening today and it's probably going to continue to 39 happen even at a larger scale in the future. 40 41 MR. HOWARTH: Bob -- Mr. Chair, it's 42 Wilbur. 43 44 CHAIRMAN BAKER: Go ahead, Yes. 45 Wilbur. 46 47 MR. HOWARTH: Hey, Bob, did you guys do 48 any studies on the oogruk that are coming up this way like that -- like we had one young oogruk last month or 49 50

so that was hanging around here in Noorvik, pretty young, it was, I would say maybe newborn this year or something but we sure been running into lots over at (Indiscernible) Creek, oogruk calf, and on the banks.

Thank you.

8 MR. SCHAEFFER: Yeah, well, I have an 9 answer to that, you know, but I think one of the 10 scariest things that we don't observe and we don't see 11 when it comes to the heating up of Kobuk Lake and all 12 the creeks, especially the lakes there are so important 13 for the spawning of our -- of all of our whitefish and 14 (In Native) and all those other fish because those are 15 all grass lakes and they're really important, always 16 been important spawning area for millions and millions 17 of fish but, you know, the -- the sad part, of course 18 is when you've got an excessive heat and then still 19 waters, you have an excessive growth of algaeand it's --20 it's -- and as time goes on -- the Kotzebue IRA has a new mooring that we're going to put out next year to 21 22 try to monitor what's happening with the waters insofar 23 as the growth of algae is concerned. I've been working 24 for Alex for a number of a years now, Alex Whiting, 25 with the Environmental Department of Kotzebue and it's just really a concern because remember when you go out 26 27 boating and -- and it's aftera real hot summer -- and--28 and in 2018/2019 when you were -- you could look out 29 the front and see the water when it splashes when -- on 30 the boat, and it's either brown or green, you know, and 31 on Kobuk Lake and the rivers, that's the growth of 32 algae and, you know, algae is probably -- probably, you 33 know, it -- it can become quite deadly when it -- when 34 it starts getting into the food chain. And in many 35 cases we try to find clams -- there's a lot of clams on the Kobuk Delta, there's a -- there's a huge amount of 36 37 clams in the Selawik -- in the Selawik Rivers and the 38 lakes and there's clams all over and try to get clams 39 to determine the toxicity of the algae as it flows through the animals, you know, and the -- or the fish --40 41 and you have all the whitefish that feed on those --42 on the miniature snails that are found in every one of 43 the lakes it seems in the -- and in the Kobuk Valley, 44 you know, they've been doing -- you know how is the algae affecting them so, you know, it's -- it's 45 46 affecting -- it's even killed -- it got so bad and --47 in Southwest Alaska that the clams became very toxic in 48 some of the -- and killing walruses down there that --49 there was two walruses that died and they found out 50

0163

6

1 later that during the autopsies and sending out -- and as they were sending out some of the tissues that they 2 died of toxic stuff that are found in clams and also 3 4 use the water -- they siphon in water to -- you know to get food, and they're like a huge vacuum down there, 5 they just vacuum and it goes out the other end and all 6 7 the micro -- micro organisms feed them and so they're a good telltale sign of -- of what's -- of what the water 8 9 is doing and how toxic the algae growth is to the 10 water. So we're doing a little -- we're going to put a 11 mooring out there between probably I'd say about seven, 12 eight miles outside of Pike's Spit, towards the middle 13 to where the -- the converge of the Kobuk Delta, the 14 Kobuk -- and the -- the water and the Selawik River 15 waters are -- come together and it showed with using a 16 satellite photo some of those areas that -- there's a 17 high concentration of algae, so we're going to put that 18 mooring there and it's going to work all summer picking 19 up data in the water. 20

21 So I thought I'd just bring that up 22 because we're concerned about the heat and what it's 23 doing to -- doing to -- you know, to the important 24 subsistence fish that we have and other resources out 25 here because I -- one of the guys came to me when I was fishing out there right by Kobuk Lake from Noorvik and 26 27 he says, oh, I got a picture I got to show you, Bob, 28 and I says, what, I got -- I got a green seal last 29 year, I says, what, you got a green seal, he says, 30 yeah, I'll show it to you, that seal was so bundled up 31 in algae growth that he turned green, the skin turned 32 green and he showed it to me and I couldn't believe it. 33 But that's some of the dangers of some of the seals 34 that meander, especially the oogruk calves that -- that 35 come into the Kotzebue Sound after birth and go into 36 all the shallows and the streams and the lakes and they 37 feed there because it's easy for them to feed there and 38 they feed and they grow. And so I'm sure it's going to 39 affect them in some way as well. 40 41 MR. SHIEDT: Thanks, Bobby, good

42 report. 43 44 MR. HOWARTH: Thank you. 45 46 MR. SCHAEFFER: Yeah, thank you. 47 48 CHAIRMAN BAKER: Yeah, thank you for 49 So if there are no other Council members that Bob. 50

0165 1 with anything to report at this time we'll move on to 2 the 2022 Fisheries Resource.... 3 4 MS. ATORUK: Can I ask something, Mr. 5 Chair. 6 7 CHAIRMAN BAKER: Is that Barbara? 8 9 (No comments) 10 11 CHAIRMAN BAKER: Barbara, is that you? 12 13 MS. ATORUK: Can you hear me? 14 15 CHAIRMAN BAKER: Yes, I can hear you 16 now. 17 18 MS. ATORUK: Okay. I had my mute 19 button on, I always forget that. But, Bobby, some 20 riders in the back road, back there this summer, posted 21 on Facebook there was some -- you know, some places 22 back there there's some muddy areas and bubbles were 23 shooting out of that one area back there. And that was 24 something different that I hadn't seen in awhile in 25 that area but years back, my aunt's great-grandma did 26 say to her when she was a young girl, she died at 86, 27 Aunt Vera, and she told her granddaughter and say if 28 you grow up and have kids, please don't have them live 29 near the ocean because it's going to come in, the ocean 30 is going to come in. And from your report, you know, 31 it's been happening for some time, but those gas 32 bubbles that were seen back there, I wish they had 33 contacted you but now we know who to call and to go and 34 see. Would those be gas bubbles that are coming from 35 below where the erosion or whatever is happening from And also this hadn't happened in a long time, 36 that. 37 when I lived in Kotzebue it happened one time where the 38 seals (In Native) on the ice, there were lots of seals 39 out there and would that be because they're resting or 40 is that just an occasion that happens once in a blue 41 moon. 42 43 MR. SCHAEFFER: Was that in the 44 springtime? 45 46 MS. ATORUK: The seals? 47 48 MR. SCHAEFFER: Yeah. 49 50

0166 1 MS. ATORUK: No, this fall. 2 3 MR. SCHAEFFER: Oh, yeah. 4 5 MS. ATORUK: You know lots of seals 6 were out. 7 8 MR. SCHAEFFER: They follow the herring 9 in, just like the belugas, you know, two days before 10 that -- before the seals showed up we had, you know, 11 two to 300 beluga come in and they were following the 12 herring because the herring came in, there was -- there 13 was -- the tides had changed because of the moon, I 14 guess, and we were having incoming tides and so a lot 15 of -- a lot of herring came in, oh, the seagulls enjoyed it and especially, you know, the belugas and, 16 17 then, of course, the seals are always there. They feed 18 off of herring and they get fat, you know, herring is 19 such a fat fish. So, yeah, they follow the herring, 20 and almost every fall. 21 22 MS. ATORUK: Yep. And about those 23 bubbles in that sand up on the hill, I think you would 24 have been interested. 25 26 MR. SCHAEFFER: Yeah, I think it's 27 methane, you know. As -- like I said, as the tundra melts and then permafrost is melting, you can't notice 28 29 it. But because you're so accustomed to seeing it from 30 a day to day but if you look at it from a year to year 31 or a decade to decade. I had an uncle that told me at 32 one time, that his lifetime, and he died when he was 33 almost 80 years old, in his lifetime he said he always 34 noticed from his house that hill, he said that hill was 35 gone behind Kotzebue, in his lifetime. 36 37 MS. ATORUK: Hum. 38 39 MR. SCHAEFFER: We never ever notice 40 those things because it's one of those things. But he 41 noticed it because every little time he looked out his 42 one window he would always see that hill, and in his 43 lifetime, in 80 years, that hill was gone. So it's happening all the time, you know. I noticed it in my 44 camp, you know, in my 40 years there, you know, how 45 46 there's tremendous changes because as time goes on and 47 permafrost melts because of the excess heat that we're 48 having in the summertime and of course our summers are 49 a lot longer than they ever were so the melting is 50

1 happening but you never notice it. You know the elevation is lessening almost every year but you never 2 3 notice it because we're just human, we're not machines 4 and we just can't remember those things. But when you 5 start observing those things -- methane gas will probably get worse as time goes on. As more permafrost 6 7 melts the more emissions of it, that -- so -- so it'll start affecting the atmosphere a lot more as time goes 8 9 on. 10 11 MS. ATORUK: Thank you. 12 13 CHAIRMAN BAKER: Yes, thank you, Bob. 14 So now we'll go on to the Fisheries Resource Monitoring 15 Program, and that, I believe, starts on Page 227 and I 16 have Karen Hyer, are you on the line this morning. 17 18 MS. HYER: Yes, Mr. Chairman, can you 19 hear me. 20 21 CHAIRMAN BAKER: Yes, I can. 22 23 MS. HYER: Great. Okay. All right, I'm going to give everybody a moment to get to Page 227 24 25 of your book and then I'll start. 26 27 (Pause) 28 29 MS. HYER: Hello, Mr. Chairman and 30 Members of the Council. For the record my name is 31 Karen Hyer and I'm a Fisheries Biologist with the 32 Office of Subsistence Management. I'm working with Dr. 33 Hannah Voorhees today and she's the Anthropologist that 34 works in the northern region with OSM. 35 36 So starting on Page 220 of your books 37 I'm going to go over the Fisheries Resource Monitoring Program, which is a fairly long discussion and so we're 38 going to be bouncing back and forth a little bit in 39 40 this, and I recognize there's some new Council members so I'm going to give a overview, and if any questions 41 42 come up while I'm presenting, please, just go ahead and 43 ask them. 44 45 The Office of Subsistence Management 46 provides money for fisheries research and monitoring on public lands. They do this through an 47 Federal 48 InterAgency InterDisciplinary approach, and there are 49 two terms that you need to be familiar with as I go 50

through the book. The first is the Fisheries Resource 1 Monitoring Program. The second is the Fisheries 2 3 Resource Monitoring Plan. And unfortunately the names 4 are so similar that they get confused a bit. But the 5 Fisheries Resource Monitoring Program is the overarching administration and it's about implementing 6 7 the Program. The final product of this implementation 8 is a group of products -- excuse me -- a group of projects that collect fisheries data. This group of 9 10 projects is what is called the Fisheries Resource 11 Monitoring Plan. So the Fisheries Resource Monitoring 12 Program produces the Fisheries Resource Monitoring 13 Plan. So keep that in mind as we step through this. 14 15 The Fisheries Resource Monitoring 16 Program is through six regions, and at the bottom of 17 Page 227 you can see those regions in that map, it's 18 divided up. 19 20 This Council is in the northern region 21 and the northern region consists of three Councils, the 22 North Slope, the Seward Peninsula and the Northwest 23 Arctic RAC. So this Council works with the two other 24 Councils to direct fisheries research in the northern 25 region. The process -- this whole process starts with 26 determining where there are information gaps in your 27 region. So in the fall of 2020 Dr. Voorhees and I met with the Council to identify data gaps and research 28 29 priorities for the region and each -- we met with each 30 Council and each Council produced a list of priorities. 31 And when we put this list together it was called -- the 32 final project was called the priority information needs for the Northern Region, and if you look on Page 237 33 34 and 238 you can see our final list. And if you look at 35 that you'll see that there are priority information 36 needs for your area and also for the other two areas. 37 38 (Teleconference interference 39 participants not muted) 40 41 MS. HYER: So once this list is put 42 together and the priorities are sent out -- this list 43 is sent out in an announcement and the announcement 44 asks investigators to develop projects that will these priorities. 45 address And during this 46 announcements we reach out to tribes, rural 47 organizations, the State and Federal organizations, 48 consulting firms and universities and we also publish 49 it in the Federal Register. And so the announcement 50

1 goes out and that we have money and that we're looking for projects to answer these questions. 2 And then 3 investigators that are interested in completing the 4 projects that address these priority information needs 5 actually submit proposals to OSM. And for the northern region, this round, there were four proposals that were 6 7 submitted and you can find the proposals on Page 1 -excuse me -- in Table 1 on Page 239. So if you turn to 8 Page 239 you can see the four project proposals that 9 10 were submitted for this region. 11

12 And now we are in the middle of a 13 competitive review process for these proposals. And 14 the first step in this review process is the Technical 15 Review Committee. And the Technical Review Committee is a panel of expert scientists and they review the 16 17 proposals and they evaluate them based on five 18 criteria. And so now if you flip back up in your book 19 to Page 232 you can see the criteria, the initial 20 criteria that these four proposals were reviewed on. 21 And these criteria are strategic priority; the project must address an information needs related to Federal 22 23 subsistence management; technical and scientific 24 merits; the project is evaluated for scientific rigor 25 and it's clarity of purpose; investigator ability and 26 resources; the investigators must have the ability to 27 complete the proposed work; partnership and capacity 28 building; it must have participation and support from 29 local organizations; and, finally, cost benefit; the 30 work needs to be reasonably priced. A summary of the 31 Technical Review Committee comments can be found on 32 Page 239 and 240. So then, again, below the table with the projects you can see what the Technical Review 33 34 Committee had to say about each project. And then I 35 also want to point out, below that, there is also, starting on Page 242, Appendix 2, there's also an 36 37 executive summary of the project, and these executive 38 summaries are written by the investigator.

40 So now we have the Technical Review Committee comments, and that was the first step, and so 41 42 today I'm here to collect the Council's comments on 43 these projects, and I'll do that in just a few minutes. 44 But your comments, in addition to the Technical Review Committee comments are put together and then the Staff 45 46 Committee then is the step -- they go before the Staff 47 Committee after the Council meeting and then the Staff 48 Committee then adds their comments and they combine all 49 the information together and this information is 50

0169

1 provided to the Federal Subsistence Board. In their January 2022 meeting, the Federal Subsistence Board 2 3 will take all this information on what to fund, and 4 they do that for the whole state of Alaska. And then once this recommendation is made OSM will fund as many 5 of these recommended projects as they can given their 6 7 budget. And historically OSM has been able to fund most of the recommended projects. And then once the 8 9 projects are set to be funded they will be implemented 10 in the spring and summer of 2022 so we're moving into 11 the season when these projects will be implemented. So 12 this group of projects that will be implemented is 13 called the Fisheries Resource Monitoring Plan, so we'll 14 call it the 2022 Fisheries Resource Monitoring Plan. 15 And this whole process takes place every two years and each project within the Fisheries Resource Monitoring 16 17 Plan can be funded up to four years. 18 19 before start discussing So we 20 individual projects, I just want to pause and ask if 21 there are any questions on the overarching process. 22 23 (No comments) 24 25 MS. HYER: All right, well, if nobody has any questions I'm going to refer you back to Page 26 27 239 so you can see.... 28 29 MR. SCHAEFFER: Ma'am. 30 31 MS. HYER: Oh, yes. 32 33 MR. SCHAEFFER: Yeah, this is Bob. 34 35 MS. HYER: Hi. 36 37 MR. SCHAEFFER: Who -- is this a part 38 of InterDepartmental stuff that you're doing or is it 39 different agencies that are applying for these monies? 40 41 MS. HYER: So different agencies apply 42 for the monies, we administer the money and we oversee 43 the implementation of the money. But different 44 agencies actually receive the money and they do the projects, OSM just oversees the whole administration of 45 46 the projects. So in your region, different 47 organizations have applied for this money and they will 48 actually be the ones implementing the project. 49 50

0171 1 MR. SCHAEFFER: Yeah, I was actually 2 kind of wondering because I didn't see anyone that was 3 ever mentioned about who was applying for the funds and 4 who's doing the project. 5 6 So if you look down in the MS. HYER: 7 appendix that starts -- Appendix 2, it starts on Page 243, you can see the number of the project, and this is 8 9 just a number that we assign so we can track them, and 10 then the title of the project, and then you can see the 11 principal investigator and who is actually going to 12 implement the project if it's funded. That's part of 13 the executive summary. 14 15 So for this region, we have the four projects, and this is all of northern region and the 16 17 first project is the Wildlife Conservation Society and 18 then the second one is Alaska Department of Fish and 19 Game, and then U.S. Fish and Wildlife Service has the 20 fourth one, and the fifth one I believe is Fish and 21 Game again -- yes, the fifth one is the Alaska Department of -- excuse me, the fourth one is Alaska 22 23 Department of Fish and Game and that information is all 24 in Appendix B. 25 26 Are there any other questions. 27 28 MR. HOWARTH: Yeah, this is Wilbur 29 Howarth, lower Kobuk. 30 31 MS. HYER: Yes. 32 33 MR. HOWARTH: In 2017 I believe we did 34 study on the sheefish through their little wings, or 35 whatever we cut off on the part of the sheefish and get 36 age groups from them and stuff, Bob, have you guys in 37 the Kotzebue area notice in the past year or so been 38 getting these big huge sheefish, those were the 17 year 39 olds. They were so abundant. So 21 year old right now 40 -- maybe 20 years old is what you guys have been 41 getting, and that's why the sheefish was so huge. But 42 when they were 17 years old there was so much of them, 43 they were getting them all over the Kobuk River, over 44 towards the Selawik. So I guess this year we should be 45 doing another study on them and checking on them. So 46 I'm glad you guys came up with this one, maybe we need 47 to do the whitefish now. 48 49 Thank you. 50

0172 1 MS. HYER: Mr. Chairman. Council 2 members. Are there are any other questions or comments 3 before I move on. 4 5 MS. ATORUK: Karen. 6 7 MS. HYER: Yes, hi, Barb. 8 9 MS. ATORUK: Hi. Will there be a time 10 for us to submit some new ideas or new add-in species 11 or should I do it now? 12 13 MS. HYER: You know, yes, so the 14 official time will be -- we start this whole process 15 over again so I'll be coming back with Dr. Voorhees next fall, so in a year, and we'll submit the official 16 17 list -- we'll work on the official list, but if you 18 have some thoughts, Barb, I'd be happy to hear them 19 because it helps me prepare. But I think maybe if we 20 go through the projects and then if there's something that you think you want to add on the end, that would 21 be an excellent time. I'd love to hear what your 22 23 thoughts are, if that sounds okay with you. 24 25 MS. ATORUK: Oh, that's okay, because 26 in another year I might not be here and my concerns are 27 the grayling. We haven't had grayling here for awhile in this kind of study ever since Fred from Fish and 28 29 Game left and the did the last study over in Wulik and 30 also in Point Hope. And I've just seen pictures of the 31 size of grayling that were just harvested up in Point 32 Hope and they were like 12 or 13 inches and they were 33 just amazed at how big those are. And then Fred -- I 34 can't remember his last name, but with Fish and Game, 35 said on his report at the time, that it takes 30 years 36 for a grayling to mature to that size. And his advice 37 was to the villages, at the time, is to back off in harvesting so much but just to get enough to get by. 38 39 And he said some elders at Kivalina were doing that 40 because of the depelmention, the starting to decline, 41 the size of -- at the time that he's talking about the 42 grayling then, and also -- so I think the grayling 43 studies need to come back on board sometime in the 44 future. 45 46 Thank you. 47 48 MS. HYER: Thank you, Barb. I will put that on the list to bring up when we start on our 2024 49

0173 1 priority information needs. I'm always interested in 2 what people are seeing with fisheries in the region. 3 4 MS. ATORUK: Okay, back on mute. 5 6 MS. HYER: Any other comments or 7 questions. 8 9 MR. SCHAEFFER: Just one, this is Bob. 10 11 MS. HYER: Hi, Bob. 12 13 MR. SCHAEFFER: Yeah, well, I'm a huge 14 proponent of local knowledge and at the university did 15 a good job, and -- and had the Advisory Committee up here during that entire sea ice study and a number of 16 17 us elders were on that -- on that committee, an 18 advisory committee that just talked about what they 19 were going to do it and how they were going to do it 20 and we gave suggestions on a lot of different items as 21 to what local knowledge because nobody knows -- knows 22 the country better than we do, nobody knows the fish 23 and resources better than we do, we've been living with 24 them and studying them for a long, long time. 25 26 to express the But I just wanted 27 importance of local knowledge and of course the university did a wonderful job by working with some of 28 29 the local elders. There's not too many of us left that 30 have the inside knowledge of a lot of the subsistence 31 resources and as time goes on there'll be even less, 32 it's just one of those things where we're all getting old and we still have that knowledge that was passed 33 34 down from my dad, you know, and some of the elders back 35 in the 36 '40s and '50s that are still with us. But anyway I 37 just wanted to stress theimportance of the knowledge -if there's an RPF coming out for funding, that the 38 placed within your 39 local knowledge emphasis is framework of your -- you know, the grants that you are 40 41 issuing. 42 43 MS. HYER: Yes, absolutely. 44 45 (Pause) 46 47 MS. HYER: Any other comments or 48 questions. 49 50

0174 1 (No comments) 2 3 MS. HYER: Okay. All right, so what I 4 need from the Council today is their thoughts and comments about the four projects that were proposed for 5 funding in this region. And this isn't an action item, 6 7 we just want to know if the Council has any specific concerns about the proposals or anything to add. And 8 9 10 will be recording your comments and those comments will 11 be taken back to the Federal Subsistence Board and 12 included with the TRC's comments and the Staff 13 Committee comments for their consideration. So I'm 14 just going to go through this one by one, I'm going to 15 go through this table and then I'll pause -- I'll give 16 you a little bit of an overview of each project and 17 then I'll pause and if you have anything to add, or any 18 comments, please let me know and I'll record them. 19 20 So the first project is Project 21-101, 21 Kotzebue Sound sheefish, describing coastal movement, 22 temperature preferences and potential range expansion. 23 This investigator proposes using satellite telemetry to 24 characterize coastal movement of sheefish outside of 25 their typical range in Kotzebue Sound. Currently, the 26 extent of northerly coastal movement is not well 27 understood and may potentially be influenced by climate 28 Recent changes in movement patterns and change. 29 abundance of sheefish has been observed by local 30 subsistence users. Many studies of sheefish have been 31 completed during their freshwater phase but little is 32 known about their marine behavior. Originally it was believed that sheefish did not travel very far up the 33 34 coast while in saltwater but recent local knowledge 35 suggest this paradigm may not be true in the context of 36 changing climate. 37 38 So I am going to pause here and if the 39 Council has any comments or concerns about this 40 project. 41 42 MR. SCHAEFFER: This is Bob, I've got a 43 question, or more of a comment, I guess. 44 45 MS. HYER: Great, Bob. 46 47 MR. SCHAEFFER: Yeah, I know very 48 little is known, I know that Fish and Game has always been concerned about trying to manage the sheefish but 49 50

1 they -- it's kind of how do you do it when most of the activity is under the ice, you know, and we don't fish 2 3 them in the summertime, you know, they get soft and 4 then don't taste very good. But when the water gets 5 cold, and in Kotzebue Sound, of course, and then Buckland, the Kobuk Lake there's 'a certain amount of 6 7 salinity which really aides in making the fish nice and firm and so good to eat but I know I was talking about 8 the movement of some of the fish and, you know, the 9 10 herring is really, really an important species of fish 11 because it feeds a lot of other fish and the sheefish 12 just thrive on them. So when the herring come in in the late fall and the sheefish come down, you know, to 13 14 scarf themselves and they just get super fat in no time 15 and the sheefish fat are so delicious. But -- but the whole -- and, you know, the thing of tracking them, I 16 17 guess, and see what their movements are would be kind 18 of a challenge and I think more information that 19 they're able to gather would better try to understand 20 what the sheefish do.

22 We were out hunting beluga one time 23 back, I forgot how many years ago, and we got three 24 belugas out there about past the Kobuk Channel and took 25 them in because we wanted to know what they were eating 26 and when we opened them up, the sheefish had followed 27 the herring all the way out into the ocean and the 28 Belugas were stuffed with sheefish and, youknow, with --29 so different sizes from small to large so, you know, 30 they do -- they do move out into the ocean into -- and 31 thrive, I guess and in saltwater as well as freshwater 32 and -- and so I -- so it always brings the question to 33 mind, what do they do -- what do they do, where do they go, we know where they spawn, it's local knowledge in 34 35 Selawik, and then the upper Kobuk and the 36 (Indiscernible) River area, you know, they -- they go 37 way up there and then they spawn. But it's just the 38 idea that, you know, you try to gather as much 39 information as you possibly can so that you can better manage as the -- does the $\ --$ you know as the domestic 40 41 pressure on them increases as -- as the Borough 42 population increases, you know. New road's coming in, 43 the additional pressure that's going to be placed on 44 that poor fish is probably going to increase as the 45 highway expansions there in the upper Kobuk area. 46 47 So I just thought I'd mention that, 48 thanks.

49 50

0175

1 MS. HYER: Thank you. Any other 2 comments. 3 4 (No comments) 5 6 MS. HYER: Mr. Chairman. Council 7 The next project, Project 22-103, Unalakleet members. River chinook salmon escapement assessment is down in 8 9 the Seward Peninsula. The Unalakleet River supports 10 the largest chinook salmon subsistence fishery in 11 Norton Sound, Port Clarence area. The subsistence 12 fishery occurs primarily under State jurisdiction but 13 Federal subsistence users participate in the harvest. 14 Funding for this project would be used to continue 15 operation of a floating weir on the Unalakleet River to monitor the chinook salmon passage. 16 The Fisheries 17 Resource Monitoring Program has funded the Unalakleet 18 River since 2010. The results from this project will 19 continue to provide chinook salmon in-season daily 20 passage estimates and run timing. This information aides Federal and State managers in making in-season 21 22 and post-season decisions. 23 24 And I'm going to pause here and see if 25 the Council has any comments or recommendations for 26 this particular project. 27 28 (Pause) 29 30 MS. HYER: Okay. Let's move on to 31 Project 22-194, this is back in your backyard. Selawik 32 River sheefish population estimate. A permafrost slump 33 located about 40 kilometers up stream from the sheefish 34 spawning area in the Selawik River began admitting 35 large amounts of sediment into the river in 2004. The 36 Selawik River below this slump at times became turbid 37 during the summer months transporting huge quantities 38 of sediment down stream potentially having a negative 39 effect on the habitat for spawning fish. In 2012 the 40 Fisheries Resource Monitoring Program began funding 41 investigators to monitor the annual abundance and age 42 structure of the Selawik River sheefish spawning 43 population to determine if the sediment emitted from 44 the permafrost slump impacted the population over time. The investigators were not able to establish an effect 45 46 from the slump but recommended subsequent age data 47 collection in five years to confirm their findings. 48 And this proposal addresses that second request for age 49 data collection. I need to point out that in the book 50

0177 1 there is an error in the cost, and so I just wanted to point out, for the record, that this project, the cost 2 3 for 2024 for this project are 126,682, and the cost for 4 2025 should be \$34,036, so that is an error in the 5 printed book. 6 7 So I'm just going to pause here and see 8 if there are any comments or concerns about this 9 project. 10 11 MR. HOWARTH: Yes, this is Wilbur 12 Howarth. 13 14 MS. HYER: Hi Wilbur. 15 16 MR. HOWARTH: Yeah, this sheefish up 17 the Selawik, we had a meeting here with the Fish and 18 Game, I believe, when they did the counting and we --19 they got some samples of the aging of these fish and I 20 believe we did lots of that so they are -- they wanted 21 to do another deal on, you know, seeing how much --22 because they had a tough time counting that year, in 23 2004 area because of the land slide they had up there, 24 way up above the Selawik. 25 26 MS. HYER: Uh-huh. 27 28 MR. HOWARTH: And they tried counting 29 fish, how much sheefish goes up there and we never hear 30 any more counts being done on the sheefish but at least 31 we know the aging and stuff and how much sheefish there 32 is and there is still plenty. Because these sheefish 33 they live to 40 years old. So, thank you. 34 35 Thank you, Wilbur. Is there MS. HYER: 36 anybody else. 37 38 MS. SWEENEY: Hi, Karen. Hi, Council 39 This is Brittany Sweeney from Selawik Refuge. Members. May I comment. 40 41 42 MS. HYER: Absolutely, Brittany. 43 44 CHAIRMAN BAKER: Yes, please, Brittany. 45 46 MS. SWEENEY: Okay, thanks. I just 47 wanted to respond a little bit to what Wilbur said. So, yes, Selawik Refuge, our fish biologist Bill 48 49 Carter, is not able to be on the call today but we've 50

0178 1 been one of the people cooperating in the Selawik sheefish research over the years. And, you're right, 2 3 Wilbur, this has been sort of an ongoing project for a 4 number of years because we do want to keep an eye on 5 that sheefish population over the long-term especially because of that soft slump and how, you know, it can 6 7 continue to be active at times. So, you're right, we have done population counts or using sonar and also 8 looked at the otoliths, the ear bones, to do the aging 9 10 of the fish so I believe that the proposal for this 11 year is to just come back and get another set of data 12 to compare with and keep an eye on compared to what we had before. Because we're still trying to understand 13 14 the population dynamics of the sheefish because they do 15 live so long, you know, there's certain groups that 16 stay in the population and those big fish sometimes eat 17 the younger fish and then the younger fish don't 18 survive until those older ones age out. So we're still 19 trying to -- I think some of the reason for this 20 project is to understand some of those population 21 dynamics as well as continuing to monitor the numbers 22 of fish in the Selawik River after the slump. 23 24 So hopefully that gives a little 25 background. I don't know if Ray Hander is on the call, 26 he's another person that's been involved in that work. 27 28 Thank you. 29 30 MS. HYER: Thank you, Brittany. 31 32 MR. HANDER: Yes, Mr. Chair, this is 33 If anybody has any further questions, I Ray Hander. 34 think Brittany did a really great job of describing 35 where our project has been and wants to go but I'm here 36 if you need me. 37 38 Thank you. 39 40 This is Wilbur Howarth MR. HOWARTH: 41 again. Maybe Brittany might know this, are they doing 42 any studies up the Kobuk where the sheefish spawned 43 because I think that some of these sheefish that goes 44 up the Selawik, they also come up the Kobuk, if I'm 45 correct. 46 47 MS. SWEENEY: Hi, Wilbur. 48 49 MR. HANDER: Mr. Chair, this is..... 50

0179 1 MS. SWEENEY: Through the Chair. 2 3 MR. HANDER: Oh, sorry. 4 5 MS. SWEENEY: Oh, yep, this is 6 Brittany. 7 8 MR. HANDER: Oh, go -- sorry, go ahead. 9 10 MS. SWEENEY: No, I was going..... 11 12 MR. HANDER: No, go ahead, yeah. 13 14 MS. SWEENEY:to -- yeah, so we 15 have two sheefish spawning populations in our region which are separate. The ones that spawn on the Selawik 16 17 River always go back to the Selawik River. And then 18 there's another spawning population on the upper Kobuk 19 and they do mix together in the winter and so the 20 harvest and Kotzebue area, and wherever, are harvesting 21 from both of those and they mix together in their 22 rearing population. So while this project that's up 23 doesn't do too much on the Kobuk, we do get samples 24 from Fish and Game to compare the age structures but 25 I'll let Ray talk more about the work because he's the 26 expert on that subject. 27 28 So, thank you. 29 30 MR. HOWARTH: Thank you. 31 32 Yes, Mr. Chair, this is MR. HANDER: 33 Ray Hander. 34 35 CHAIRMAN BAKER: Yes, go ahead, Ray. 36 37 MR. HANDER: Okay. Hi, Wilbur. Yes, 38 over the years, to address your first question there, 39 there have been a number of tagging studies, oh, boy, from probably from the 1980s all the way through the 40 41 2000s that have done studies on both the Kobuk and 42 Selawik River sheefish and none of those tags -- let me 43 back up -- the tags, they are put on in the fall where 44 the sheefish are separated into their spawning rivers on the Kobuk and Selawik, and then those fish go back 45 46 out in the wintertime and mix, like Brittany was 47 saying, but as far as we know they do not go up -- the 48 Selawik fish don't go up the Kobuk and the Kobuk don't 49 go up the Selawik River and so it's an interesting deal 50

0180 1 there. And, yeah, I'll leave it at that, if that answers your question. 2 3 4 MR. HOWARTH: Okay, thank you. 5 6 MS. HYER: Mr. Chairman. Council 7 members. Any more questions or comments before I move 8 on to our last project. 9 10 MR. SCHAEFFER: Ma'am, I have one -- I 11 guess it's more of a comment. 12 13 MS. HYER: Absolutely, go ahead. 14 15 MR. SCHAEFFER: Yeah, I like what 16 they're doing. I think it's really important to keep 17 track of it and when you talk about global warming and 18 its affect on our poor rivers, you know, and as -- as 19 time goes on, so it becomes a real issue, as those 20 rivers heat up, how is it going to affect -- affect the salmon, chinook, chum, kings, we're seeing a lot less 21 22 of that. 23 24 Like, for example this year, you know, 25 it was kind of a scary situation because I was hoping that we'd have a couple of days to dry out but it never 26 27 happened and, you know, we worry about the salmon going 28 up the Noatak and Kobuk Rivers and the rivers are at 29 that flood stage and where are they going to lay their 30 eggs, you know, and then they're going to go on to the 31 first sand bar up that -- that -- up their spawning 32 rivers that they normally go and they spawn on the sand 33 bars and the river drops and, of course, the sand bars 34 show up. 35 36 (Teleconference interference 37 participants not muted) 38 39 40 MR. SCHAEFFER: So we could anticipate 41 that this is going to affect the population of the 42 salmon going up those streams tremendously. But I 43 think what they're doing is trying to monitor it and I 44 like that idea, I think it's a good proposal and I think -- I think it should be -- I like what they're --45 46 anyway I just thought -- I thought I'd mention that 47 because I think something like that on Kobuk and 48 Noatak.... 49 50

0181 1 (Teleconference interference 2 participants not muted) 3 4 MR. SCHAEFFER:would be 5 (indiscernible) because we're not getting salmon up the 6 They're -- you know, the Kobuk like we used to. 7 numbers just aren't there anymore and I think there's a reason for it and we need something like this so -- so 8 keep good close tabs on what they're -- like what's 9 10 happening within the Unalakleet River seems like a good 11 start for them. 12 13 (Teleconference interference 14 participants not muted) 15 16 REPORTER: Could we have some people 17 mute their phones please. 18 19 CHAIRMAN BAKER: Yes, I agree. 20 21 MR. SCHAEFFER: Hello. 22 23 MR. HOWARTH: It sounds like someone is 24 outside.... 25 26 MR. SCHAEFFER: It sounds..... 27 28 MS. WESSELS: Excuse me, this is Katya 29 Wessels. Somebody does not have their phone on mute. I 30 apologize but please mute your phones because we can 31 hear you walking, please mute your phones if you're not 32 talking. 33 34 (Teleconference interference participants not muted) 35 36 37 REPORTER: Hi, this is Tina, the 38 Could we all take a second, look at our reporter. 39 and mute it. We're hearing a background phone conversation, people walking outside, if you could we 40 41 could hear the presenters then. Thomas, go ahead. 42 43 CHAIRMAN BAKER: Thank you, Tina. 44 Karen, did you have anything..... 45 46 MS. HYER: Yes. 47 48 CHAIRMAN BAKER:else on 22-104 49 that we were looking at. 50

0182 1 MS. HYER: I don't think so, I think 2 we're ready to move on to 22-105 [sic], and this is the 3 last proposal for a project in your area so I'll go 4 over that. 5 6 CHAIRMAN BAKER: Is it 22-150, or 105, 7 I have it as 150 in mine. 8 9 MS. HYER: I'm sorry, I misspoke if I 10 said 105, it's 22-150, I apologize. 11 12 CHAIRMAN BAKER: Okay, thank you. 13 14 MS. HYER: Thank you for correcting 15 Traditional ecological knowledge of that. Okay. salmon in the river drainages of Kotzebue Sound. This 16 17 is a two year project that will contribute to the 18 understanding of the effects of environmental change on 19 salmon in Northwest Arctic, as well as the shifting 20 capacity for subsistence uses in Ambler, Noorvik and 21 Kotzebue to harvest them. This project updates the 22 traditional ecological knowledge work funded through 23 the Fisheries Resource Monitoring Program in 2012. 24 Researchers will investigate subsistence use for all 25 four species of Pacific salmon on the Noatak River and 26 all five species of Pacific salmon on the Kobuk River. The investigator will interview subsistence harvesters 27 28 about traditional knowledge of salmon ecology, map 29 and contemporary subsistence historical harvest 30 locations and observe fish migration. 31 32 So I'm interested in any comments or 33 concerns that the Council has about this last project. 34 35 MR. HOWARTH: Hello, it's Wilbur. 36 37 MS. HYER: Hello, Wilbur. 38 39 MR. HOWARTH: Yeah, that salmon that's been tested, I believe, almost every summer if I'm 40 41 right, below Kiana with the Fish and Game, what are 42 they really doing, taking samples or -- because I 43 notice every year they're gathering salmon and giving them out -- giving them to the people up in Kiana. 44 Maybe Barbara might know more about this than me. 45 46 Because these salmon comes up both rivers. One year 47 they would hit the channel area, which goes into the 48 Riley and down to the mouth of the Kobuk River, we have 49 so much names, and then on the other side they would 50

1 come in in different year so some years we don't get them and this Kobuk River side, which they come up the 2 3 main Kobuk River, and then the other river on that 4 side, towards the north or -- anyways, they go through 5 there. So we really don't know much in this Noorvik, how the salmon are doing, how many, so those people are 6 7 they doing counts up there, I'm wondering, Fish and 8 Game. 9 10 MS. HYER: Mr. Chairman. Council 11 members. That's the Alaska Department of Fish and 12 Game's test fishery. And Ray Hander or Barbara, either 13 may be able to add details, if either is on the line. 14 15 MS. ATORUK: Mr. Chair. 16 17 CHAIRMAN BAKER: Yes. 18 19 MS. ATORUK: This is Barb. Well, for 20 some years now since I've been here in Kiana, Fish and 21 Game has been doing studies, at first they were doing 22 studies with sheefish. They were taking out right on 23 top of the head, down to the nose, like a V, and they 24 were taking those off when they caught the sheefish. 25 But this summer they didn't. They have a local person 26 who does gillnetting with a helper, but they had 27 technical difficulties this summer and then, plus, the 28 river was so high for a long time that they finally 29 gave up. But Henry, Sr., (In Native), he put his net 30 out and stuff and then shared a lot with the local 31 people which made us very happy because we hardly got 32 any salmon when the other fisheries were on. So I don't know what kind of count they're doing, Fish and 33 34 Game, with the salmon now, or if they're just setting 35 locally. And I haven't heard any report on that or 36 heard why they are still doing it, if they're doing 37 that -- I know they're not doing any more sheefish count because the first time they set they caught a lot 38 39 of sheefish, and I ran down there and they didn't know what to do with it, or -- they had been announcing who 40 41 would like sheefish, and I told them -- I just asked 42 them, I said, since they were out and busy with this 43 stuff I said, just bring it by my house, I'll work on them, and they did that and then shortly after that 44 salmon were slow coming in, for a very long time, even 45 46 when Henry set, they weren't really that -- up here 47 until late August. And so I don't know what's going 48 on, if they're doing salmon studies then or if they're 49 just checking to see how many salmon they've caught and 50

0184 1 just counting by numbers. 2 3 That's all I've seen here. Thank you. 4 5 MR. HOWARTH: Thank you, Barb. 6 7 MR. HANDER: Yes, Mr. Chair, this is Ray 8 Hander. 9 10 CHAIRMAN BAKER: Yes, go ahead, Ray. 11 12 MR. HANDER: Yes, Sir. If there is no 13 Alaska Department of Fish and Game person online that 14 can address this I think I can do a reasonable job from 15 a U.S. Fish and Wildlife Service perspective there. 16 17 (No comments) 18 19 MR. HANDER: Yes, so maybe hearing 20 none, so the Alaska Department of Fish and Game 21 operates a chum salmon test fishery there and that is 22 through the Commercial Fisheries Division, that office 23 base for that part of the state is in Nome. And from 24 2011 to 2018, like Mrs. Atoruk was speaking, the U.S. 25 Fish and Wildlife Service and the Alaska Department of 26 Fish and Game were cooperating on the project that Ms. 27 Hyer spoke about that we did on the sheefish from 2011 to 2018 taking the ear bones and doing sonar counts. 28 29 We also had cooperated -- or the Alaska Department of 30 Fish and Game cooperated with us to be able to get age, 31 sex, and length data from Kobuk River sheefish so for 32 those eight years, 2011 through 2018, those sheefish 33 were being distributed to the community of Kiana and 34 maybe others close by there. So that's kind of where 35 the sheefish part came in. And, yes, so 2019, 2020, 36 and 2021 those sheefish weren't being analyzed like 37 they had been in the recent past. 38 39 And the Alaska Department of Fish and 40 Game, they've been running the chum salmon test fishery 41 for quite a number of years and they are -- their goal 42 mainly is to estimate abundance of the number of chum 43 salmon going up the Kobuk River, and they take age, 44 sex, and length data from those fish as they go by to 45 help their management practices. 46 47 If that helps out, great, and if 48 there's any Fish and Game persons on board, you can 49 help clean up my description. 50

0185 1 Thank you. 2 3 CHAIRMAN BAKER: Thank you, Ray. 4 Anybody else have any questions. 5 6 (No comments) 7 8 Mr. Chairman. MS. HYER: Council 9 members. If there are no other questions or comments, 10 that concludes my presentation. I have everything I 11 need from you and I appreciate all your comments. 12 13 CHAIRMAN BAKER: Thank you, Karen. Any 14 final questions or comments for Karen on her 15 presentations. 16 17 MR. SCHAEFFER: Just one, Tom. 18 19 CHAIRMAN BAKER: Yeah, go ahead, Bobby. 20 21 MR. SCHAEFFER: Can you hear me? 22 23 CHAIRMAN BAKER: Yes, I can hear you. 24 25 MR. SCHAEFFER: Hello -- okay. Yeah, I just think -- I think more should be done, I -- I don't 26 27 know -- like I can attest to global warming and what it's doing to us up here, you know, we're all feeling 28 29 the effects of it, if it's not the excess heat then 30 it's something like we had this summer, we had three 31 months of rain. And, you know, it's going to affect 32 our salmon, so the mortality rate is probably going to 33 be pretty high this year and the escapement is probably 34 not going to be very, very good four years from now. 35 But I think the more that we do and -- insofar as 36 understanding how global warming is going to affect the 37 species, the four species that we do have up here, you 38 know, it's going to be interesting. For the first 39 time, you know, the last couple years, we got so much doggone pinks, it was like crazy how they just showed 40 41 up from somewhere and -- and I've been fishing 42 commercially since 1962 for Godssake and, you know, 43 it's -- it's just something that we've never seen before. But we've always watched -- watch the fishery 44 from year to year and, you know, my -- my dad used to 45 46 always worry about the wet summers and he said in four 47 years from now it's not going to be good, the returns 48 are not going to be as good because the mortality rate 49 is going to be too high up the rivers. And I've been 50

1 keeping track of those thingsand with the Department -from Fish and Game, and, you know, fish and wildlife 2 3 is really important, I think -- God knows what's in 4 store for us next summer. But I -- I just hope it's a better summer than we had this summer, if it's not the 5 excess heat it's too much water so one thing after 6 7 another, I quess. I -- I worry about the species very much, the four species of salmon, I -- I -- you know, 8 9 when we have a summer like this you know that mortality 10 rate for the -- especially the eggs is going to be 11 high, there's washout and then also, you know, spawning 12 on -- on sand bars that are normally dry during --13 during the winter months and so the -- the more work 14 that we can get no salmon, more studies done on them, 15 maybe the more we will understand what we can do to try 16 to -- you know to try to -- you know to save our salmon 17 runs. 18 19 Thank you. 20 21 MR. HOWARTH: Mr. Chair, it's Wilbur. 22 23 CHAIRMAN BAKER: Yes, go ahead, Wilbur. 24 25 MR. HOWARTH: Yeah, Karen. To get 26 these fundings to do more studies, I would like to see 27 studies being done on whitefish. Right now some of our 28 locals still have nets out and we're getting the (In 29 Native), they're probably -- that's the blunt-nosed 30 whitefish, the huge ones we put away for eating, with a 31 lot of eggs, but right now they're eggs -- once they 32 come out of the water they just ooze out, but they're 33 heading up -- up the Kobuk. Anyways one guy showed us 34 a picture of the whitefish with a big 'ol giant bump 35 right next to its head by the gill area and it looks 36 pretty terrible. For me, anyways, as a subsistence 37 person fishing all the time, I had my net out -- I just 38 fished three days, and put enough away for the winter. 39 But I'm concerned about the whitefish. They've been going up early, I believe, while the river is wide 40 41 open, and, yes, we did have a lot of high water and it 42 was kind of hard on fishing. 43 44 So, thank you. 45 46 MS. SWEENEY: Mr. Chair, this is 47 Brittany Sweeney again. 48 49 CHAIRMAN BAKER: Yes, go ahead, 50

0187 1 Brittany. 2 3 MS. SWEENEY: Hi. I'd like to give 4 more information on Wilbur's question if I could. So 5 Selawik Refuge has a Facebook page and we did receive a message on that Facebook page from a community member 6 in Noorvik that included that picture -- or a picture 7 of an abnormal looking whitefish. So I sent that photo 8 to some of the fish biologists, including Ray, that are 9 10 on this call and the information that I got from Randy 11 Brown, who specializes in whitefish, that, he said 12 sometimes individual fish can get tumors, abscesses, or 13 other sorts of growth on them for one reason or another 14 and while they're somewhat rare they're not totally 15 unusual. And I asked him if there -- if, you know, looking at the picture if there would be any cause for 16 17 concern about the safety of fish to eat, other fish 18 that were caught in the same net with that fish and he 19 said, yeah, I'd probably feed that one to my dogs, but 20 those sorts of things would not tarnish any other fish. 21 22 So hopefully, Wilbur, that answers that 23 And any time that people have concern for you. 24 questions like that you're welcome to contact us at the 25 Refuge, pictures are great on our Facebook page because 26 that helps us, and then I could reach out to folks. 27 28 Thank you. 29 30 MR. HOWARTH: Thank you, Brittany. 31 Maybe I'll be calling you soon. 32 33 CHAIRMAN BAKER: If there are no other 34 questions or comments, thank you, Karen, for all the 35 information that you presented today, and I hope you 36 meaningful input that will help moving got some 37 forward. 38 39 MS. HYER: Yes, Mr. Chairman and 40 Council members, I did. And I appreciate everybody's 41 input, it's always good to hear what's going on up in 42 the Northwest. 43 44 CHAIRMAN BAKER: All right, thank you. 45 So with that, I'd like to propose that we take a 15 46 minute break before we move on to the identifying 47 issues for the 2021 annual report. Does anyone have 48 any issues with that. 49 50

0188 1 (No comments) 2 3 CHAIRMAN BAKER: All right, it's now Thanks 4 10:40 so we'll come back together at 10:55. 5 everyone. 6 7 (Off record) 8 9 (On record) 10 11 CHAIRMAN BAKER: All right, it is now 12 10:55, this is Chair Thomas Baker. 13 14 (Pause) 15 CHAIRMAN BAKER: Next on the agenda is 16 17 Item E, identify issues for fiscal year 2021 annual 18 report and I believe that'll be Katya that will be 19 taking the floor on this one. 20 Thank you, Mr. Chair. 21 MS. WESSELS: 22 Members of the Council. For the record my name is 23 Katya Wessels, and I'm Council Coordination Division 24 Supervisor with OSM. And the briefing on the annual report is located on Page 252 of your Council meeting 25 26 materials book. I just wanted to talk briefly about 27 the annual report mostly for the benefit of the newer 28 Council members. 29 30 Section .805 of ANILCA, Title VIII, it 31 outlines the Council's right to submit an annual report 32 to the Federal Subsistence Board. Basically each Council, each of the 10 Councils, one is yours, 33 34 Northwest Arctic Council, are advisors to the Federal 35 Subsistence Board and you provide advice in two 36 different ways; one, your comment on the fisheries and 37 wildlife proposals and closure reviews, this is one of 38 the ways you provide advice; the other advice you 39 provide through the annual report. The annual report 40 is your opportunity to submit your concerns about 41 subsistence uses of fish and wildlife in your region. 42 And Section .805 of ANILCA, Title VIII species that the 43 Council should think about the current and anticipated 44 subsistence uses of fish and wildlife populations in 45 your region; it should also talk about the needs for 46 fish and wildlife populations within the region, current and anticipated needs; other topics that can be 47 48 included in the annual report can be your proposed 49 strategy for the management of fish and wildlife 50

0189 1 populations within your region to accommodate such subsistence uses and needs; and, also the Council can 2 3 provide recommendations concerning policies, guidelines the strategy 4 and regulations to implement for 5 management of fish and wildlife. 6 7 The Council should talk on the record 8 about the topics that you would like to put in your annual report. This will be the FY fiscal year 2021 9 10 annual report. And you will develop the topics during 11 this meeting and then the OSM Staff by your winter 2022 12 meeting will have a draft annual report. The Council 13 will have an opportunity to review this draft annual 14 report during your winter 2022 meeting. And at that 15 time you can make additions or corrections in your report. Then after that the annual report is signed by 16 17 the Chair and submitted to the Federal Subsistence 18 Board and then the Federal Subsistence Board reviews 19 your report and replies the reply to the topics that 20 you brought to the Board's attention. 21 22 So I would -- you know, at this point 23 I'm just going to open the floor to the Council, any 24 Council member who has an idea of what topics should be 25 put in the annual report. Just, please state the 26 issues that you would like to put in the annual report 27 and have a little bit of discussion on that topic. And it could be as few as one topic in your annual report 28 or it could be many, you know, five, eight, 10, 29 30 whatever the Council feels is important for your region 31 and whatever you feel is important to bring to the 32 Board's attention. 33 34 So, please, I'm opening the floor to 35 the Council members to talk about proposed topics. 36 37 CHAIRMAN BAKER: Thank you, Katya. 38 So one of the things that the Board This is Thomas. 39 has been -- the Council has been talking about a lot in 40 the few meetings we've had is the trend in caribou harvesting in Game Unit 23, basically in that not many 41 42 communities, not many members of communities in our 43 Game Unit are able to successfully able to harvest during the typical fall season that we 44 caribou traditionally would in large part due to the numbers of 45 46 non-Federally-qualified subsistence users, predominately people from outside of the region and 47 48 outside of the state of Alaska coming into the Game 49 Unit to hunt caribou during that same season as we do 50

0190 1 and leading to what's been branded as the herd being displaced and interruptions with the migration pattern. 2 3 I feel that this would be something that the Council 4 should discuss now, if anyone has any opinions on it. 5 6 MS. WESSELS: I think that's a good 7 topic, Tom, you know, to add to your annual report. You know if Council members would like to contribute to 8 9 this topic that would be great. We also can reach out 10 to Council members outside of this meeting, since you 11 proposed this topic for your report, if Council members 12 don't have any feedback right now, we can reach out to 13 them also outside of the meeting. But it would be 14 great if the other Council members could talk about 15 that right now as well. 16 17 CHAIRMAN BAKER: Thank you, Katya. Do 18 any members want to talk about the caribou situation 19 and how we can put that into our report going to the 20 Subsistence Board. 21 22 MR. SCHAEFFER: Hello, Tom. 23 24 CHAIRMAN BAKER: Is that Bob. 25 26 MR. SCHAEFFER: Yeah, I quess I got 27 I was really disappointed in their lack of something. 28 action on our proposal to close commercial hunting in 29 the Federal lands around there. I felt that all the 30 testimony that I listened to and the Board, you know, 31 at that time, at least our Committee made a strong 32 statement and, near and dear to our hearts, of course, 33 is, you know, the preservation of our herd, making sure 34 that it's healthy and it hasn't been, you know, for a 35 number of reasons. And I was kind of disappointed in their lack of action. I just felt that out of all the 36 37 effort that we made to try to, you know, lessen the pressure on that poor herd because it's eyeballed by 38 39 every sportsman in the world now, I quess, and just, you know, you only have 230,000 left and you got 40 41 230,000 sportsmen who want to come up and get a 42 caribou, it makes no biological sense. So I just felt 43 that there's a number of factors working against our 44 herd, you know, global warming has played -- and has -and it's proven that it's played a really, really 45 46 tremendous role in their behavior, you know, because 47 they haven't come down, they haven't migrated, they've 48 just sort of haphazardly -- you know I was talking with 49 the Fish and Game -- and listening at the last meeting, 50

1 you know, God, they went as far as the Haul Road, you know, trying to -- God knows what they were doing, you 2 3 know, and they met up with the Teshekpuk Herd and 4 summered over there for awhile and then I guess most of 5 them headed back. And there's -- there's a huge contingent of our herd had wintered around Anaktuvuk 6 7 Pass and over there in Noatak Valley and so it's hard to tell the norm, you know, we don't really look at it 8 9 from that perspective but the Fish and Game does, and 10 they were wondering why they were doing that. And --11 but, you know, with the changes that are happening 12 today with the global warming stuff, there's longer 13 summers, there's warmer winters, things that are --14 that are changing that are probably confusing the norm 15 some. 16

I think, you know, that the poor animal has so much pressure against it that it's just reacting to the changing times today.

21 I guess I'm concerned about that herd 22 because I was -- when I was being raised back in the 23 '50s, you know, it was a little different then. You 24 know winters were a little more -- were cold and you 25 were guaranteed it was going to get 50 below up here, 26 you know, in December and January and you don't see 27 But in a nutshell I just -- I just -- I that no more. 28 think the changes are happening, people are wondering 29 why they're not following their usual routes that they 30 normally follow during the annual migrations but, you 31 know, when things change so drastically they -- they 32 have to react and their reaction is out of the norm and 33 -- and it's just something that I think we're going to 34 have to deal with in the future.

36 Anyway, I thought I'd mention that. 37 You know, anything that we can do to try to preserve our herd and keep it strong is something that we should 38 39 do, and I think there's been a recommendation to the 40 Federal Subsistence Board, a legitimate one, and then 41 that -- that -- you know, it becomes a matter of 42 dollars, you know, the State gets a lot of money from 43 all those non-residents that comes up here and hunts 44 our herd. And the herds up here are the only ones left 45 in the state, it's pretty much decimated all the other 46 herds, and the population growth the way it's going and 47 there's going to be more pressure on them and I just 48 think we have to stand tall and try to put more 49 pressure on the managers of our herd to, you know, to 50

0191

0192 1 do more than just react to big money and -- and try to 2 do their jobs and -- and make recommendations that are 3 to the benefit of the herd. 4 5 Thanks. 6 7 CHAIRMAN BAKER: Thank you, Bob. Does 8 anyone else have any comments at this time or any 9 further discussion. 10 11 MS. ATORUK: Mr. Chair. 12 13 CHAIRMAN BAKER: Yes. 14 15 MS. ATORUK: This is Barb. I concur 16 with what Bobby says. We need to keep on top of our 17 caribou. We need more reports on transporters and who 18 is giving out the permits to be hunting up there. 19 Because I hear, heard real loud this fall that there 20 was a lot of planes up there and a lot of hunters did 21 come through, a lot of camouflage in Kotzebue passing 22 through, over and back. And we need to first -- at 23 first, get a hold of that, and start to control it more 24 because we are the ones that live here and survive on 25 caribou. Even Anaktuvuk Pass, this fall, we have one 26 person from Shungnak that lives up there, has been for 27 awhile, and they didn't get their caribou until after we got ours and that's late. And the hunting period 28 29 time for these hunters in this region this fall was 30 very short because they had just started crossing one 31 day and the next day the ice came and a lot of them almost got stuck up there so -- but apparently it 32 warmed up again and melted the ice and they went back 33 34 out. 35 36 So we need to be on top of that. We 37 need the reports on those transporters and the hunters and a lot of money is coming through with that and we 38 39 need to know who is giving the permits for these 40 hunters to be happening. 41 42 And then we need to be on top of the 43 other stuff like our salmon, the beaver, our moose, and like earlier I mentioned, the grayling. 44 The last person, whoever did a study in this region, including 45 46 Point Hope and Wulik is Fred DeCicco from the State, so 47 we need to ask and do another study on the grayling 48 again please. 49 50

0193 1 I think that's all I have, thank you. 2 3 CHAIRMAN BAKER: Thank you, Barb. Any 4 other discussion regarding comments on our caribou herd 5 for the annual report. 6 7 MR. SHIEDT: Attamuk here. 8 9 MR. BALLOT: This is Percy Ballot from 10 Buckland. 11 12 CHAIRMAN BAKER: Attamuk, please. 13 14 MR. SHIEDT: Go ahead and get Percy, 15 I'll wait. 16 17 MR. BALLOT: Okay, thank you, Attamuk. Good to hear you guys again, it's been awhile since we 18 19 have any kind of meeting regarding our resources 20 especially the ones we subsist on. And while I've been out of it a little bit I still know what's going on 21 22 from our hunters out here. It's now end of October and 23 we're still looking for the herd here and, you know, 24 people are asking and asking and asking 25 26 (Teleconference interference 27 participants not muted) 28 29 MR. BALLOT: Can you hear me? 30 31 MS. WESSELS: I'm sorry, someone --32 Someone doesn't have their yeah, we can hear you. 33 phone muted. If you're not actively speaking please 34 mute your phones, star six. 35 36 MR. BALLOT: Okay. So as I'm talking 37 here, this group has provided some good comments in 38 regards to what's going on with the herd now and we 39 don't know the full story, we need to know the full 40 story and make our managers accountable. The Western 41 Arctic Caribou Herd has the meeting December 15th and I 42 don't know where, what information they share, I've 43 been an alternate all these years, but Ron Moto has 44 always made those meetings and I think we need to get 45 him -- make them a little more accountable for their 46 responsibilities as managers or whatever, for the 47 Western Arctic Caribou Herd. The Western Arctic Caribou Herd winters here along the Buckland area, and 48 49 it used to be near here and now it's going down farther 50

0194 1 to Unalakleet and all those places, Elim, wherever. 2 3 But we hear a lot that they're having a 4 hard time too. 5 6 And now all we hear is there's a lot of 7 planes over that way, up there, running around and we don't know those numbers. I'm pretty sure our local 8 guides out of Kotzebue report what they do but I'm 9 10 pretty sure these (indiscernible) planes, they -- they 11 come out of Kivalina or wherever, we don't know who 12 they are and who they're bringing, who they're dropping 13 off and what they're doing except you hear a lot of 14 people going and here and there with antlers and stuff. 15 And we need to make somebody accountable to see if -where's the meat, at least give them to the people, the 16 17 people need it, we live on that stuff. And it's just 18 like -- it's helped our mental, our culture and our 19 health. 20 21 So I hope that we could make а 22 statement to the Western Arctic Caribou Herd and 23 ourself too that the State or whoever, the Feds, need 24 to be a little more accountable. 25 26 I heard you mention the RAC Members, I 27 used to be there for 20 years or so and I didn't hear our member's name on there. I don't know if he's still 28 29 on there, Ramey Jr., if he's still on there or not, but 30 I don't know if we ever going to plan to have a group 31 meeting with them, it might be -- a teleconference 32 might be helpful for us with the Western Arctic Caribou 33 Herd status, health, or whatever, update, might be good 34 We're all managers after the State and Feds, for us. 35 and try to get some common grounds or sharing of information that might make the herd last longer. 36 37 We're right on the fine line as I understand it, several years ago, and if we're not doingsomething to --38 39 you know, Western Science and local knowledge, to work together, we need to get that married and we need to 40 41 get together about how to best manage the herd in the 42 coming years otherwise we will have no herd. What 43 happened back in the '50s or '60s when we had 70,000 or something like that, that's pretty scary to see that 44 stuff coming up. I heard you ask -- people have a good 45 46 talk with those folks and discussion with whoever about 47 the herd itself. 48 49 CHAIRMAN BAKER: Thank you, Percy. 50

1 This is Thomas Baker, I'm the Chair of the RAC, and I just everyone while 2 remind comments are much 3 appreciated right now, we're just looking to hear from 4 members of the RAC to comment on this for our annual 5 report. But what you're saying is greatly appreciated 6 and echoed by a lot of us on the RAC, and I believe 7 Attamuk had something he was going to say. 8

MR. SHIEDT: 9 Yeah, thank you, Percy. 10 What I am going to say is this, that to begin with I'm 11 going to go back a little bit. We talk about the 12 Ambler Road earlier, I think what we need is a representative from this Board here to attend the 13 14 Ambler Road discussions that are happening. And we 15 need one to the Western Arctic Caribou Herd Working Group from the Federal Board, we need to have a seat in 16 17 there because they will look for our help, the Western 18 Arctic Caribou Herd Working Group to get directions, 19 because they have to go through the State of Alaska 20 Board of Game. The problem we're having is it's not on the Federal lands, it's on the State lands that 21 22 transporters and outfitters go out and disperse our 23 caribou on their migration route. And we have to ask 24 our -- the people that sit on the Western Arctic 25 Caribou Herd Working Group to try to put their foot 26 down to help us, we're crying about it. And the more I 27 thought about it, the more I see it. I think the 28 migration of the caribou is going back to the '50s 29 where they never go south for the summer. If -- that's 30 how it used to be in the '50s. People used to go way 31 above Selawik and way up Noatak behind Point Lay and 32 Wainwright to get caribou, maybe that's what's 33 happening and we're not thinking about. Think about 34 it. In the '50s they used to have to go up north to 35 get caribou because they feeling the pressure from the 36 transporters and outfitters dropping off hunters. 37

Just like the beluga, for an example, when we bother them they move. And I think that's what's happening, I don't know, it's just a thought. Think about it.

And I think we need a seat in the Ambler Road and the Western Arctic Caribou Herd Working Group. Because Western Arctic Caribou Herd Working Group have to go through the Board of Game to get anything approved, they're just like more -- if we talk to -- a little bit different -- at least at the Board here and the Board level we could stop them from coming 50

0196 1 into the Federal lands. 2 3 Thank you. 4 5 CHAIRMAN BAKER: Thank you, Attamuk. 6 Any other Council members wanting to comment on the 7 caribou situation for the annual report. 8 9 MR. HOWARTH: This is Wilbur, Mr. 10 Chair. 11 12 CHAIRMAN BAKER: Go ahead, Wilbur. 13 14 MR. HOWARTH: Yeah, if we go back to 15 Page 157, Council, and look at this and you notice the State administered lands. 16 I see that the closures, 17 they closed some of that area and that's the green 18 part, and I believe that's where most of the planes are 19 dropping off hunters and that's State land, I believe. 20 Would we, or the NANA get with the State and if we 21 closed that area that's where most of the hunters are 22 that comes in, flys in. If we could get control of 23 that area, I'm sure we should be getting caribou 24 running through our area because we're not getting any 25 caribou down this way and there's so much State land 26 yet, so we need to get control of our land. 27 28 Thank you. 29 30 CHAIRMAN BAKER: Thank you, Wilbur. 31 Any other comments regarding caribou. 32 33 MR. ARMSTRONG: Yeah, this is Elmer. 34 35 CHAIRMAN BAKER: Yes, go ahead, Elmer. 36 37 MR. ARMSTRONG: Yeah, I was kind of 38 disappointed in the Federal Board deferring our 39 Wildlife Special Action request. You know through the report that was given, I think there was over 400 40 that were taken by outsiders 41 caribou and many 42 communities didn't get any. So I was kind of 43 disappointed in the Board's decision. And this year 44 we're having pretty tough again. 45 46 That's all I have to say, thank you. 47 48 CHAIRMAN BAKER: Thank you, Elmer. And 49 that brings up something that I was hoping to touch on. 50

1 Throughout this whole process of putting in these special wildlife action requests, we have made the 2 3 argument that local people are not catching caribou, 4 that we are not getting them when we are accustomed to 5 in the fall and we're having to wait until things freeze up and then we can hunt them via snowmobile, but 6 7 the problem that I see in our efforts facing is the 8 opposition, not wanting these closures to take effect, 9 sav, well, last year non-Federally-qualified 10 subsistence users from outside of the state or outside 11 of the region only harvested roughly 250 caribou but we 12 estimate that local people harvested 12,000 and the 13 problem that we have is that we're dealing with people 14 who say that we don't have enough research in place, we 15 don't have the science to support our claims that we're not catching the caribou when the science that's being 16 17 used to argue with us is not exact, it's an estimate. 18 So the argument that we are catching -- that local 19 hunters are harvesting roughly 10 to 12,000 caribou 20 annually versus the very hard numbers of how many 21 caribou are tagged and brought out by non-local hunters because they have to have a tag and they have to report 22 23 if they're successful, it's very demeaning and it's 24 very insulting to our issue here, so that's one thing 25 that I was hoping that we could have in the annual 26 report, is that the fact that not enough data has been 27 collected to warrant our position and -- for action to be taken. And just building on top of that, that more 28 29 discussions need to be had with the local people, with 30 the Western Arctic Caribou Herd Working Group, with the 31 RAC, with the Fish and Game Advisory Committees. Ι 32 mean since June, when the Federal Game Board had their 33 meeting where they decided to defer our special action 34 request, I've had one person from one Federal agency 35 reach out to me asking about the caribou situation and 36 what information should be looked at so that we can 37 gather ourselves and present a case. And I understand 38 that the different agencies do what they can and 39 they've been reaching out to people but what needs to happen and what needs to be recognized is the local 40 41 people and the local problems that we're having of not 42 being able to harvest caribou and a misrepresentation 43 of numbers, which I don't see the support of that we're 44 getting 10 to 12,000 animals a year every year, and 45 these are estimates that need to be made into 46 realities. 47 48 And that's what I have, does anyone 49 else have any comments to make.

0197

0198 1 MR. BALLOT: Tom, this is Percy Ballot. Maniilag has a traditional food program and they give 2 3 funds out to ever village in the region and they're for 4 hunters, they get gas and shells to go out and, you know, in order for you to get these, you have to give 5 your report, your hunters have to give their report. I 6 7 don't know if anybody -- if they give them out to anybody, but that might be a source for helping with to 8 9 look at a smaller picture of what's going on. But 10 every person that gets gas have to give a report on the 11 catch of caribou or what not, for the elders. 12 13 CHAIRMAN BAKER: Thank you, Percy. 14 Katya, can that be noted on record, I'm not sure who 15 would be doing the reaching out for that kind of thing, 16 but these elder support and subsistence programs that 17 the Maniilaq Association, the different Native village organizations around Game Unit 23, 18 have similar 19 programs where, like Mr. Ballot said you have to report 20 what you caught and what not. So I'm not necessarily sure if that would go into our annual report, but just 21 22 regarding this conversation for future reference. 23 24 Thank you. 25 26 MS. WESSELS: Yeah, thank you, Mr. 27 Chair. This is Katya. You know, we are, a little bit later in the agenda, we are going to have a discussion 28 29 about the Wildlife Special Action 21-01. You know some 30 of these things can be repeated or added there. You 31 know, so I -- from the conversation that the Council 32 has had, I,right now, I think, let's see, I think I 33 have three topics. One is, you know, the main topic 34 that you discussed mostly was regarding the caribou 35 harvesting in Unit 23 and all of the concerns associated with it. Including, you know, possibly one 36 37 of your RAC representative attending WACH meetings. I 38 don't know if you can get a seat on the WACH because, 39 you know, the have just representatives from different 40 communities, like Kotzebue has a representative there, 41 but I would think that the RAC member can attend the 42 meetings, so we can ask the Board for this in the 43 annual report. 44 45 And then two other topics that I caught 46 on were, like one that Barbara presented. She was 47 talking about additional -- where did I write it here 48 -- oh, study on the grayling, that the Council would 49 like to see another study on the grayling. 50

1 And another one that was proposed, I think -- yeah, I don't know who that was -- somebody 2 said about attending Ambler Road discussions. I didn't 3 4 catch the name who said that, was it Attamuk who said 5 that; is that correct..... 6 7 CHAIRMAN BAKER: Yes. 8 9 MS. WESSELS:or was it -- okay. 10 So that's the three topics that I see. And then 11 Barbara also mentioned salmon, beaver and moose. And, 12 Barbara, if you can reiterate what you would like to 13 put regarding that in the annual report, specifically, 14 do you want more studies, or do you have specific 15 concerns or are you proposing something. 16 17 MS. ATORUK: On the moose, you know, a 18 few years ago we were saying that the moose was 19 declining and if you have recent reports on how the moose is doing is what I was asking. And then they 20 21 were talking about the decline of the moose, and that's 22 what I was concerned about. And about the beaver, we 23 know they're in abundance and I think wasn't there no 24 limit in harvesting, and we also need to stay on top of 25 our salmon, we need to, like Bobby said, you know, how 26 serious this is about our moose, and that's also our 27 mainstay in the summertime, is the salmon, or moose, 28 than any other fish that we have on the river, so we 29 need to have studies and learn more about the situation 30 about the salmon. 31 32 Okay. Besides this, I have a question 33 for Thomas. Did you say, or did I misunderstood you to 34 say that the region harvested 12,000 caribou versus 35 outside hunters of 256? 36 37 CHAIRMAN BAKER: That is the argument that's been made by the State of Alaska when they have 38 39 brought the numbers forward, specifically from Fish and Game, and that number of 10 to 12,000 caribou annual is 40 41 what Fish and Game estimates local people are 42 harvesting. 43 44 MS. ATORUK: That's a lot of caribou and I don't see it. That's my version of seeing it, 45 46 anyway, but I don't see 12,000. And what kind of proof 47 do they have to be saying that and that would have to 48 be reported from what records for them to say that. 49 And then to be able to sit on the Western Arctic 50

1 Caribou Herd Working Group, I don't think we'd get a seat there because that's State and we're Feds, and if 2 they -- if we ask they will say that the Feds would 3 4 have to bring someone in on their own, pay for the 5 airfare, the per diem and a place to stay and you would 6 be able to attend in that way, but then I know they 7 won't give us a seat on there because we're sitting on the Council, we have a voice here. But we can make 8 9 request to the WACH regarding what they are doing and 10 they do send their report out in -- like in newspaper 11 form to us every year every time after they meet, but 12 then -- that's how I see it anyway, it was that way 13 when I was in, and I'm sure it's still that way, State 14 is pretty strict and in control of what they have and 15 see the Federal side in a different manner, and then 16 the only ones that are helping us right now are the 17 Federal Board. 18 19 Thank you, Mr. Chair. 20 21 MR. HANSON: Mr. Chair, this is Alex 22 Hanson, Department of Fish and Game. 23 24 CHAIRMAN BAKER: Yes, go ahead, Alex. 25 26 MR. HANSON: Yes, I just wanted to 27 mention that I'm on the line and happy to discuss any of these topics if you like. I don't -- I'm certainly 28 29 happy to help, you know, get you in contact with the 30 Working Group Staff, I don't see any conflict of 31 interest there that -- you know, I don't know why one 32 of the Board members, or Council members couldn't be on 33 group. And also happy to discuss harvest that 34 estimates at any time. So at your convenience just let 35 me know, I'm happy to discuss those things. 36 37 Thank you. 38 39 CHAIRMAN BAKER: Thank you, Alex. 40 MS. WESSELS: Yeah, Mr. Chair, this is 41 42 Katya. I just want to say that right now the Council 43 is discussing the topics for the annual report and 44 we're going to have a separate discussion later on the 45 caribou so then perhaps you can help during that time. 46 47 MR. SHIEDT: Yeah, Attamuk here. 48 49 CHAIRMAN BAKER: Yes, thank you, Katya, 50

0201 1 that's what I was -- one second, Attamuk. 2 3 MR. SHIEDT: Thank you. 4 5 CHAIRMAN BAKER: We still have the 6 discussion on the Western Arctic Caribou Herd and the 7 deferred special action from yesterday that we moved to this afternoon so we can discuss that with Alex and 8 9 continue this part of the conversation after lunch when 10 we get to those agenda items. 11 12 Yes, Attamuk. 13 14 MR. SHIEDT: Yes, I think we're saying 15 this all wrong on our caribou. I think what we need to do is say, hey, we're getting so many caribou -- the 16 17 problem is, our disturbance from transporters and 18 outfitters being dropped off on the State lands and 19 they're disturbing us, of the migration route, it's not 20 the numbers, how much we get, it's where transporters and outfitters are dropping off hunters and they're 21 22 changing the migration of our caribou, that's why we're 23 not getting them. I think we're going about this the 24 wrong way, think about it. And this is just my 25 And we need our caribou. And when they're thought. 26 changing the migration from way up in the State lands 27 and they never come here, look at Anaktuvuk Pass, they 28 got two places to go through in Anaktuvuk Pass and when 29 they never make their migration until later. It's all 30 because of global arming and when they finally make it 31 to Noatak there's already hunters up there changing 32 them. 33 34 Thank you. 35 36 CHAIRMAN BAKER: Thank you, Attamuk. 37 And as Katya pointed out, we're still on the annual 38 report. Are there any more issues that we'd like to 39 put -- identify for the fiscal year 2021 annual report 40 or are we ready to move on. 41 42 MS. ATORUK: Move on. 43 44 MS. WESSELS: Okay, Mr. Chair, this is 45 Katya. 46 47 CHAIRMAN BAKER: Okay -- yes, please, 48 Katya. 49 50

1 MS. WESSELS: Yeah, I think the Council 2 had a pretty good discussion, we have several topics 3 now. The OSM Staff is going to draft the report, we 4 will be, you know, showing you the first draft before 5 you even see them during the winter 2022 meeting so --6 and then during the winter meeting the Council can add 7 more things if they feel it's necessary to add more 8 things to the annual report. 9 10 And another thing I just wanted to 11 remind you that we forgot this morning, to have the 12 comments, public and tribal comments on non-agenda 13 items, we forgot that item on the agenda. We're 14 supposed to have it every morning at the beginning of 15 the meeting. Sorry I didn't remind you earlier. But, you know, I suggest if we maybe have an open period 16 17 right now for public and tribal comments on non-agenda 18 items so meaning items that are not on the agenda, that 19 would be great but it's at your discretion, of course, 20 Mr. Chair. 21 22 Thank you. 23 24 CHAIRMAN BAKER: Thank you for that 25 The time is now 11:40 and since we reminder, Katya. 26 did skip over that, if we have any members of the 27 public or any tribal comments, organizations that would 28 like to comment on non-agenda items, I'm comfortable with doing that now, do we have anyone who would like 29 30 to make any public comments on something that is not on 31 our agenda. 32 33 MR. HARRIS: Mr. Chairman. Cyrus 34 Harris here. 35 36 CHAIRMAN BAKER: Yes, go ahead, Cyrus. 37 38 MR. HARRIS: Yeah, I just couldn't help 39 to hear -- a little bit of information on the hunter 40 support program so just to clarify a few things, the 41 reports that I do receive from the hunters regarding 42 the hunter support from the villages is all -- the 43 information I receive back is mainly from the 44 distribution that was brought to the elders within the communities, not necessarily the entire community but 45 46 the elders, caribou, moose that's delivered to the 47 elders there in the community. Just to clarify 48 something there. 49 50

0203 1 And a little bit topic that I hear on 2 the Western Arctic Caribou Herd Working Group meeting and the discussions on the closure, Federal -- this for 3 4 Federally-qualified subsistence users, we do support 5 that -- or the Western Arctic Caribou Herd Working Group do support that. 6 We are going to have a 7 teleconference meeting December 15th and some members did have some meetings with the OSM and I'm sure they 8 9 could share that with you, so we put in our two cents 10 to support this discussion on bringing it back on the 11 table. 12 13 Thank you for your time. 14 Thank you for that 15 CHAIRMAN BAKER: 16 Cyrus. Do we have any other public or tribal comment 17 on non-agenda items at this time. 18 19 MR. BALLOT: Mr. Chairman. 20 21 CHAIRMAN BAKER: Yes, please identify 22 yourself. 23 24 Percy MR. BALLOT: Ballot from Buckland, I sit on the Seward Peninsula Advisory 25 26 Committee. I'm not too sure but I'm going to make my 27 comment anyway when you said non-agenda items. Ι 28 wanted to get a feeling, fishing is a big part of our 29 lives, subsistence and I know we do a little commercial 30 there in Kotzebue, which is fine. But you've been 31 seeing and I've been hearing and seeing of the salmon 32 going farther up here and there and seeing pictures of 33 fish with whatever marks or things on their bodies or 34 faces, or whatever, whitefish what not, is anybody 35 doing any studies on the food they eat, the plankton, 36 or whatever, the food chain, or whatever. I think that 37 probably needs to get working. You know over the years 38 dead fish or dead birds or skinny seals, or dead seals 39 and stuff like that, and is something going on with the 40 ecosystem under water or the climate, whatever it's --41 do we have any people doing any of those studies. 42 43 And the other part of my question is 44 what's the feeling about the bycatch that's been going on over the years. Sooner or later, if it -- it's 45 46 already affecting our king salmon, our salmon up this 47 way. There's too much catch in the high seas. Is 48 there any discussions regarding those talks about 49 what's going on in the high seas, and bottom trawlers, 50

0204 1 or whatever you want to call that. Is it in this group's radar? 2 3 4 CHAIRMAN BAKER: Thank you, Percy. Ιf 5 there is anyone who is able to respond to those, the 6 floor is yours. 7 8 MR. HOWARTH: Mr. Chair, it's Wilbur. 9 10 CHAIRMAN BAKER: Yes, Wilbur. 11 12 MR. HOWARTH: Yeah, our IRA, or 13 environmentalist program that we started on doing water 14 samples, we had the equipment to do studies on the 15 whole Kobuk River but the farthest up we could go, I believe was just right below Kiana and do all the 16 outlets from Noorvik and below, all the rivers that 17 18 goes out to the Kobuk Lake. We had the funds and 19 working with Lonnie Tibbitts, our Environmentalist 20 Coordinator. Our fish, that's where we find out about 21 our fish and stuff, what they're doing. But I think 22 that's one that I believe we were going over with Karen 23 on fundings and stuff. Maybe we'll just do more 24 testing. I wanted them to go out after it freeze up 25 and do some tests in all the drainage, out to the Kobuk 26 Lake. And the reasons we're doing these tests is the 27 start up of the Ambler Road, I was on one of the boards, that's where I went to Fairbanks and represent 28 29 the NANA region and we started those tests. So I have 30 a little knowledge about our fish and doing these 31 Tagloruk (ph) told them when we were in tests. 32 Fairbanks -- I should have had a pH on whitefish because they call me the whitefish specialist and 33 34 that's what they underlined me for. 35 36 But anyways I hope things keep going. 37 Lots of studies are still going and I believe all this 38 high water, and like Bob said the fresh water coming 39 out of the rivers and into the Kobuk Lake is what's 40 really hurting our fish. 41 42 So thank you. 43 44 CHAIRMAN BAKER: Thank you, Wilbur. 45 46 MS. ATORUK: Mr. Chair. 47 48 CHAIRMAN BAKER: Yes. 49 50

0205 1 MS. ATORUK: To go back on the annual 2 report request, we need to look at our Council make up here. The Staff Committee need to look at this Council 3 4 make up. If you look at your roster we have four 5 people from Kotzebue, two people from Noorvik and we have one from Deering, one who is from Ambler who is 6 7 not attending any meetings. We have one seat vacant. And we need to ask Percy to reapply and get back in, he 8 9 was a good representative from that area. And we need 10 to get Noatak in and we need someone from upper Kobuk, 11 we need someone from Selawik. The Council is heavy in 12 some areas and where it's most needed they're being So we need to put that in the annual 13 blank seated. 14 report to see if the Staff Committee need to look out 15 more to mix us more up. My term is up as of the end of this year and I'm not reapplying. I am going to 16 17 totally retire now and do my own thing some more. So 18 that's just working in my personal opinion. 19 20 Taikuu. 21 22 CHAIRMAN BAKER: Thank you, Barbara. 23 Do we have any other public or tribal comments on non-24 agenda items. 25 26 (No comments) 27 28 CHAIRMAN BAKER: Any public or tribal 29 comments on non-agenda items. 30 31 MR. HARRIS: Mr. Chairman, if I may. 32 Cyrus Harris. 33 34 CHAIRMAN BAKER: Is that Cyrus -- yes, 35 go ahead Cyrus. 36 37 MR. HARRIS: Yeah, okay. Yeah, a lot 38 of this discussions got a lot to do with the 39 terrestrial mammal studies, flora and fauna studies, 40 you know, fish and what not. And there's more studying 41 than that one particular fish but the habitat it live 42 on and how sensitive these areas are and how we shall 43 protect it for our future generations. And along with coming in and 44 that is the future development highly 45 roads and, you know, with all these resources going out 46 of our own state to another state, I mean things like 47 that we got to think about and protect these resources 48 that we are studying on, each individual species. 49 Excuse me, I get a little emotional speaking about this 50

0206 1 kind of stuff, but, thank you. 2 3 CHAIRMAN BAKER: Thank you, Cyrus. Any 4 other public or tribal comments at this time. 5 6 7 (No comments) 8 9 CHAIRMAN BAKER: Hearing none, up next 10 on the agenda is the annual report reply process, 11 revision discussion with Lisa. Lisa, would it be -- in 12 your opinion would it be easier to start now, pause for 13 lunch, or just to break a little early for lunch and 14 then start with that after lunch. 15 16 MS. GREDIAGIN: Yeah, thank you, Mr. 17 This is Lisa Grediagin. It's really at the Chair. 18 discretion of the Council, and you as the Chair. I'm 19 getting some feedback from other OSM Staff that we 20 should just go ahead and do it now. 21 22 MS. ATORUK: Can we do it after lunch, 23 Mr. Chair. 24 25 CHAIRMAN BAKER: How does the rest of 26 the Council feel, do we want to start it now or just 27 start after lunch. 28 29 MR. ARMSTRONG: After lunch. 30 31 MR. SHIEDT: Thomas, Attamuk here. I'm 32 not going to log back in this afternoon, I have to go 33 to the hospital and -- because my wife got to go to 34 Anchorage tomorrow and we got to go pick up some 35 paperwork and I have to get a blood draw. 36 37 CHAIRMAN BAKER: Okay. Thank you for 38 the head's up, Attamuk, and thank you for joining us 39 and voicing your opinions. 40 41 MS. GREDIAGIN: Yeah, Mr. Chair, sorry 42 this is Lisa. And I'm just getting some feedback from 43 other OSM Staff that this should be a really quick 44 agenda item, it's mostly just a briefing. So I think it should only be about five minutes. 45 46 47 MS. ATORUK: All right, do it. 48 49 CHAIRMAN BAKER: Okay. Well, if that's 50

0207 1 the case the floor is yours Lisa. 2 3 MS. GREDIAGIN: Okay, thank you, Mr. 4 Chair. Lisa Grediagin, for the record. So during the Federal Subsistence Board's August -- oh, and this is 5 on Page 254 of your meeting book if you'd like to 6 7 follow along, I'm just reading this briefing on Page 8 254. 9 10 11 the Federal So during Subsistence 12 Board's August 2021 work session the InterAgency Staff 13 Committee briefed the Board on the annual report reply 14 process and possible revisions to improve response to 15 Regional Advisory Council concerns. The Board reviewed and discussed the report reply process and agreed to 16 17 add this topic to the Councils fall meeting agendas for 18 Council input on suggested revisions. 19 20 ANILCA, Section .805, authorizes the prepare an annual report containing 21 Councils to 22 information related to current and future subsistence 23 uses of fish and wildlife populations, an evaluation of 24 current and future subsistence needs for these 25 populations, a strategy for their management and 26 recommendations related to policies, standards, 27 guidelines and regulations to implement the strategy. These reports are invaluable as they provide the Board 28 29 with a broad holistic picture of local resource 30 conditions and needs and challenges facing communities 31 across rural Alaska. With this knowledge the Board can 32 make informed decisions. 33 34 Historically the Federal Subsistence 35 Management Program has strived to provide responses to 36 every topic listed in annual reports regardless of the 37 Board's ability to address the issues raised. While 38 all topics are important to the Board, understanding of 39 local conditions, many are on issues over which the 40 Board has no regulatory authority and some of the same 41 and similar topics are often repeated in subsequent 42 years with no resolution. ANILCA does not require 43 replies to annual reports from the Council and 44 currently the Code of Federal Regulations state that the Board consider the reports and recommendations of 45 46 the Regional Councils. For these and other reasons it 47 is unclear if Board responses on all annual report 48 topics are helpful to the Councils and warrants the use 49 of often very limited Staff capacity. 50

0208 1 One way to address Council reports and 2 recommendations would be to change the process of how 3 the Board responds to Council issues. Process 4 revisions could include that Councils consider letter 5 writing as the most appropriate means for requesting a response to topics of concern and that the annual 6 7 report process be streamlined as a mechanism for informing the Board of local conditions and means. 8 This revision would allow for more substantive and 9 10 timely responses from the Board on topics most critical 11 to the Council. Under this scenario, Councils could 12 ask their coordinator to write a letter to the Board if 13 are annual report topics to which they're there 14 specifically requesting a response. Any other topics, 15 such as those outside the regulatory authority of the Board, can be addressed to the appropriate Federal 16 17 agency Staff at Council meetings, or Councils can write 18 letters requesting a response directly from them, thus 19 streamlining the response process and encouraging 20 direct agency communications with the Councils. 21 22 These suggested revisions are not 23 intended to diminish the ability of the Councils to 24 report to the Board on topics of concern, and Councils 25 will still receive responses, when requested, from the 26 Board. 27 28 At this time the Board is seeking input 29 from the Councils on these suggested changes to the 30 annual report process. Council feedback on this issue 31 is critical as the Board evaluates how to make the 32 reply process more efficient and responsive. The Board 33 will consider Council input on the annual report reply 34 process at its winter work session at the end of 35 January 2022. 36 37 you, Mr. So, thank Chair, that 38 concludes my presentation on the issue. And I received 39 a message from other OSM Staff that I may have missed 40 something here so I invite anyone else to chime in if I 41 missed something here. And, oh, Katya, just said she 42 was dropped off the call, so I'm sure she's calling 43 back in right now. 44 45 But, basically, there's just some 46 concern that some of the responses to your annual 47 report replies from the Board are rather perfunctory 48 and not very meaningful because the Board has limited 49 authority over some of these concerns, but writing 50

1 those responses take a lot of Staff effort and time and we just are not sure if they're really that useful to 2 the Council if the Board doesn't really have authority 3 4 over some of these topics and concerns from the Council, even though the Board really appreciates 5 hearing everything the Council puts in their report, 6 7 just some of the responses may not be very useful to 8 the Council. So there's some thoughts by Staff 9 about.... 10 11 MS. LAVINE: Mr. Chair. 12 13 MS. GREDIAGIN:streamlining this 14 -- oh, okay, here's Robbin. 15 16 MS. LAVINE: Mr. Chair. 17 18 MS. GREDIAGIN: Thanks, Robbin. 19 20 CHAIRMAN BAKER: Yes, go ahead, Robbin. 21 22 MS. LAVINE: Hello, Mr. Chair, this is 23 Thank you, Mr. Chair. Robbin LaVine. The most important part of this briefing is to keep this issue 24 25 in your minds between the fall meeting and the winter 26 meeting. The InterAgency Staff Committee has suggested 27 processes to improve the efficiency and responsiveness 28 of the annual reports and reply process. While also 29 recognizing how critical your annual reports are to the 30 Board and informing our Federal Subsistence Management 31 Program and process. 32 33 So the main thing is this is just a 34 briefing, this is an opportunity for you to think about 35 what you want from the Board in terms of replies as you 36 develop and confirm your 2021 annual reports between 37 the fall and winter meetings and we'll take this up 38 again, this will be an action item in -- when we meet 39 in 2022. So, once, again, this is not an action item, this is for your consideration. Again, as you're 40 developing annual report topics to inform the Board, 41 42 and as you think about what you want from the Board in 43 return, especially considering some of these topics are 44 for the Board's information and are potentially beyond 45 the Board's scope of authority. 46 47 Thank you, Mr. Chair. 48 49 CHAIRMAN BAKER: Thank you, Robbin. 50

0210 1 Thank you, Lisa. Does anyone have any questions 2 regarding this for Lisa and/or Robbin. 3 4 (No comments) 5 6 CHAIRMAN BAKER: Hearing none. I don't 7 have any questions but I'm sure that if I do I will reach out to Staff after the meeting just to get some 8 9 clarification. Thank you, again, Lisa, for that. And 10 if there's nothing else that you have to add, I'd say 11 that we can break for lunch now being that it's 12:00 and reconvene at 1:00 p.m., and we'll start back up 12 the 2022 Council application and 13 with Item G, 14 nomination open season. 15 16 (No comments) 17 18 CHAIRMAN BAKER: Sound like a plan 19 everyone. 20 21 MS. SWEENEY: Mr. Chair, this is 22 Brittany Sweeney. 23 24 CHAIRMAN BAKER: Hi, Brittany. 25 26 MS. SWEENEY: Hey. I just wanted to 27 note the fact that I did some posting about this meeting yesterday on some regional Facebook groups and 28 29 I've seen a lot of shares come in so I don't know if 30 we'll see a higher participation rate or more people 31 calling after lunch but I just wanted to let you know 32 that that might be possible so just to let folks know 33 where we are at on the agenda and all that stuff after 34 lunch. 35 36 Thank you. 37 38 CHAIRMAN BAKER: Okay, good to know. 39 Thank you very much for that Brittany. Anything else 40 before we wrap up in the morning. 41 42 (No comments) 43 44 CHAIRMAN BAKER: All right, we will 45 come back at 1:00 p.m., thanks everyone. 46 47 (Off record) 48 49 (On record) 50

0211 1 CHAIRMAN BAKER: Hello everyone, it's 2 Thomas Baker. The time is now 1:00 o'clock. If Elmer Armstrong is on the call, could we get a quick roll 3 4 call Elmer. 5 6 MR. ARMSTRONG: Okay. Okay, Attamuk 7 was going to be off. 8 9 Thomas Baker. 10 11 CHAIRMAN BAKER: Here. 12 13 MR. ARMSTRONG: Mike Kramer will call 14 in in a little bit. 15 16 Calvin Moto. 17 18 (No comments) 19 20 MR. ARMSTRONG: Wilbur Howarth, Sr. 21 22 MR. HOWARTH: Here. 23 24 MR. ARMSTRONG: Robert Schaeffer. 25 26 MR. SCHAEFFER: Here. 27 28 MR. ARMSTRONG: Elmer Armstrong, Jr., 29 here. 30 31 Brian Lee Jones. 32 33 (No comments) 34 35 MR. ARMSTRONG: Barbara Atoruk. 36 37 (No comments) 38 39 MR. ARMSTRONG: Okay, there you go, Mr. 40 Chair. 41 42 CHAIRMAN BAKER: Thank you, Elmer. So 43 we will continue on with Item G on the agenda, which is 44 business, the 2022 under new Council 45 application/nomination open season and I believe that will be Katya that's taking care of that. 46 47 48 (Teleconference interference 49 participants not muted) 50

0212 1 MS. WESSELS: Thank you, Mr. Chair. 2 Members of the Council. 3 4 REPORTER: Katya. 5 6 MS. WESSELS: This is Katya Wessels. 7 8 REPORTER: Katya. 9 10 MS. WESSELS: Yes. 11 12 REPORTER: Yep, this is Tina. Let me 13 just say I'd like to ask everybody to please look at 14 their phone and see if you're on mute, we have an echo, 15 which generally means that's many open lines. So if you could please look at your phone device, hit star 16 six or the mute button, I would appreciate that so, not 17 18 only everybody else can hear, but I can also hear for 19 this recording for your transcript. Thank you. Go 20 ahead, Katya. Sorry to interrupt. 21 22 MS. WESSELS: So let's see, okay, 23 there's still an echo. 24 25 REPORTER: Yep. I'm going to call the 26 operator and I will probably have that line 27 disconnected, thank you, if we can't mute the phone. 28 29 MS. WESSELS: Okay. There's still an 30 echo. 31 32 (Pause - Reaching Operator) 33 34 MS. WESSELS: All right, Mr. Chair and 35 Council. First before I talk about the 2022 Council 36 application and nomination open season I would like to 37 make an administrative announcement for the Council. So this is the second day of the Council meeting and I 38 39 would like to remind all the participants please mute 40 your phones when you're not actively speaking. You can 41 do it either by pressing mute button on your phone or 42 by pressing star button and six button, and then you 43 can unmute your phone by pressing the same buttons 44 again. 45 46 So I also would like to remind the 47 meeting participants, all the meeting participants, 48 that this is a public meeting and the principal purpose 49 of the public comment part of this meeting is to 50

1 receive information and comments from you on record so these opportunities for public comments come at the 2 Chair's discretion, when the Chair announces those 3 4 opportunities. And for every participant, I would like to remind, that, please when you speak be respectful in 5 your statements, no insults or foul language will be 6 7 tolerated in the public meeting. This concludes the 8 administrative part of my announcement. 9 10 So now I am going to talk about 2022 11 Council application and nomination open season. 12 13 So first I would like to thank all of 14 you, Council members, for your service on the Council 15 on behalf of the user groups that you represent, your knowledge and experience is of great value to the 16 17 Federal Subsistence Management Program and to the 18 Federal Subsistence Board. 19 20 We're currently going through some 21 difficult times during the pandemic but at the same time we are constantly working to have robust Councils 22 23 with full memberships. And as you know you currently have one vacant seat that was vacated by Vita Coltrain 24 25 from Selawik. So while we are looking at keeping your Council seats all filled, we are looking to you, 26 27 Council members. We're looking for your help because 28 you are our connection to the communities that you 29 represent. 30 31 So the 2022 Council application period 32 was opened on September 12th of this year and it will close on February 28th, 2022. We are encouraging you 33 34 to help us to spread the word about the open season to 35 the region's communities and help us recruit new applicants throughout your region. You know the people 36 37 in your region and you can also share the firsthand 38 experience of what it means to serve on the Council and 39 what is involved and how much time it takes. 40 41 (Teleconference interference 42 participants not muted) 43 44 MS. WESSELS: You can also nominate the candidates to serve on the Council if someone is 45 46 interested in applying but is having a hard time, for 47 example, filling out an application. You can talk with 48 a person, if they're interested, you can nominate them, 49 you can help them to fill out this application. The 50

1 application packets are available on our website, and the address is: www.doi.gov/subsistence/regions, and 2 there's also a fillable copy of the application on the 3 4 site as well, which can be filled on the computer, or 5 you can print our a copy and fill it out by hand if you'd rather. The applications and nominations can be 6 7 emailed, it can be faxed, it can be mailed, as long as it's done before February 28th. We're also waiting for 8 the printer to print out the applications so we're 9 10 emailing a number of application packets to the current 11 Council members when we receive them so you can hand 12 them out to interested persons or organizations and 13 tribes in your region. 14 15 Additionally, we are mailing around 2,000 copies of the application packet to various 16 17 addresses across the state. If someone needs a copy to 18 be faxed to them we can do this as well. We are hoping 19 to have a good number of qualified applicants applying 20 this year so we are able to fill all vacant seats and have alternates available for the situations when 21 22 Council members resign, move out of region, or pass 23 away. 24 25 I make a special appeal today to the 26 members of the Northwest Arctic Council, you have just 27 one open seat, but, you know, a couple of your Council 28 members were not able to attend any meetings at all so 29 we need to fill the vacant seats so we have the full 30 Council. I want to let the Council members know that 31 if you're aware of good perspective applicants, you can 32 let us know and we will reach out to them and ask them 33 if they would be interested to be nominated. If you or 34 any applicants need help filling out the forms, please 35 let us know. 36 37 We would really, really appreciate your 38 help with the recruitment this year. 39 40 I also want to encourage the incumbents 41 on your Council who's terms are expiring in 2022 to 42 reapply to serve on the Council. You will need to 43 reapply before February 28th of 2022 although your terms do not expire until December of 2022 you will 44 have to reapply by February 28th. And the incumbents 45 46 whose terms expire next year, who should reapply if you 47 are interested in continuing serving on the Council is 48 Enoch Shiedt, Thomas Baker, Michael Kramer and Elmer 49 Armstrong, your terms expire in December of 2022. So I 50

0215 am going to mail to you the incumbent applications that 1 you will need to fill out, incumbents have different 2 3 applications to reapply that are shorter versions. 4 5 So I know that Barbara spoke a little 6 bit about the membership earlier before lunch, so I 7 would encourage any Council members who have any ideas about how we can attract more applicants to speak out 8 regarding the 9 or any other suggestions Council 10 membership, you know, you can express them now. 11 12 Thank you. 13 14 MR. SHIEDT: Attamuk here, Thomas. The 15 hospital put the wrong Attamuk, they wanted Jr. 16 17 CHAIRMAN BAKER: Okay, thank you for 18 joining us Attamuk. 19 20 Yeah, but what I'm going MR. SHIEDT: 21 to tell you is -- you're not going to be happy, I'm 22 going to make this last one, I'm done too, I'm getting 23 tired. I might not even attend the SRC tomorrow. So 24 Hannah I hate to say that but I'm getting tired. So 25 thank you everyone for listening to me. Taikuu. 26 27 CHAIRMAN BAKER: Thank you, Attamuk, and, again, we all appreciate all the knowledge that 28 29 you share and the time that you've put into all this. 30 Does anyone have any questions regarding the nomination 31 or application process for Katya. 32 33 This is Percy Ballot, MR. BALLOT: 34 Buckland. 35 36 CHAIRMAN BAKER: Yes, Mr. Ballot. 37 38 MR. BALLOT: The rep, is that Buckland 39 and Deering, that we don't have a Buckland rep? 40 41 MS. WESSELS: I don't think there's 42 anyone from the Buckland on the Council right now, 43 yeah, there isn't. And the way the Council membership works, it's not like you have a representative from 44 each community, it's whoever applies from the region. 45 46 You know if there are two people who apply from 47 Buckland and they're both qualified then they're both 48 appointed. There can be two representatives from 49 Buckland or from, you know, Deering -- let's see we 50

0216 1 have -- we have a representative from Deering, 2 Calvin.... 3 4 MR. BALLOT: I thought we..... 5 6 MS. WESSELS:Moto, II. 7 8 MR. BALLOT: Yeah, we had Raymond 9 Lee.... 10 11 REPORTER: Okay, one at a time, qo 12 ahead Percy. 13 14 MS. WESSELS: Go ahead, you're breaking 15 up. 16 17 MR. BALLOT:Jr., back in the 18 past, he did not reapply or what happened with him? 19 20 MS. WESSELS: Well, we can't really 21 speak about that in the public meetings who applied or 22 reapplied, specifically because that's personal 23 information. 24 25 MR. BALLOT: Okay. Okay, then that's 26 I will reach out for the Council. I heard fine. 27 Barbara mention my name but, like, Attamuk, we got a lot of young guys that have been around the block here 28 29 in the village and I will talk to them and try to 30 encourage some of those younger folks to apply from 31 Buckland. 32 33 MS. WESSELS: That would be absolutely We are looking for more younger Council 34 wonderful. 35 members because, you know, we have a lot of older Council members who have a lot of experience who share 36 their knowledge and wisdom with us but a lot of the 37 38 older Council members have served for many years and 39 just as Attamuk said, they're getting tired from this public service basically so it's great if they continue 40 41 being on the Councils but it would be wonderful if we 42 get new applicants that are younger that can also learn 43 how to be on the Council, learn how to serve on the 44 Council, learn about the regulatory world and how they 45 can help their communities and subsistence and 46 commercial/sport user groups, you know, with the 47 regulatory changes. So thank you for that Percy. 48 49 MR. BALLOT: Yes. I got to say this, 50

1 though, Attamuk, and guys like him, 30, 40 years ago we have done things that have never been done before, over 2 3 the years, we've done no fly zone in Noatak years ago, 4 we done nets across the mouth of the river; we've done so many different things that nobody has ever done 5 before. These old guards are people that have listened 6 7 to their elders and learned from their elders, these young guys they need to learn to pay more attention and 8 9 just do it, not talk about it, just do it. So don't --10 even though I'm encouraging the younger guys, too, they 11 just got to do it, there's nothing too hard and if you 12 don't you try again and if you don't you keep on trying 13 until you get something in there that's going to 14 benefit and work for the resources, for the villages 15 and for the people, and for everybody else for that matter, State or Federal. 16 17 18 But I wouldn't downplay the good work 19 of the guys that's been in there over the years, I'm 20 thankful for them. Our herd is still in good hands 21 right now, still okay but they need to get a little 22 more humph in their step there and make it a little 23 more harder -- or put more stuff into what's going on 24 regarding the herd, whether it's in the State lands or 25 the Federal lands, stay and do it. 26 27 Thank you, Attamuk, for your service. 28 29 (Teleconference interference 30 participants not muted) 31 32 MS. WESSELS: Yeah, I just also want to 33 clarify to the Council members whose term expire next 34 year you're still serving on the Council until the end 35 of 2022, even if you decide not to reapply like Attamuk 36 explained to us, Attamuk, you're still on the Council 37 for the whole of next year, so we really hope that you 38 can join the next meetings next year but after that if 39 you choose not to reapply that is absolutely fine. 40 41 CHAIRMAN BAKER: Thank you, Katya. 42 Does anyone else from the Council have any questions 43 for Katya regarding the application process. 44 45 (No comments) 46 47 CHAIRMAN BAKER: Hearing none, thank 48 you for that Katya. I'll be sure to point anyone with 49 any questions in you or the rest of the Staff's 50

1 direction, hopefully we can fill some of the vacant seats on the Council and get more people involved. So 2 3 with that we can move on and we had shuffled the agenda 4 yesterday so that we could have discussion on the 5 Western Arctic Caribou Herd status, updates and management strategies. What's on the agenda here is 6 7 Item B under new business. So I feel at this time we have as many people from the Council as we were going 8 to get since some aren't able to join us again today 9 10 and Mr. Kramer will be joining in the next 10 minutes 11 or so So I feel that now is a good time to start the 12 Western Arctic Caribou Herd discussion. Who would like 13 to begin. 14 15 MR. HANSON: Mr. Chair, this is Alex 16 Hanson with Fish and Game here in Kotzebue, I can jump 17 in if that works. 18 19 CHAIRMAN BAKER: Yes, please, Alex, the 20 floor is yours. 21 22 MR. HANSON: Thank you, Mr. Chair. 23 Members of the Council. For the record this is Alex Hanson, Alaska Department of Fish and Game here in 24 25 Kotzebue, the Western Arctic Caribou Herd caribou 26 biologist. I'll give you just a brief synopsis of the 27 current metrics of the herd. 28 29 As I mentioned previously the 2021 30 census is nearing completion, we don't have that number 31 yet but we typically do share that number once we get 32 it all finalized at the working group meeting that'll 33 be coming up in December. The last count that we have, 34 and this is what we're going off of currently is the 35 2019 census, we did not shoot a census in 2020, last year, the last count from 2019 is 244,000. And that's 36 37 what we're modeling off our metrics off at the moment. 38 Hope to have that other updated number for '21 soon. 39 40 Recruitment is another thing that we 41 look at very closely. This is an estimate of the 42 number of young that are entering the herd is something 43 we look at in the spring and we've been tracking that 44 for a number of years. Currently it's about average, 17 calves to 100 adults. Calving rates have gone down 45 46 a little bit in the last couple of years, still 47 average, or low average about 68 calves to 100 cows. 48 The highs that we've seen as we were coming out of the 49 bottom of the decline about 2015/2016 were low 80s so 50

1 it's down a little bit but not record lows by any 2 means. 3 4 Fall composition, this is something 5 that we don't do every year but the last one that was 6 conducted was 2017 and then we were able to put one 7 together this fall. So I just barely completed that and put those numbers together last night. So our bull 8 9 to cow ratio in 2017 was 100 cows -- or 54 bulls to 100 10 cows and then this 2021 that we recently completed was 11 47 bulls to 100 cows. As you're probably aware we 12 maintain, at least according to the working group 13 management plan, looking to maintain to 30 bulls to 100 14 cows. That was recently changed in 2019, a revision of 15 that plan, prior to that we were shooting to maintain 16 40 bulls to 100 cows. 17

18 One thing that I'd really like to touch 19 on today is distribution and hoping, you know, some of 20 the folks on the line and on the Council might be able One thing 21 to help facilitate this discussion as well. 22 that we've definitely seen in the past few years 23 beginning in about 2018 is departure from normal movements, or what we term normal. 24 You know we've 25 certainly experienced a long period of fall caribou 26 movements that favor wintering areas on the Seward 27 Peninsula and, for instance, if we look back to collar data, we don't have to go too far but if we look back 28 29 20 years or so, between 1992 and 1994 there was а 30 substantial portion of the herd that wintered in the 31 Nulato Hills. We jump forward a little bit, 2013 to 32 2016 kind of that time period, the greatest portion of 33 the collars were on the Seward Peninsula. And that 34 was, you know, not that long ago but things changed 35 quite drastically beginning in about 2018. And I don't 36 have to point this out to you but, you know, last year 37 what we saw was very different, very few collars, very 38 few animals across the Kobuk River and most wintered on 39 the North Slope or mostly in the Central Brook Ranges. 40 So I guess my question to you is, you know, there's a 41 lot of reasons that could be -- and I've heard a lot of 42 discussion about changing weather patterns and how that 43 has affected the resources that we have in this region, 44 and I think back and I started looking, digging into some older reports and some historical accounts from of 45 46 elders within the region and I was starting to see a 47 pattern. You know things are very different today than 48 they were 15 or 20 years ago, but caribou movements 49 aren't all that different than they were 50 years ago 50

1 or 60 years ago. One account from Nathan Hadley in Buckland said he saw his first caribou in 1955, you 2 3 know, near Buckland and that was new, that wasn't 4 something they'd been used to seeing. Ralph Ramos, 5 Sr., of Selawik said his mother spoke of his grandfather traveling deep into the Brooks Range to 6 7 hunt. A lot of accounts like that, you know, folks would travel for weeks on end up into the upper Noatak 8 to harvest caribou by dog team. And one that really 9 10 touched me was Ruby Foster of Selawik, said around my 11 time there were no caribou, we just ate fish, ptarmigan 12 and rabbit, that is all, there were no caribou around 13 during that time, absolutely none, there were no moose 14 and not much bear. 15 16 So I pose the question to you, what do 17 you suppose causes these changes? We certainly can 18 look at, you know, pointing the finger at aircraft or 19 other disturbances, and something that I want to 20 understand, that's something that I want to understand 21 with you and I'm happy to have those discussions but I 22 would like to, you know, at least have a broader 23 discussion and see if, perhaps, there may be bigger 24 things at play. 25 26 But I watch the collars, I do this everyday, looking at these collars and I see movements 27 that go across 200 miles of the range, caribou are 28 moving south and then all of a sudden they move north 29 30 and I don't feel like that, you know, a few planes in 31 the mountain, and that's not to say it can't cause 32 disturbances, are causing these big shifts in movement 33 patterns across such a large range, but points to 34 weather to me. Maybe there's other reasons. But I 35 want to understand those things and get to the bottom 36 of them. 37 38 I guess I would just leave that to you, 39 I'm curious what you think the implications of changing weather patterns, and changing climate might have on the Western Arctic Caribou Herd movement. 40 41 42 43 CHAIRMAN BAKER: Thank you for that 44 Does anyone have any opening questions or Alex. 45 comments regarding what Alex is talking about. 46 47 MR. ARMSTRONG: Yeah, this is Elmer. 48 49 MR. HOWARTH: Yeah, Mr. Chair -- oops, 50

0221 1 sorry, Elmer, go ahead. 2 3 CHAIRMAN BAKER: I heard Elmer first. 4 5 MR. ARMSTRONG: Okay. What's the 6 collar movement, is there any other data that has 7 different directions to the present? 8 9 MR. HANSON: Yeah, through the Chair, 10 Elmer. I apologize, yeah, aside from the collar data, 11 yeah, we look at a lot of different things. Maybe you 12 could expound on your question so I could answer it 13 more fully. 14 15 MR. ARMSTRONG: Like, say, a certain year back they traveled this way and then you stated 16 17 you seen them go south and then go north, so I just 18 wanted to see if there was data..... 19 20 MR. HANSON: Yeah, according to..... 21 22 MR. ARMSTRONG:that would point 23 towards the -- go ahead. 24 25 MR. HANSON: Sorry. Elmer, through the 26 One example that comes to mind was just a Chair. 27 couple years ago it was in October, I think it was 2019, I'd have to look back, but you could see just 28 29 kind of the caribou were spread across the range, it 30 was like I said, October or late September, across the 31 Slope there and they were all traveling south and, you 32 know, we were getting excited because we thought they 33 were going to come toward the Kobuk River and then all 34 of a sudden they just turned and went north and I can't 35 say exactly what caused that but I would say that, you 36 know, perhaps it was something bigger than a small 37 disturbance. Perhaps they were walking into the wind, 38 perhaps it was weather patterns. What we see often --39 I'll cite 2019 there were a number of caribou in the mountains, we were hoping they would come down so that 40 41 we could put some collars out on the Kobuk River there 42 at Onion Portage and they just stayed there and they 43 stayed there and they stayed there, and then we got a 44 bunch of storms and snow then they moved out of the mountains. I think what we're seeing, in my opinion, 45 46 is a lot of these later -- you know, later and later 47 falls, it's been warmer, we've had a lot more rain, a 48 lot less snow, things aren't freezing up like they used 49 to, and those caribou were just staying put because 50

1 they're comfortable. And then this year, boy, I was surprised I didn't think they were going to come down, 2 3 I really thought they were just going to stay in the 4 mountains like they've done for the past few years and 5 then all of a sudden here they come. You know a lot of them crossed the river before it froze up, some of them 6 7 struggled with that pan ice, we could see collars bouncing off the Kobuk River there and, you know, some 8 9 of them were still in that Kobuk Valley. A lot of them 10 were in the Selawik Valley. So very different 11 movements this year. Very different weather this year than last year. I guess that's kind of what I'm 12 pointing the finger at and asking those questions. 13 14 15 But I'm curious what, you know, your collective traditional knowledge might do to inform me 16 17 so that I could understand my job better. 18 19 MR. ARMSTRONG: Okay, another question, 20 too, is when they're traveling to Federal lands, do 21 they move north when they're near rivers? 22 23 MR. HANSON: Sorry, I missed that 24 reference, north near where? 25 26 MR. ARMSTRONG: Any rivers. 27 28 MR. HANSON: Yeah, of course. And I 29 don't know if Kyle's hearing, but Kyle Joly with the 30 Park Service puts together kind of this timeline of a 31 graphic of when the caribou cross, when the herd 32 crosses the Noatak River. It's very informative and 33 descriptive and you can find that information through 34 the Park Service. I believe you can also link that up 35 through Western Arctic Caribou Herd Working Group meeting. And I -- yeah, they definitely cross rivers 36 37 and they go back and forth and kind of what we see, 38 I'll just describe briefly, is, the Western Arctic 39 Caribou Herd has a very strong fidelity to the calving 40 grounds. They head to the calving grounds, kind of the Udakuk River up lands, end of May, first part of June 41 42 and that's where they calve. From there, the next 43 step, or their stop on their way is they move toward 44 the Lisburne Peninsula and that's where we shoot our census, they're out there, this is what we call post-45 46 calving aggregations, they get together in giant groups 47 hopefully so we can shoot photographs, and they're 48 trying to find relief from bugs and other things out on 49 the windswept areas, and snow patches. But after that, 50

1 you know, this fidelity or strong desire to be in a specific area kind of goes out the window. They start 2 3 moving into the mountains there and they just disperse 4 all over the place. A lot of them will go to the North Slope, some will go into the mountains, some go back to 5 the coast, it can be very different every year and very 6 7 dynamic and so after that shakeup, you know, kind of what we're seeing right now, is they then move into the 8 9 rut and they just kind of slow down. But they're 10 working their way slowly to where they're going to 11 winter. And whatever those pressures are, whether it 12 be weather or, you know, other things, desire to get to 13 certain feeding areas or whatever, they just appear to 14 move at some times randomly and eventually stop for the 15 winter. 16 17 So like I say it's very dynamic and 18 challenging to understand and guess where they're going 19 to go next. 20 21 MR. ARMSTRONG: Thank you. 22 23 MR. JOLY: Mr. Chairman, this is Kyle 24 Joly with the Park Service. 25 26 CHAIRMAN BAKER: Yes, Mr. Joly. 27 28 MR. JOLY: I sent a presentation 29 through Eva to you, would you like me to give that now, 30 it's a talk about movements and distributions of 31 caribou? 32 33 CHAIRMAN BAKER: Alex, do you have 34 anything else that you'd like to share right now or 35 would you like to have Kyle do his presentation. 36 37 MR. HANSON: I'm happy to do either. Ι 38 quess one thing that I really want to share is that we 39 need, you know, the local help, you mentioned briefly that, you know, we put out a number, you know, harvest 40 41 between 10 and 12,000, we don't really know. I mean 42 I'm being honest. And we put that out before we tell --43 we tell people that that's our best guess, it tracks We feel like it's pretty accurate 44 long-term harvest. long-term but it doesn't do much good for short-term. 45 46 And so our request to the members of the public and 47 members of the Council, you know, we have this tool, 48 this RC907 tool in 23 and 26A and it helps us track 49 caribou harvest and we really need help so we can 50

1 understand what the harvest is. We don't want to 2 guess. But that's kind of where we're forced when we 3 don't have the participation that we need with this 4 tool. 5

6 And I'm absolutely open to any other 7 ideas. You know there were some ideas mentioned about working with Maniilaq to get harvest 8 reporting. Harvest reporting can be very important especially as 9 10 we get close to, you know, this line, the population is 11 a little bit closer to, you know, those critical 12 values. And so I would certainly be open to discussion 13 for that. Anybody that has any ideas, whether it's now 14 or, you know, come into my office, I'm happy to visit 15 with you, let's try to figure out where harvest is so that we could understand it better. So that we could 16 17 understand, you know, what the harvest level should be 18 at in Noorvik or Kotzebue. So that's a real struggle 19 for us to get that data. And I'm here, so any other 20 questions I'm happy to entertain them, but that's kind 21 of what I had and what I wanted to talk about.

23 CHAIRMAN BAKER: Thank you, Alex. And, 24 Kyle, before we move on to yours I just have a question 25 So thinking about those situations you for Alex. 26 mentioned, Alex, where the herd as a whole or large 27 sections of the herd may be moving south and then they 28 all of a sudden just kind of stop and swap directions, 29 is there any way for you to cross reference those 30 spots, say, working with some of the things that the 31 National Park Service has done in looking for wolf 32 dens, I'm sure Fish and Game has as well, seeing if 33 there might be high concentrations of predators in that 34 area or if those occasions where the herd, out of 35 nowhere, turns around, if those are documented and if there's way, that over time, you could see if it was 36 37 related to a specific valley, or a specific stretch of 38 the mountains or whatever it may be?

40 Thank you, Mr. Chair, MR. HANSON: 41 that's a good comment and good point to consider. You 42 know the reference that I was talking about was kind of 43 this, you know, basically the whole herd was across, you know, 150, 200 miles, and just to see that shift 44 45 was pretty interesting and dynamic. But there's 46 certainly, you know, instances where point disturbances 47 might take place and those get very difficult to 48 understand. We're typically recording movements in 49 eight hour increments so seeing those minute changes in 50

0224

22

1 movement patterns can be very challenging and very difficult. We can see the large scale stuff, for 2 instance if they come to the Kobuk River, occasionally, 3 4 you know, whether it's ice pans or boat traffic or 5 whatever, we might see some of those collars bounce on the river and eventually get through. 6 We might see 7 that, for instance, along the road corridor, and those are a little bit easier to understand because it's a 8 9 well defined, you know, structure or feature on the 10 landscape. But being able to pin down those really 11 minute things can be super challenging, but I'm 12 absolutely open to any discussion and ideas as to how 13 we can get to that. 14 15 MR. HOWARTH: Mr. Chair, it's Wilbur. 16 17 CHAIRMAN BAKER: Yes, please, Wilbur. 18 19 MR. HOWARTH: Yeah, Alex, back when we 20 had Mr. Dau flying around with Fish and Game and doing 21 counts and now it's Brandon Sato, I believe, but anyways we did -- or we asked and had someone who did 22 23 some studies on their food, what they eat. For so many 24 years that they traveled along the coast now I'm kind 25 of thinking that the abundance of the food is when they 26 go through that same routing on their migration along 27 the coast and they hit here the past maybe four or five years ago, maybe less than that, but how is the food 28 29 affecting them now with all this climate change and --30 and another thing that was hurting our fawns when they 31 were born up in the calving grounds, there was the 32 eagle, the Golden Eagle that there was so many of them, 33 how's that going. 34 35 Thank you. 36 37 Yeah, through the Chair. MR. HANSON: 38 Thank you, Wilbur, those are great questions. I quess 39 real briefly I would say that, yes, Mr. Dau is still around, I took his position about five years ago, I certainly don't know half the things he knows and 40 41 42 probably never will but I'm doing my best. 43 44 As far as the feed situation, you bring 45 up a very good point. If we think about, and I don't 46 know all that much about lichen, I'll admit, but if we 47 think about lichen and it takes many, many years to 48 regrow, 20 to 50 years in some cases and we think about 49 this giant mass of animals, the Western Arctic Herd 50

1 that reached almost a half million animals in 2003 and for a number of years that mass of animals spent the 2 3 winter on the Seward Peninsula and so with a half a 4 million, dwindling down to a quarter million, you know, occupying that landscape for 20 to 50 years, you know, 5 6 there's certainly going to be some potential for 7 depletion of resource, depletion of that lichen or that 8 winter feed that they need, so it certainly stands to 9 reason, as you point out, that they're going to have to 10 move to different areas. You know we see this, you 11 know, they might be in one drainage, or one specific area one winter and then move to another next so that 12 13 that resource can replenish. I believe the BLM had 14 some studies on that, and Kyle may be able to speak to 15 some of that as well with the Park Service, but I don't 16 have any of that data at my fingertips. 17

18 But as far as the calving, you 19 mentioned mortality on the calving grounds. We 20 recently wrapped up a study that we started in 2017 for 21 three years, we went up to the calving grounds and we 22 collared two day old calves, and we followed those 23 calves through the first year of their life so that we 24 could understand what the mortality causes and rates 25 And you mentioned, you know, Golden Eagles were. 26 taking calves and we certainly documented that, and we 27 also documented brown bear mortality on the calving 28 grounds. But it was a very interesting dynamic because 29 the first year we saw high mortality from black [sic] 30 bears and I believe two or three cases where Golden 31 Eagles were involved and this was out of about 75 32 individuals that we collared so it definitely was 33 happening, it was very interesting to see in the 34 document. The next year and the next year, this was 35 three years the mortality on the calving ground went 36 down quite a bit, we saw almost no mortality the next 37 two years from bears, what we saw was, as near as I can 38 tell, you know, we call it the calving grounds, you 39 know, it's an area that theygo to every year and it's--40 we like to think of it as a small confined space, but, 41 in fact, it's huge, a very large area and they don't 42 always calve in the exact same spot, and they moved a 43 little bit further to the north in these second two 44 years of the study, and appeared to have moved out of 45 the home range of some of the bears, so that brown bear 46 mortality went down quite a bit. So it was very 47 interesting to see. 48

49

0226

But thank you for bringing up that

0227 1 point about mortality on the calving ground. 2 3 MR. SCHAEFFER: Tom. 4 5 MR. HOWARTH: Yes, thank you so much. 6 7 MR. SCHAEFFER: Tom, you hear me? 8 9 CHAIRMAN BAKER: Is that Bob Schaeffer 10 -- is that you Bob? 11 12 SCHAEFFER: Yeah, I think I -- I MR. 13 don't know I've always thought about it because my 14 father -- I was raised back in the '50s, you know, and 15 I -- and when my father used to go with a bunch of guys from Kotzebue, Noorvik, they'd head north through the 16 17 Squirrel and go up to the NorthFork and head over 18 toward (In Native) and all the way around the other 19 side of -- towards the Continental Divide, between the 20 Brooks Range and between the north and the -- the 21 Noatak area and they did that -- I was raised when that 22 happened and every year back in the '50s and they'd 23 spend a month, month and a half out there, you know, to 24 go get the caribou. He was telling me, you know, that 25 it was a long trek but that's what they did before that 26 as well. There were reindeer herds all over but there 27 was -- this was a business and they, you know, they just couldn't -- didn't have enough money to go out and 28 29 buy a reindeer so all the reindeer herds were pretty 30 much still intact, you know, the (Indiscernible) herd 31 was still around, I think there was a herd over in 32 Noatak, I can't remember what the name was, and York 33 Wilson's over toward Wolf Creek and then the Noorvik 34 herd and there was -- and Lawrence Grey's herd over 35 towards Selawik, I could go on and on but, you know, 36 they were established reindeer herds and -- and people 37 thrived pretty much on them, you know, but the main 38 thing was when I was young, and growing up in the '50s 39 it was commonplace for the Kotzebue people then to pack 40 up their 14 foot sleds and their dogs and they'd head 41 up north like they did before when -- when before my 42 dad was young, you know, the forefathers, I guess, they 43 did the same thing. Because the caribou herd pretty 44 much stayed on the North Slope and these were full-45 bloodied caribou, you know. And he said when he went 46 up there and got a terrible he had to tip his sled on 47 the side to get the big bull in there because there was 48 no way they could lift them so they'd put them on its 49 slide the caribou in and lift it up and then he said 50

that's how they got them in, into the sleds. 1 And, anyway, they spent a month up there and got a sled load 2 3 and they'd come back down and have their meat for a 4 year. And it happened like clockwork almost every 5 year. 6 7 So the caribou really never came down 8 at that time, and God knows what happened prior to 9 that, there was no recorded history of, you know, what 10 the -- we didn't have a -- our language -- our written language so it was all passed down. But he was always 11 12 telling stories about the old -- and how they had to go 13 back up there to get -- to get caribou. 14 15 But anyway in the meantime, you know, 16 at the turn of the century they had the reindeer 17 introduced up here through the Bureau of Indian Affairs 18 reindeer service and -- and the number of local folks 19 got reindeers from -- from the -- through the BIA and 20 the BLM and they -- they raised reindeer from the turn 21 of the century all the way through until the caribou 22 came in. But let me tell you something about the 23 caribou, this is what my dad told me. He said back in 24 1938 they -- they corralled over by (Indiscernible) 25 over by -- by (In Native) across from us, across here 26 from Kotzebue about 10 miles or so theyhad some huge --27 they had some huge fencing that they did with local wood and they stocked the herd from Noorvik and York 28 29 Wilson's herd and they dropped them in and then it was 30 after, you know, 40 years of feeding in those areas and 31 they were -- they were getting guite concerned because 32 they were over grazing and the food became quite scarce 33 so they herded -- they -- he said they corralled 90,000 34 over there in that -- in the (In Native) and he said a 35 lot of them were in real bad shape. The next winter he 36 said that that's when the movement north took place, 37 they just over grazed, there was no food, there was so 38 much death amongst the reindeer and he said that the 39 reindeer herds just headed north. And therein met the 40 other herd, the caribou herd and started something new. He said they interbred because of necessity, they had 41 42 to find food. They were not -- they just over grazed 43 their winter area, most of the grazing areas and you 44 know lichens grow, they grow very very slow and so they stayed up north with the caribou herd and that's why 45 46 our caribou is so small. He said he'd grab a caribou 47 bull in comparison to the old full-blooded bulls and 48 they were almost twice the size. So he said that was 49 the caribou went from large to medium and he said 50

1 that's how it happened. And then all of a sudden, you 2 know, we have the start of a new breed called the 3 Western Arctic Caribou Herd, half reindeer and half 4 caribou.

6 But, you know, the thing is it grew to 7 a large size and started migrating to where the old reindeer coral, or reindeer herds -- most of the herd 8 is along the local -- and those back in the '50s and 9 10 '60s lost their herds to the caribou and then as time 11 went on NANA got involved in the reindeer herding 12 business because that herd never went to the Seward 13 Peninsula, so there was still herds in Buckland and, of 14 course, there's the Good Hope herd over in Shishmaref 15 and a number of other herds all the way through the 16 Seward Peninsula all the wayto Nome and as mentioned --17 as I think Alex mentioned that they did spend a couple 18 years on the Seward Peninsula and let me tell you they 19 took a lot of reindeer. We'd see tags all over the 20 place when we're hunting caribou for Godssake.

22 But, anyway, that's pretty much the 23 history of it. It's something that was passed down to 24 me from my father who worked for the reindeer herders 25 back when he was young, back in the '20s and '30s and 26 he had a real vast knowledge of reindeer. So anyway I 27 think the haphazard way they're reacting is because of 28 their bloodline, the reindeer, if there's no food in 29 one spot they all know that they're not going to go 30 back to that spot, they're going to go someplace else. 31 But that's pretty much the history of how -- of what I 32 know of it, you know. When they got on to the Seward Peninsula, of course they took all the reindeer herds 33 34 over there and they mixed in with the caribou and then 35 they left and then they followed the spring migration back up north and so that's part of it. Some of the 36 37 reindeer still reside on the Seward Peninsula that 38 don't leave there but there's a vast majority that did 39 follow the caribou as they migrated north in the 40 springtime.

42 But, you're right, Alex, that's pretty 43 much the history of it as we know it because let me 44 tell you there was a number of hunters from Kotzebue back from when I was growing back that left and were 45 46 gone for a month, a month and a half to try to get 47 caribou from the North Slope area. Dad said he'd go as 48 far as Colville sometimes, the headwaters of the 49 Colville just to try to find caribou in the wintertime 50

0229

21

1 and so sometimes they'd go even closer, they'd migrated down into the upper Noatak and they'd find them on the 2 3 hills up in the Noatak. But listening to them when 4 they talked about it was kind of interesting because there was reindeer all over when I was growing up. 5 We 6 used to have people, the Yorks come in with reindeer 7 sleds and have reindeers pulling their sleds into town and go stock up on grub and head back to his reindeer 8 9 camp over by Wolf Creek. But those were the days that, 10 I think, the reindeer and the caribou, are pretty much 11 the same breed, but they were just a little different 12 and they were interbred and that's the caribou that we 13 have today. 14 15 CHAIRMAN BAKER: Bob. Bob, for the 16 sake of time do we have any questions for Alex. 17 18 MR. BALLOT: Yeah, this is Percy Ballot. 19 Maybe I do. Alex.... 20 21 CHAIRMAN BAKER: Yes, Percy. 22 23 REPORTER: Who's speaking please. 24 25 MR. BALLOT:regarding hunting fawns in Unit 22, and I'm a little bit perturbed about 26 27 that because, you know, fawns, okay, but they should 28 just be for elders. 29 30 CHAIRMAN BAKER: Percy. 31 32 MR. BALLOT: Yeah. 33 34 CHAIRMAN BAKER: So this is Thomas 35 Baker, and I think it was Tina that asked, this is 36 Percy Ballot speaking. 37 38 REPORTER: Oh, okay, thank you. Нi 39 Percy. 40 41 CHAIRMAN BAKER: And just so you know, 42 Percy, we took care of all the proposals yesterday and 43 that one regarding the harvest of fawns in Unit 22 we 44 do not support, this RAC is opposed to. But for now we 45 can.... 46 47 MR. BALLOT: All right, I apologize. 48 49 CHAIRMAN BAKER: That one is taken care 50

0231 1 of and we're opposed to that. 2 3 MR. BALLOT: But my question was what 4 kind of effect, you know, if there's killing females and stuff now that we're going to be going on because 5 we got no choice, and we're killing three or four or 6 7 whoever is killing, whatever, in the end, when's the best time to -- we got to stop this for this amount of 8 9 time. 10 11 MR. HANSON: Yeah, through the Chair. 12 Member -- or to Mr. Percy Ballot. Yeah, those are challenging questions trying to understand harvest and 13 14 like I said we really don't understand it. We need 15 more participation in our program, more reports so that we can see what's going on. But as we know if wewere --16 17 let's say we were in a situation where we wanted to 18 prevent further decline of the herd, you know, what we 19 would typically recommend and that would certainly have 20 to come with public support is reduction in cow harvest 21 because that's where the production comes in. As I 22 mentioned I just finished up the fall composition 23 survey and we have a pretty good component of bulls, 47 24 bulls to 100 cows and anecdotally we don't track this 25 closely but, you know, it seemed to be a good 26 representative ample of the age class in there, big 27 bulls, medium bulls, small bulls and little bulls. So 28 I would say that we have quite a few bulls to harvest 29 and, you know, currently we're not asking anybody to 30 reduce harvest, we just want to understand it better so 31 we can see where we're at. 32 33 And I wanted to briefly respond to Bob, 34 I appreciate that history, that was pretty incredible 35 and I just want to say when we have more time perhaps you and I should sit down, I'd love to visit with you. 36 37 So feel free to get a hold of me at the office and we 38 can do that or I can find you somewhere else. 39 40 Thanks. 41 42 MR. BALLOT: Yeah, I guess the point, 43 Mr. Chair, is.... 44 45 MR. KRAMER: Mr. Chairman, this is 46 Michael. 47 48 MR. BALLOT:that there's got to 49 be some sort of goals or plans, if we are down to the 50

breaking point of there's 12,000 people shooting them for subsistence and there's 450 whatever hunters and you don't know the amount, there's got to be some kind of a balance in what we do to balance that herd. And if you, you know, think about all that, now is the time to start making some points, or moves, or goals, that's your job.

9 MR. HANSON: Correct. Yeah, that's a 10 very good point. Yeah, that's something we think about 11 a lot and, you know, we may have to have those hard 12 discussions in the future, depending on where the 13 population goes. You know kind of pointing towards 14 this discussion coming up about the closure, you know, 15 from a biological perspective what we see is, you know, harvest from non-local folks on the order of, you know, 16 17 250 to 350 almost all bulls each year. Biologically 18 it's pretty insignificant but I understand that this is 19 far more than biological information, and more than a 20 biological discussion, it comes down to some very important social things and, you know, when we really 21 22 look at reduction in harvest, if we have to go there, 23 you know, it's you folks are going to have to visit 24 with us and we're going to have to come up with some 25 good solutions and some good plans, like you said, we 26 need to make some plans and, you know, see where we can go with, heaven forbid, we have to figure a way to 27 28 reduce harvest some day.

I appreciate that.

32 MR. BALLOT: And I thank you. I don't 33 mean no disrespect to you or anybody, I'm just voicing 34 my point. I apologize for not being there yesterday, 35 Mr. Chairman, but I was invited to this meeting and I 36 guess I had the wrong time. Caribou is important to 37 Hearing that history reminded me of what my papa me. 38 used to do about going out and being out a month at a 39 time with dog teams and crossing the river even through 40 break up stuff and everybody being happy to get a bite 41 to eat, like how we gather together when we're hunting 42 beluga, if somebody gets something we stop and share 43 our food, you know. Miss those kind of times and just 44 don't want to see that happening, if there's ways we 45 could help through our tribes and getting those numbers 46 you really need, Cyrus said something about it was for 47 elders only but we need to capture those young folks 48 that are out there and if we get the word out to the 49 tribes I'm sure they'll step in and help us get those 50

0232

8

29 30

0233 1 real numbers. 2 3 MR. HANSON: Thank you, Percy. Briefly 4 I would say that it's just amazing to hear those 5 stories of how your ancestors traveled so far and, you know, a month at a time is just incredible. I think 6 7 I'm kind of a little bit jealous that I don't get to do 8 that but I probably would have died so it's pretty 9 amazing. 10 11 MR. BALLOT: Yeah, I got pictures of 12 Nathan Hadley when he was a young guy and my papa and 13 him crossing the river with the ice broken up going 14 through patched ice with full loads of caribou if I 15 remember right, yeah. I need to find them some day. 16 17 CHAIRMAN BAKER: Mike Kramer did you 18 join us. 19 20 (No comments) 21 22 CHAIRMAN BAKER: I thought I heard Mike 23 Kramer join and ask to speak a little while ago. Are 24 you on Mike? 25 26 MR. KRAMER: Yeah, I'm here. I had 27 questions. I'm back. I was back before 1:30. One thing I'd like to see from Alex at our next meeting is 28 29 the seven day periodic data from August 1st to October 30 15th of collars in seven day intervals. And the other 31 thing is what date is the last day of air traffic 32 transporters and guides. That way we coincide the data 33 with the movement of the caribou to see if the aircraft 34 traffic is hindering and once it calms down then they 35 start coming down. That's one of the reasons why I'm asking for that data. Number 3 is, you know, the drop 36 37 off points of all commercial services. You know on a map where these commercial services are operating, 38 39 where they have camps. And then the last thing is, is, 40 you know, the female harvest. I see that we've been 41 cut back to March 31st but, you know, I try not to take 42 them anywhere past December 31st until maybe in 43 January. 44 45 Because I know that ANILCA says that, 46 you know, once a caribou herd becomes critical and 47 critical steps and stages are taken that, you know, 48 there's supposed to be three steps. One is -- I'm 49 trying to remember, environment enhancement, first ones 50

1 are cut off are transporters and guides, second one is predator control, you know, I seen that in ANILCA, 2 3 that's one of the steps that are required to be taken 4 if a lot of means of harvesting animals have been taken 5 by a local area such as Game Management Unit 23 and we've taken a lot of cuts, we've probably taken more 6 7 cuts than the transporters and guides to preserve our herd, you know, and it's very, very critical to this 8 9 region. I haven't even gotten one caribou yet and here 10 it is November. I'm waiting for the females to come 11 down to be able to at least harvest two or three, you 12 know, for my freezer, because all fall they're not 13 nowhere near by so why waste the money to go out and 14 look for them and you ain't going to see any. So I've 15 been basically just waiting for them to come south end of October, November and into December. That's why I 16 17 think a good cut off date for cows would be December 18 31st that way you can ensure that they're carrying 19 their young all the way up until they reach the calving 20 grounds and give birth. You know, that way we're being 21 able to monitor how many cows are taken. And that's 22 the other question I have for Alex, in the last five 23 years how many cows have been harvested by year. You 24 know that kind of data really helps us to be able to 25 prepare for what kind of cuts we have to take. And I 26 know we've taken drastic cuts because we're one of the 27 biggest harvesters of this herd and we've continued to 28 take cuts and other places aren't taking cuts, it's 29 just unfair, and I mean in kind of a way it's 30 discriminatory because, you know, it's not just helping 31 the local people fill their freezers and it's very 32 critical that people fill their freezers because right 33 now we're in this pandemic, you know, a lot of the 34 grocery stores here they tend to run out of stuff very 35 quickly. When you go to the store for a dinner plan, 36 you better have five or six of them, you know, dinner 37 plans because a lot of the stuff ain't going to be 38 there. So a lot of people depend on, you know, caribou 39 and moose to fill their freezers. 40 41 That's all I have for right now. 42 43 Thank you, Mike. Through MR. HANSON: 44 Yeah, I can certainly put together some the Chair. data for you. I don't know if you've seen it or not 45

but, or maybe Kyle can speak to this, but a few years ago they looked at, you know, just that thing, it was the collar data, the camps, the airplane drop off stuff, kind of between 2010 and 2013 and, you know, 50

1 they were looking at that to see if, you know, if those camps and landing sites changed the movements of the 2 3 caribou and ultimately, from my understanding of this 4 study, they didn't. They weren't able to detect any change, you know, as to just caribou just 5 real wandering through the mountains, running into terrain 6 7 and trees and rivers and what have you. So it's something that they looked at, didn't really see much 8 9 impact but I'm absolutely interested in that and any 10 other ways that we can study it because it's super 11 interesting and super challenging to study and 12 understand. 13 14 And, you know, happy to talk locations 15 and that kind of stuff, and movements, we can't share specific locations per se, but happy to visit with 16 17 anybody that wants to come into the office or give me a 18 call. 19 20 Harvest of cows, you make a very good 21 point, Mike, that's kind of where we grow the herd 22 obviously, cows produce the calves that become the next 23 generation of bulls and cows to produce more animals 24 and, you know, if we can voluntarily reduce harvest --25 if we had the opportunity to harvest a smaller bull or 26 something in the fall that's going to do great things 27 for the herd potentially so appreciate that. 28 29 And if I missed anything, Mike, please 30 let me know. 31 32 MR. HOWARTH: Mr. Chair, it's Wilbur. 33 34 CHAIRMAN BAKER: Yes, Wilbur. 35 36 MR. HOWARTH: Yeah, Alex, this -- we 37 only had 29 bulls taken with the elders program this fall and 64 that I know of our hunters, so about 93 38 39 bulls have been taken this fall if you guys want a Noorvik count. That's what I just put together. 40 41 42 HANSON: Thank you, Wilbur, Ι MR. 43 really appreciate that. 44 45 CHAIRMAN BAKER: Thank you, Wilbur. 46 47 MR. HANSON: 93, that's excellent to 48 hear. 49 50

1 CHAIRMAN BAKER: Does anyone else have 2 any more questions for Alex at this time before we move 3 on to Kyle's presentation. 4 5 MR. BALLOT: I've got to leave but Т 6 want to thank you guys, this is Percy Ballot again. 7 And maybe we need to start thinking about getting 8 villages to start their reindeer business up. 9 10 CHAIRMAN BAKER: Thank you for joining 11 us Percy. And like you mentioned, if there's anyone in 12 the Buckland or Deering areas that wants to get involved with the RAC, they can go online or they can 13 14 reach out to any of -- well, there's the Park Service, or Selawik National Wildlife Refuge or any of those 15 16 agencies to get an application so we can keep more 17 people from that part of the region involved. Thank 18 you for calling in. 19 20 MR. BALLOT: Yes, I will talk to two or 21 three guys, they love hunting and they love sharing and 22 they like hearing stories, too, I'll steer them your 23 way. 24 25 REPORTER: Bye Percy. 26 27 CHAIRMAN BAKER: Thank you, Percy. So 28 with that, Kyle, if you're still able I think we can 29 segue into your portion. 30 31 MR. JOLY: Thank you, Mr. Chairman, can 32 you hear me okay. 33 34 CHAIRMAN BAKER: Yes. 35 36 MR. JOLY: Hello everyone. My name's 37 Kyle Joly, I'm a Wildlife Biologist with Gates of the Arctic National Park and Preserve working with the Park 38 39 Service. I work with Alex on the Western Arctic Herd. For those of you who don't know me, I've been working 40 41 out at Northwest and Northern Alaska for more than 20 42 years now. I was able to send a slideshow presentation 43 to Eva and hopefully most of you got it. I'll try and 44 describe what I'm talking about for those folks who 45 don't have access. 46 47 One thing I wanted to mention before I 48 jump into that is I wanted to answer a question about 49 lichen abundance. Yeah, Alex, was right it takes 20, 50

1 25 years for lichens to grow back after they're grazed. After a wildfire it could be 50 to 100 or even 150 2 3 years, depending on the species. In the Buckland area 4 I worked on a study that looked at lichen abundance and it started way back in 1981, before my time, and lichen 5 cover back then was 35 percent, so 35 percent of the 6 7 ground was covered with lichen. By the time I got there and did my study in 2005 the lichen coverage 8 9 dropped to about 12.5 percent, and I know that BLM has 10 continued to monitor those transects in Buckland, and 11 east of Buckland into the Nulato Hills and the lichen 12 abundance has gone down but I don't have those specific 13 numbers as I wasn't involved with the study. But 14 that's BLM would probably have the most up to date 15 information on that.

17 With that I'll start my presentation. 18 So the first slide is just a picture from early October 19 of the GPS locations. We started putting GPS collars 20 We've got about a million GPS locations out in 2009. of caribou now all on females. The distribution right 21 22 now is very heavily clustered in Kobuk Valley National 23 Park and eastern part of Selawik, there is a bunch over 24 north and west of Red Dog Mine and then there's a few 25 scattered out in the Gates of the Arctic and then on 26 the North Slope. You can feel free to interrupt me at 27 any time if you have any questions. I'm happy to stop 28 at any point.

30 The next slide shows caribou movements 31 near the Red Dog Road. So we've been talking a lot about movements and, you know, I was really happy to 32 33 hear the discussion about, you know, transporters and 34 I'll get to that a little more in a minute, but also 35 climate change and I'll talk about that in a minute as 36 well. But one factor that really hasn't been discussed 37 much is the impacts of roads. And I think you can see 38 from this image that, you know, caribou do have a tough 39 times, and this year is one of them, trying to cross the Red Dog Road. We published a paper, Jim Dau, and I 40 41 and a couple other folks back in 2016 and that showed 42 that the Red Dog Road was having an impact and, you 43 know, this map shows that this road is still having an 44 impact. 45

Another thing that we seen this year which Alex mentioned and other people have noted is caribou having trouble crossing the rivers. This slide here is -- it says Page 3, it's the movements near 50

0237

16

Kiana. And so there's red arrows depicting the flow of 1 caribou movements and it's north to south then they hit 2 3 the Kobuk River and they really get hung up, and then 4 they start moving to the southwest and then up into the 5 Squirrel area. And what I think is going on there is 6 that, you know, due to the late migration they ran into 7 the Kobuk and there was pan ice and they were having a 8 hard time betting across it and so their movements have 9 been deflected. We really haven't seen it this obvious 10 in previous years but this year it was super obvious. 11 Just two days ago we had a paper come out and it was an 12 analysis looking at caribou movements and what were the 13 cues for caribou to migrate in the fall. And all of 14 you know this if you've sat out on the tundra and 15 watched caribou, but we were able to quantify it for We were able to look at data that 16 the first time. 17 showed snowfall coming in and temperatures dropping and 18 when that combination of events would happen in the 19 fall, caribou would start having directional long 20 that is, migratory movements. movements, The 21 interesting thing was is that they always continuously 22 updated their decisionmaking process so that if they 23 reached an area that didn't have snow and temperatures 24 warmed up they would stop or even halt or sometimes 25 even back up, but if those cold temperatures came back 26 in and more snow they'd continue on in their migration. 27 So this is something that hunters have seen, you know, 28 for hundreds if not thousands of years but we were able 29 to quantify it and that paper just came out this week 30 and I can share that with the Council if anyone is 31 interested in it. But, you know, that has a lot of 32 implications for climate change, you know, if the fall 33 temperatures are warmer, if those snows are coming 34 we should expect to continue to see late later 35 migrations. 36 37 The next slide is another one of а 38 river. This is higher up, this is on the North Slope,

37 The next slide is another one of a 38 river. This is higher up, this is on the North Slope, 39 the Colville River. Animals coming in from the north, 40 hitting the river, getting deflected, walking along the 41 river but finally crossing up there. 42

43 We've heard a lot of talk about movements through Noatak. Looking at, you know, this years movements, you know, these tracks, these white 44 45 46 So this is, you know, lines are 30 days of movement. 47 September movements through the Preserve and largely, 48 you know, I don't see the obvious signs of delays that 49 we saw, you know, in those images of Red Dog. The 50

1 animals seem to be getting through and, in fact, Alex, alluded to it back in 2017 Ken Fullman and myself and 2 3 Andrew Ackerman, we took all the data that the Park 4 Service had on where transporters were putting down sporthunter camps and we looked at that and we found 5 6 that, you know, caribou movements were affected by 7 rugged terrain, they tried to avoid the rugged terrain, 8 they tried to avoid really dense vegetation so they 9 stuck out in the tundra, there's probably a couple of 10 reasons for that. One is easier traveling, but, two 11 they can, you know, see predators better. They also 12 tended to avoid rivers and that might just be because 13 of the difficulties, the energetic expense of trying to 14 swim across them. But we did not see impacts at this 15 scale of the sporthunting camps. And when I say, at 16 this scale, so it's eight hour relocations and so, you 17 know, that analysis showed that the caribou were still 18 able to migrate through the Preserve but it still 19 leaves the potential that there's these shorter term 20 local impacts that could very well, you know, really hinder a hunt for a local user. So it's not evidence 21 22 that, you know, what people have been saying that 23 there's impacts from these transporters, it's just 24 saying that at this scale that we looked at we're not 25 seeing them. So the bigger, broader scale the animals 26 are getting through.

28 The next slide is just some 29 information. So Alex had mentioned that we had 30 switched to net gunning, Alex leads up that operation. 31 Two years in a row we've got out a record number of GPS 32 collars, which has been fantastic. We've talked about 33 the change in overwinter use. So in Bering Landbridge 34 there was a few years that when we first put out GPS 35 collars that there was very little use and then it really ramped up almost 75 percent of the animals ended 36 37 up in Bering Landbridge about five or six years ago and 38 -- but for the last three years we're down to zero 39 percent of the collars coming. Last year we had 71 40 percent of the collars end up in Gates of the Arctic, 41 which it was an all time record for the GPS data, which 42 only goes back to 2009 but it's 50 percent more than 43 we've ever seen in Gates of the Arctic. And, you know, 44 I found the discussions really interesting but, you know, the talk about the distribution going back to the 45 46 1950s, I found that really interesting, I read Lois 47 Crisler's book, Arctic Wild that took place in the 48 '50s, her and her husband were photographers for Disney 49 doing wildlife filming and they were in Gates of the 50

0239

Arctic and they had caribou all winter long in the Kilik River area and so, you know, that was interesting to see that happen again last winter.
On the next slide is a depiction of the

6 annual range of the caribou. 2020 was just a really 7 strange year, stranger than most years. I know that caribou movements and distribution are very variable 8 between years, but last year was notable. It started 9 10 off with the caribou not really spreading out over the 11 North Slope during summertime. They really hung by the 12 coast and stayed far northwest and then in the winter, 13 like I said, almost all of them, more than 70 percent 14 ended up in Gates of the Arctic and that's what that 15 bright orange coloration is, is that concentrated use and that heavy use in Gates of the Arctic which was 16 17 really unusual for our short GPS time period. 18

19 The next slide looks at where caribou 20 cross the Noatak River. So the upper pic is where they did it in 2020 and so the bigger the bar the more the 21 22 caribou came through. And you could see that the 23 distribution was very skewed to the east, a lot of 24 animals coming through, the very upper Noatak where 25 Noatak Preserve changes into Gates of the Arctic. 26 Interestingly there was none that came on the far west 27 Usually we have some that come through Cape side. Krusenstern, west of Noatak village and kind of come 28 29 down to the mouth of the Noatak River. So we didn't 30 have any of that in 2020, which is unusual. We haven't 31 seen that since 2010, so 10 years. The graph below 32 shows kind of a long-term average so it was more skewed 33 to the east. One of the interesting things about the 34 crossings that we've been seeing is that we do have 35 animals cross the Noatak River in the end of July, which is well before what we think of as typical 36 37 migration and a lot of those animals, they cross south 38 of the Noatak and they just hang out south there until 39 they figure out what they want to do for winter. So 40 some of these movements aren't really particularly 41 migratory movements. 42

43 So this is a new slide. I haven't shown this to the Western Arctic Caribou Herd Working 44 Group before so you guys are the first ones to get to 45 46 see it. But it's a graph of the number of collars, the 47 percentage of collars that are crossing the Kobuk River 48 in fall so north to south they're crossing. In the six 49 [sic] year span from 2010 to 2015 [sic] an average of 50

0241 82 percent crossed the river, so 82 percent of the 1 collars crossed the Kobuk River migrating south. 2 In 3 the last five years it's been an average of 34 percent, 4 so less than half of what we've been seeing, what we kind of thought was quote/unquote normal, 80 plus 5 percent, now we're down at 34 percent. In 2020 we had 6 7 a record low six percent cross the Kobuk River. This year it's going to be a little bit higher but, you 8 know, that pan ice did deflect some animals and it's 9 10 unclear if those animals will wait to freeze-up to see 11 if they come south or they'll get north of the Kobuk. 12 13 This next graph looks at the timing of 14 fall migration. And we all talk about how migration 15 has been getting later and later. Interestingly and I don't have an explanation for it, for a number of 16 17 years, from 2012 to 2016 the average crossing date of 18 the Kobuk was getting earlier and we didn't really 19 understand why, I don't understand why, but the last 20 four years have been the latest. Last year, in 2020, 21 was tied for the latest ever migration that we have. 22 You know, when I tried to figure out why the migrations 23 were getting earlier I started looking at the time that 24 the first animal crossed, so not the average of all 25 animals that crossed, but the first animal that crossed 26 and it really became really striking this year. We had 27 the first animal cross the Kobuk River on November 2nd, 28 that's two months later than just 10 years ago, which I 29 think most people think of as kind of normal. When we 30 had animals in 2010 and 2011 crossing the Kobuk River 31 August. in late August. So now last year was 32 November, which was a whole month later than the record 33 late time of October 1st, which just happened last 34 year. So those first animals are really showing up at 35 a much much later crossing time. It's going to be late 36 again this year but not quite as late as last year. 37 38 slide is about spring The next 39 migration. Really there's not a whole lot going on on the spring migration side. It was a pretty average 40 41 year. There are a couple anomalous years, some very 42 late years, that was 2012 and 2013. That -- those 43 years were deep snow years, very late spring and I 44 think the caribou just had a hard time getting through 45 that and they kind of waited for it to melt a little bit before they made a run up to the calving grounds. 46 47 And I think, you know, the explanation there is the 48 calving grounds, you know, those animals they have to 49 calve and, you know, so the spring migration is going

1 to be less flexible than the fall migration. Interestingly we haven't detected any significant 2 3 change in when caribou are having their calves, it's 4 the first week of June and that really hasn't changed 5 all that much as far back as we can tell. 6

7 The last couple slides are just brief 8 updates on papers that we published this year. The 9 first one was an analysis of calving. Like Alex said 10 there's a huge, really strong fidelity to the calving 11 area. The herd has used the calving area for over 100 12 years, one of the only places that this has been 13 documented. They do change from year to year a little 14 bit but they go back to the core area and this core 15 area has really high forage quality for them which is really necessary for them to replenish their stores 16 17 that they lost over the winter and have enough energy 18 to lactate, to provide milk for their calves. 19

20 The next one is about patterns of 21 fidelity. so, you know, again high fidelity to the calving area, also their insect relief areas, out on 22 23 the Lisburne Hills, it's even more really strong 24 fidelity there. Less so in winter. One of the 25 interesting things that we were able to detect was that 26 there's super high fidelity to calving areas, individual animals would calve, on average, 35 miles 27 from where they calved the previous year. So they're 28 not coming back to the exact same spot to calve year 29 30 after year, they're kind of going up to a general area 31 and finding the best forage and that differs from year 32 to year depending on weather conditions, snow melt, 33 rainfall, things like that. Interestingly, calves --34 cows had calves on average within four days year to 35 year so there wasn't a lot of variability in when an individual calves, they were-- there was pretty tight--36 37 again, fall migration more variable than spring migration. We also looked at a proposed AStar program, 38 39 so this is a series of proposed roads for the North 40 Slope connecting various villages and development 41 scenarios and so we looked at the flow of caribou 42 migration and how that proposed road system might 43 impact things and what we found is that like the other paper that I mentioned about sporthunting, caribou 44 avoided dense vegetation, rugged terrain, major rivers, 45 46 but they also avoided roads, which is something that we 47 found in that Red Dog analysis as well. And if that 48 proposed road system came in, different villages would 49 have different impacts. Some villages would have 50

0243 likely less flow of caribou coming to their villages. 1 2 3 The next paper is an analysis of the 4 NPR-A, the National Petroleum Reserve-Alaska. There 5 was an EIS out looking at the impacts of potential development there and so we did our own analysis on 6 that and looked at the Western Arctic herd but also the 7 8 Teshekpuk and some bird species and we quantified the amount of impact that the different development 9 10 scenarios would have on caribou calving specifically 11 for those two herds. 12 13 The last paper is a paper about a new 14 initiative, it's a group that's called the Global 15 Initiative on Ungulate Migrations. Long distance terrestrial migrations are imperiled globally and this 16 17 group is seeking to try and conserve these migratory 18 routes and so one of their ideas is to try and make 19 sure that these routes are mapped so people can try and 20 avoid development where those are. 21 22 So that was the end of my slide show. 23 The only other thing that I wanted to mention that 24 hasn't been mentioned in terms of caribou migrations 25 and population size. One thing to consider is that 26 across North America is that when these large caribou 27 herds that inhabit all Northern North America, when they get smaller, their ranges tend to get smaller and 28 29 so that necessarily is going to mean they're going to 30 have different migratory routes, different migratory 31 destinations, different migratory distances. And so, 32 you know, when we think back to the '50s, the herd was 33 much smaller then too and, you know, there may be a 34 population connection as well as these transporter 35 issues as well as these changes in forage, as well as 36 wildfire changing movements, as well as roads changing 37 movements, so there's a lot of different factors. And 38 I guess I'd like to echo what Alex said, you know, 39 we've got a lot to learn from you folks and we'd love 40 to hear your input on what we can do to help understand 41 the system better and mitigate any issues that are 42 arising. 43 44 So with that I'll be happy to take any 45 questions. 46 47 CHAIRMAN BAKER: Thank you, Kyle. Does 48 any questions regarding Kyle's anybody have 49 presentation. 50

0244 1 MS. WESSELS: Mr. Chair, this is Katya. 2 3 CHAIRMAN BAKER: Yes, Katya. 4 5 MS. WESSELS: Yeah, I just would like 6 to let everyone know that we received this PowerPoint 7 presentation from Mr. Joly yesterday so we emailed it to the Council members and to anyone we could, we don't 8 9 have it published on our website and I would hope to do 10 that so it's available to the public but, you know, we 11 might have some technical difficulties doing it. But 12 if anyone would like a copy of this PowerPoint please 13 send an email to OSM and we will be able to send you a 14 copy of this presentation that Kyle was referring to. 15 16 Thank you. 17 18 CHAIRMAN BAKER: Thank you for that 19 Katya. Does anyone have any questions. 20 21 MR. KRAMER: Mr. Chairman, this is 22 Michael. 23 24 CHAIRMAN BAKER: Yes, Mike. 25 26 MR. KRAMER: Yeah, I had a question. 27 You know I know that you guys say that a lot of the caribou spend a lot of time north of the Noatak, we do 28 29 notice that there's small groups and congregations, you 30 know, even south of Kotzebue and, you know, there's 31 still a lot of them that are still up in the mountains. 32 I know I've gone sheep hunting in the past, in August, 33 and we run into groups of 20, maybe 30, and even just 34 singles, you know, way up high, you know, I've never 35 seen a caribou at 5,000 feet in altitude but there was 36 probably a dozen of them up there just staying up 37 there, probably to avoid the bugs. But do you guys 38 have any collar data that, you know, shows any caribou 39 are staying south of the Noatak, south of the Kobuk, 40 you know, south of Kotzebue that are just kind of mingling in certain areas, have you guys noticed any 41 42 difference in that, or any collars. 43 44 MR. JOLY: Thank you. Mr. Chairman, 45 this is Kyle Joly again. So, yeah, an excellent 46 question. So there are as a member mentioned earlier, 47 remanent reindeer groups and so I've seen that group on 48 the Baldwin Peninsula and I believe that's a remanent 49 caribou -- or, excuse me, reindeer bunch, because they 50

0245 1 do tend to stay there and our collars don't tend to stay on the Baldwin Peninsula. We've had one, maybe, 2 3 over the last 10 years just kind of hang out on the 4 Baldwin but in general they go through there. We do 5 find them up in very high elevations. I've worked in the Talkeetna Mountains, the Wrangell Mountains with 6 7 caribou and we have them up five, six, 7,000 feet. They're very capable climbers. Mountains that we think 8 9 of as extremely rugged they just walk right over. 10 11 Now, one of the interesting things that 12 happens after insect harassment, the peak of insect 13 harassment, which is usually like about the 7th of 14 July, is that the animals tend to shoot from the 15 Lisburne Hills directly east. And they go up and over the Brooks Range Mountains, you know, just basically on 16 17 a due east course like the Brooks Range wasn't even 18 there. It's an epic journey that would take the 19 fittest humans months and months and they're just doing 20 So they're incredibly good at navigating it in days. mountainous terrain. Most people of it as sheep 21 I've collected collars 22 habitat but from caribou 23 mortalities and I'm picking up the collar and I'm 24 looking down at sheep so they're very capable climbers. 25 26 Did that answer your question. 27 28 MR. KRAMER: Yeah. Like do you guys 29 have any that kind of mingle in the DeLongs and the 30 Bairds and south of the Kobuk, I mean during the 31 summer. Because, you know, I know we have like little 32 congregations like, you know, are scattered throughout 33 our reg -- our game management unit, but I know that 34 occasionally there's times where -- you know, like you 35 said it's probably due to the reindeer congregation or 36 mostly reindeer bred into them but yeah we do see some 37 groups that kind of stick in around in certain areas. 38 I know that I used to trap up in the Kobuk Valley and I 39 used to run into some of them in between Ambler and Huslia, you know, a couple groups there, several 40 hundred or more but, you know, they didn't migrate down 41 42 towards Buckland or Selawik area. But I knew that 43 some people say that some would winter in that area and 44 those Huslia Hills in between Huslia and Ambler. 45 46 MR. JOLY: Yes, thanks for those great 47 observations. This is Kyle Joly again. Yeah, you 48 know, we've got usually 70 to 100 GPS collars out, you 49 know, and there's a couple hundred thousand caribou in 50

1 the herd and so there's always little bands doing different things you know we don't capture all the 2 3 movements. And there's always scattered little groups. 4 You know a lot of times, you know, you'll find younger 5 animals kind of doing these weird things, I think they get lost from the main groups, they lose, you know, the 6 7 leaders, the adult cows, and they kind of figure it out and they end up in kind of these strange places. 8 We 9 also, you know, get reports of either caribou or 10 reindeer being out on the Seward Peninsula year-round, 11 I've seen five, 6,000 animals out there during the 12 Interestingly we looked at -- that summertime. fidelity paper, we looked at animals were wintering out 13 14 at Red Dog and we kind of suspected that those animals 15 maybe kind of hunt out there but we didn't have any caribou that wintered by Red Dog ever winter there 16 17 again. So a lot of them moved up to Wainwright the 18 following year, something like that, some moved off to 19 the Brooks Range so, you know, what we saw on the 20 winter range is that the animals really move about and 21 they really aren't found in the same spot over and 22 over, for the, you know, Western Arctic herd animals. 23 But, you know, that's what makes me suspect that, you know, if you're seeing animals in the same spot, one, 24 25 it could be that it's this little remnant reindeer 26 band. 27

28 MR. KRAMER: Yeah, one other thing I 29 wanted to ask, you know, is what was the estimated --30 or maybe Alex, you know, what was the estimated count 31 on the Teshekpuk Herd and, you know, has their 32 migration ever intermingled with the Western Arctic 33 herd in the last several years.

35 MR. HANSON: Yeah, through the Chair, 36 this is Alex Hanson. Kyle probably knows the answer to 37 this as well. But I -- gosh off the top of my head the 38 last count for the Teshekpuk Herd was in 2017 and if 39 Carmen was online she could answer, but it was 54 or 40 57,000 so a pretty good number. That was at the same 41 time that we shot the 2017 census for the Western 42 Arctic herd at 259,000. So absolutely they do mingle, 43 they do get together, we saw that actually last winter 44 as Kyle was taking about, how they wintered in the Gates of the Arctic, a good component of the herd was 45 46 there, they mingle with the Teshekpuk. There's even 47 some Central Arctic approaching that area. This year, 48 very different, they seem to be very separated at the 49 moment. So, yeah, they do get together, there's some 50

0246

0247 1 interchange, and some mixing that occurs for sure on 2 certain years. 3 4 MS. DAGGETT: Mr. Chair, this is Carmen 5 Daggett. 6 7 CHAIRMAN BAKER: Hi, Carmen, go ahead. 8 9 MS. DAGGETT: So the Teshekpuk Caribou Herd count was last done in 2017 as exactly Alex said, 10 11 however it was 55 to 56,000, just so that you guys have 12 an accurate number. And it's been good listening to you guys. I miss seeing all of you and I know you 13 14 wouldn't be seeing each other's faces, but I miss all 15 of your faces and talking with all of you. 16 17 Thank you. 18 19 MR. HANSON: Thank you for that 20 correction, Carmen. 21 22 CHAIRMAN BAKER: Thank you for that. 23 24 MR. JOLY: Mr. Chairman, this is Kyle 25 Joly. 26 27 CHAIRMAN BAKER: Yes, go ahead. 28 29 Yes, thank you. I just MR. JOLY: 30 wanted to add to Alex's comments there. We did do a formal analysis of the interchange and it was pretty 31 32 interesting kind of contrary to what you might expect 33 off the top of your head, we actually saw more flow from smaller herds like the Teshekpuk to the larger 34 35 herds, like the Western Arctic, and so like there was 36 more flow from the Central Arctic to the Porcupine, so 37 Central Arctic's smaller than the Porcupine. And the flow rates, the interchange rates were higher than 38 39 people had thought about, in some cases is like five percent of the collars would change herds, or, you 40 41 know, calve -- you know, if a Western Arctic herd 42 animal would go calve near Teshekpuk Lake or something 43 like that. So if people are interested in that we do have a publication that outlines how much interchange 44 and flow of interchange that occurs for all the four 45 46 northern Alaska herds. 47 48 CHAIRMAN BAKER: Thank you, that is 49 interesting to note, Kyle. Does anyone have any other 50

0248 1 questions for Alex and/or Kyle at this point. 2 3 (No comments) 4 5 CHAIRMAN BAKER: One question I have 6 for you Kyle, this is Thomas Baker. Is there any 7 recording or -- is there any way for, in your studies, to overlay areas where there may have been large 8 wildfires in the past and just correlating those 9 10 estimated stretches of burned tundra wildland, whatever 11 you want to call it, with these images that we're 12 seeing representative of where the herds are moving at 13 different times of the year, if there are any -- is 14 there any possibility of being able to show that in the 15 future. 16 17 MR. JOLY: Thank you, Mr. Chairman. This is Kyle Joly. Yeah, that's a great question. 18 19 Actually I did my PhD thesis on the Western Arctic herd 20 and relations to wildfires and lichens and so, you know, that was back probably 10, 12 years ago now so, 21 22 yeah, what we found was that, you know, first that, you 23 know, wildfires are a little more prevalent than people 24 expected. We were documenting fires out in the tundra 25 and now people are seeing that much more commonly. And 26 then the Anaktuvuk fire obviously was a big eye opener 27 for a lot of people. So that was the first part of the 28 project. The second part of the project was documenting, you know, lichen recovery in those burned 29 30 areas and what we found was that, yes, like in the 31 boreal forest, lichens were taking 50 years or more to 32 recover after the fire. Other things were recovering 33 very quickly, things like cotton grass, those are your 34 tussock grasses, those were recovering the very next 35 year, within three, five years for sure. And often 36 they actually were more abundant than before the fire, 37 but the lichens were taking a long time. And then we 38 used collaring data, this is showing my age, but this 39 is pre-GPS, so those collars were called PTT collars, 40 they weren't quite as accurate, but using those old PTT 41 data, we showed that the caribou were avoiding those 42 burned areas for about the length of time that it took 43 those lichens to recover. So, yes, what you're getting at is, you know, are the caribou moving around in 44 response to fire and I'd say yes they are. And I'd be 45 46 happy to share, you know, those papers with you or talk 47 about it more if you have additional questions. 48 49 CHAIRMAN BAKER: Thank you, Kyle. That 50

1 -- the perfect person to ask this about -- the main reason I ask is just in one of the things in your slide 2 3 show is that you see the shift in percentages of 4 caribou crossing the Noatak River and how it's slowly 5 moved more to the east and it just struck me that it was probably the 10 years ago there was a pretty 6 7 sizable wildfire north of the Noatak River that a lot of people even then said this is going to destruct the 8 herd, but just showing that transition over the years 9 10 the animals steadily moving more towards the east just 11 kind of supports that. I don't have any more questions 12 but thank you for that. 13 14 Does anyone have any other questions 15 for Kyle or Alex. 16 17 (No comments) 18 19 CHAIRMAN BAKER: Okay. 20 21 MR. JOLY: Mr. Chairman, I really..... 22 23 MR. KRAMER: Mr. Chairman, this is 24 Michael. 25 26 MR. JOLY:appreciate the 27 If any other questions appear you can opportunity. shout them out to me or you can connect with me after 28 29 the meeting. I'm pretty easy to get a hold of. 30 31 CHAIRMAN BAKER: Thank you, Kyle. Τ 32 have in my notes here that we might have heard from 33 Jeanette Koelsch and Hannah Adkinson on this topic. 34 Jeanette or Hannah, do either of you have anything 35 you'd like to add in at this time. 36 37 MS. ATKINSON: Hi, I missed the first 38 part of what you said but, no, we don't have anything 39 we were planning on sharing. It seems like it would be nice to have the discussion on the WSA21-01 and if any 40 41 questions come up we're available to answer. Is there 42 something specific that you wanted me to share that I 43 missed? 44 45 CHAIRMAN BAKER: No, it was just in my 46 notes, Hannah, that National Park Service may have 47 something to add in, kind of in addition to Kyle, but 48 if there isn't..... 49 50

0250 1 MS. ADKINSON: Oh, I see. 2 3 CHAIRMAN BAKER:anything 4 specific, I just wanted to check. At this time..... 5 6 MS. ADKINSON: No. Thank you. 7 8 CHAIRMAN BAKER: Okay. Then we'll..... 9 10 MS. ADKINSON: Yeah, we'll just respond 11 to questions. Thank you. 12 13 CHAIRMAN BAKER: Okay, thank you for 14 that clarification Hannah. So at this time I'm getting 15 a note that there's some members of the public who want to know if there will be a period for public or tribal 16 17 comment on this caribou discussion. We currently don't 18 have this on the agenda and I'm just looking through 19 what we have left on the agenda to see if we'll have 20 time to do one. We're also scheduling public hearings 21 on Wildlife Special Action 21-01, which will be next on 22 the agenda and Hannah Voorhees will be discussing and 23 announcing these once we get to that portion of the 24 Does anyone else from the Council have any agenda. 25 questions regarding this discussion on Western Arctic 26 Caribou Herd status updates and management strategy. 27 28 MR. SCHAEFFER: Tom. 29 30 CHAIRMAN BAKER: Yes. 31 32 MR. SCHAEFFER: Yeah, this is Bob. 33 34 CHAIRMAN BAKER: Yes, go ahead, Bobby. 35 36 MR. SCHAEFFER: Yeah, you know, I 37 mentioned earlier on my presentation on global warming 38 because I think it's going to affect the oceans huge 39 and not only with the carbon dioxide, but what carbon dioxide does, you know, to an ocean when it becomes 40 41 infused with it, of course, you probably all have heard 42 of ocean acidification which is probably the most 43 dangerous part of our -- of what can happen to an ocean. You know if 52 percent of the -- what do they 44 call that -- the -- the stuff that grows in the ocean --45 46 anyway I wanted to mention that because I think -- I'm 47 not sure exactly how it's going to affect the caribou 48 herd, I know it's probably going to affect others 49 because of -- you know there's massive massive melting 50

0251 1 of permafrost out there now and I wanted to ask Kyle and Alex about what they're noticing insofar as the 2 3 changes out there now that global warming is pretty 4 much speeding up in the process. Are there any dangers 5 that you've noticed or have you predicted anything that 6 may change, that may have a negative impact on our 7 herd. 8 9 MR. JOLY: Hello, Mr. Chairman, this is 10 Kyle Joly. 11 12 CHAIRMAN BAKER: Yes, please, go ahead, 13 Kyle. 14 15 MR. JOLY: Thank you. Yeah, the number 16 of implications of climate change on caribou are just 17 probably too many to deal with in one meeting. But, 18 you know, some of the big ones, you know, we pointed 19 out already are changes in the ice that make it 20 difficult for them to cross. We're going to see more 21 and more shrubs. We go to Onion Portage -- or we used 22 to go to Onion Portage to catch caribou and, you know, 23 just in the short time, you know, 15 years or whatever 24 that I've been going there, you know, the amount of 25 shrubs that have appeared there and their height has really changed so that can affect how predators can 26 27 hide in the bushes, it also affects where caribou are 28 going to migrate. As I noted, you know, we have a couple of analysis showing that caribou like to avoid 29 30 thick vegetation when they're migrating and so that can 31 You know one of the big change migratory patterns. 32 concerns that people voice is icing events. So if 33 there's snow on the ground and it rains, what happens 34 is there's an ice crust that can form and that can have 35 several problems for caribou. It can make it very difficult for them to dig down, or crater to their 36 37 lichens which is their primary winter forage which can be 70 percent or more of their diet in the winter and 38 39 so that's very essential for them to be able to bust 40 through that ice. Those ice crusts, as you know, when you walk through them can be very sharp and that can 41 42 cut open the bottom of the caribou legs and that can 43 expose them to diseases and other things. Another 44 impact from climate change that we expect is more bugs. Typically bugs do better in the Arctic when it's warmer 45 46 and so we're expecting the insect harassment to be 47 worse and that's a very critical aspect of caribou 48 ecology is how much insect harassment they get, it 49 determines how much foraging they can do. I could go 50

1 on and on really about this. I'd be happy to have a discussion another day on it or I could send you a 2 couple of articles that outline some of the more major 3 4 threats that climate change has for the herd. Another 5 one just off the top of my head that we've been 6 speaking about in fires, is wildfire obviously, we're 7 expecting more wildfires as temperature heats up and we 8 get more lightening storms out in Northwest Alaska. 9 10 Let me know if that covers it or if I 11 should do some more. 12 13 MR. SCHAEFFER: Yeah, thanks. 14 15 MR. KRAMER: Mr. Chairman, this is 16 Michael. 17 18 CHAIRMAN BAKER: Yes, go ahead, Mike. 19 20 MR. KRAMER: Yeah, you know, I know one of the major things that's been coming up within the 21 22 last year or two is these algae blooms that we've been 23 getting in the water. I know just recently we had a 24 whole bunch of herring washing up on shore, you know, 25 we don't know if that's due to the population, over 26 population or has to do with this algae bloom. I know 27 a lot of the North Slop in the spring and into the summer have a lot of these fog, big storms, you know, 28 29 would some of that algae bloom coming airborne and 30 traveling inwards along with the fog and the wind, you 31 know, does that have any kind of an affect on the 32 lichen and basically just the overall condition of the 33 tundra. Because I know a lot of fish and animals and 34 crustaceans have a lot of -- you know, there's been 35 die-offs due to this stuff. I know that in the ocean we've had a lot of warming, the king crabbing up here 36 37 near Krusenstern has nearly dropped off the deep end. 38 Have you guys put any kind of, you know, temperature 39 monitoring programs, or monitoring areas in the North 40 Slope to monitor the temperatures, you know, from 365 41 days a year in different areas because that would be 42 interesting to find out, you know, the very 43 temperatures within the areas of the calving ground, 44 their migration, it'd be very interesting. I know that here in Kotzebue within the last -- you know, this last 45 46 summer, you know, we only came over 60 degrees only a 47 few days this year because it was very rainy, cold, you 48 know, in the 40s and 50s. But I know that the 49 temperatures, you know, have a lot of effect on 50

0253 1 different things. But that was the question I had. 2 3 MR. JOLY: Through the Chair, this is 4 Kyle Joly. Yeah, I'm not a climatologist. We do have Staff experts, unfortunately they're not on the call 5 What I do know is that, you know, the 6 right now. 7 Arctic, including the Northwest Arctic is warming very rapidly, three times as fast as other parts of the 8 globe. A lot of this warming is happening during the 9 10 fall and, you know, that has potential to really 11 strongly impact caribou movements but I -- you know, 12 for -- for detailed information on temperatures and 13 precipitation and things like that it would be better 14 if I could get together with my team and get you 15 precise information if that's okay. 16 17 MR. KRAMER: Yeah, that's okay. Thank 18 you for your time. 19 20 CHAIRMAN BAKER: So it is now 3:00 21 o'clock. Do we have any more questions or discussion 22 from the Council for Alex or Kyle or anyone else 23 regarding the Western Arctic Caribou Herd discussion. 24 25 (No comments) 26 CHAIRMAN BAKER: Hearing none, next on 27 28 the agenda we have the update and guided discussion on 29 Wildlife Special Action 21-01. At this time does the 30 Council want to entertain a 10 minute break or just 31 keep going. 32 33 (No comments) 34 35 CHAIRMAN BAKER: Any members of the 36 Council wanting a short break or are we ready to just 37 keep rolling forward. 38 39 (No comments) 40 41 CHAIRMAN BAKER: Hearing no decisions 42 one way or the other, Hannah Voorhees, I have it 43 written down that you will be working with us on this 44 one. If you are ready the floor is yours. 45 46 **Transcriber Note** 47 48 Voorhees contacted Computer Matrix Hannah Court 49 Reporters requesting she be titled as Dr. Voorhees in 50

0254 1 transcripts and not Ms. Voorhees 2 3 **End Transcriber Note** 4 5 DR. VOORHEES: Thank you, Mr. Chair. 6 Before I begin, I just wanted to check and see if Tom 7 Sparks had wanted to give any sort of presentation. He's with BLM and I have him noted as possibly , or 8 perhaps he just wanted to answer questions later if 9 10 needed. 11 12 (No comments) 13 14 DR. VOORHEES: All right, hearing 15 nothing from Tom, I'll jump right in. 16 17 (Teleconference interference 18 participants not muted) 19 20 DR. VOORHEES: So good afternoon, this is Hannah Voorhees, I'm an Anthropologist with the 21 22 Office of Subsistence Management. I'm here to give you 23 an update on Special Action Request WSA21-01, get 24 feedback from you and discuss the next steps for this 25 request. Relevant materials begin on Page 139 of your 26 meeting materials. And this is not an action item and 27 no motions are needed. 28 29 Temporary Wildlife Special Action WSA21-01 was submitted by this Council in February this 30 31 year and requested closure of Federal public lands in 32 Units 23, 26A to caribou and moose hunting by non-33 Federally-qualified users from August 1st to September 34 30th, 2021. This proposal was also supported by the 35 North Slope Council. This Council expressed concern about the late migration of caribou for Unit 23. The 36 37 caribou migration has been delayed in recent years. 38 The effect that transporters and non-local hunters may 39 be having on caribou migration is of particular concern 40 to the Council. 41 42 Following submission of this request, 43 OSM held a public hearing, opened a written public and held two tribal and 44 comment period ANCSA 45 Corporation consultations. 46 47 The original OSM conclusion was to 48 support WSA21-01 with modification to only close moose 49 hunting to non-Federally-qualified users in Unit 23 50

0255 1 from August 1st to September 30th, 2021. 2 3 In June 2021 the Board met to decide 4 this request but deferred it until 2022. In the 5 meantime the Board requested that OSM Staff seek additional input on concerns related to caribou from 6 7 the Western Arctic Caribou Herd Working Group, Federal land managing agencies, local Fish and Game Advisory 8 Committees, the Alaska Department of Fish and Game, 9 10 Regional Advisory Councils, commercial guides and 11 transporters and subsistence users in the area. The 12 Board also asked OSM Staff to include comparisons of moose harvest by survey area within Unit 23 in their 13 14 analysis. 15 16 After OSM has compiled feedback from 17 these groups, updates will be made to include this 18 information in the analysis which will then come before 19 this Council at your winter 2022 meeting. The Council 20 can make a formal recommendation at that time. The 21 Board will take action on this request in 2022. 22 23 This item came before the Western 24 Interior Council for discussion though not as an action 25 item two weeks ago and they decided to defer all 26 conversation on this item to the home region. It also 27 came before the Seward Peninsula Council last week. In 28 terms of conversation with that Council a member from Unalakleet noted that she [sic] had to go further and 29 30 further for caribou and that member as well as the 31 member from Brevig Mission said that weather is likely 32 to be affecting caribou movements. Changing weather 33 also interferes with access to caribou on the Seward 34 Peninsula. A similar conversation will also occur at 35 the North Slope Council meeting later this week. 36 37 Additional public meetings on the 38 deferred closure will be held in November and December. 39 The first will be held in the next few weeks and will 40 be announced very soon, within the next couple days. 41 42 I do have some specific questions for 43 this Council today but before I move on are there any 44 questions or comments. 45 46 (No comments) 47 48 DR. VOORHEES: So as I go through these 49 questions, I know that many of you have commented on 50

1 these topics already today and in the past; if there's anything you'd like to add this is a chance to do so. 2 If you have nothing to add then we can just move on to 3 4 the next question. These are questions that we're 5 asking of all four affected Councils, that is all four 6 Councils with C&T for caribou in Unit 23. 7 8 So, first, can you tell me more about 9 the recent success or lack of success of communities in 10 your region with caribou harvest. Can you tell me 11 about this fall's harvest, how much effort are you 12 expending to harvest caribou, and is this more or less 13 effort in the past. Do you have to go further than in 14 the past. 15 16 UNIDENTIFIED VOICE: Geez. 17 18 CHAIRMAN BAKER: This is Thomas Baker 19 for the record. From my experience and from those in 20 and around Kotzebue and the Kotzebue area, yes, people 21 are having to go further and farther afield, up rivers, 22 or inland, depending on where they typically hunt 23 caribou, but they are expending more time, energy, 24 money, what have you, with minimal success. 25 26 DR. VOORHEES: Thank you for that 27 response, Mr. Chair. Are there any other comments in 28 response to that question. 29 30 MR. HOWARTH: Yeah, Mr. Chair, it's 31 Wilbur. 32 33 CHAIRMAN BAKER: Yes, please, Wilbur. 34 35 MR. HOWARTH: Yeah, our hunters here 36 out of Noorvik had to go to Onion Portage and further 37 probably and later on they were trying to go up to 38 Squirrel and, yes, that is happening. We only had a 39 few boats that went all the way up to Onion Portage and spend quite awhile up there, and got back before 40 41 freeze-up, too bad the caribou didn't show up. So, 42 yes, that global warming or, I don't know, it's just 43 that's keeping the caribou up high in the that 44 mountains and going further up. 45 46 Thank you. 47 48 DR. VOORHEES: All right. If -- thank 49 you -- and if there are no other comments on that one 50

0257 1 the next question is in terms of your concerns about transporters, and non-local hunters, OSM is looking for 2 3 some clarification if air traffic is more of the issue 4 or whether non-local hunters on the ground are more of 5 an issue, or whether it's both. I guess we've heard 6 kind of -- we've heard both and we're just looking for 7 some clarity. 8 9 MR. KRAMER: Mr. Chairman, this is 10 Michael. 11 12 CHAIRMAN BAKER: Yes, please, Mike, go 13 ahead. 14 15 MR. KRAMER: Yeah, I kind of think it's a combination of both. Also, you know, camp placements 16 17 because of the area that's up there closed five miles 18 on each side of the river, I know that it's pushing a 19 lot of them either north. You know the biggest problem 20 I see is, you know, we as our Inupiaq culture, is to 21 allow the first caribou to go by unhindered but if, you 22 know, within the first couple weeks of August you've 23 got hunters north of the Noatak, you know, they're not 24 allowing the first ones to come through, it's beginning 25 to hinder the people that hunt up the Noatak River, 26 specifically the village of Noatak. I know that they 27 have done very well the last couple of years, somewhat 28 well. I mean I see people have success but I hear a 29 lot of people not having success because of, you know, 30 the cost of fuel, you know, the pandemic, making a lot 31 of things very limited in the villages. The biggest 32 thing that I see is, in this pandemic, is food security. The grocery stores here in Northwest Alaska, 33 34 they just can't keep up with the demand because they're 35 literally buying out stores. I know in the beginning 36 of the pandemic it was cut back hours, business being 37 closed, you know, plus a whole bunch of other factors 38 that have been affecting food security, and with the 39 caribou coming later, limited time to be able to go out 40 and go get any, bulls, you know, good healthy bulls and 41 then like now a lot of people from Kotzebue didn't have 42 the chance to make it up the Kobuk because they don't 43 see very many caribou anymore. I know that there used 44 to be a lot of boats that would leave Kotzebue, go up 45 the Kobuk and harvest caribou and come down. I know 46 that some people used to go up to Noatak and harvest 47 caribou up there in the fall. But boats from Kotzebue 48 having to go all the way up to (In Native), you know, 49 that's -- I mean we're talking about a lot of fuel, a 50

lot of groceries, a lot of time, a lot of traveling, 1 especially traveling and if they come back empty, you 2 3 know, that's not good, you know, so the only reason --4 what I want to say is the reason for cutting back on 5 transporters, whether we start limiting the amount of 6 animals they could take or the amount of clients they 7 could take because we've been taking cuts for the last five years because the population has dropped, the 8 9 later migration, the access to caribou. I know that I quit wasting my money going up the rivers to hunt 10 11 because they're not there so I wait until November --12 late October, November when the caribou herds start to 13 come through Kotzebue, you know, around Kotzebue to be 14 able to harvest my caribou and by then, you know, the 15 big bulls are in their rut, some of the young bulls are in a rut, it's kind of a hit or miss whether you get 16 17 one that's good or not and a lot of people depend on 18 the cows. You know I know that we've cut back on the 19 dates for harvesting cows in the winter months to be 20 able to -- to be able to give them the advantage to be able to produce good healthy calves without being 21 22 hindered. That's one of the steps that we have taken. 23 You know we've taken -- on Federal lands went from 15 24 to five a day, nobody got 15 caribou a day but there 25 was like three or four or five people in a boat that got 20 a day because there's how many people in that 26 27 boat and they're feeding a lot of families in the villages. And we used to call those the super hunters 28 29 who provide and provide and provide for a lot of the 30 elders and family members who could not afford a boat 31 or the gas or the oil or the ammunition or the time to 32 go out and harvest caribou. That was one of the 33 benefits of being able to go out there with several 34 guys is, you know, our IRA provided fuel for people to 35 be able to go out there. You know, fuel, oil, 36 ammunition to be able to go out there and go hunting 37 and that's a real beneficial thing to the elders. Last 38 year was a very bad year, you know, overall, the 39 pandemic, we had zero cases here in Kotzebue and we had 40 a big rush of hunters throughout the whole entire fall 41 and there was a lot of conflicts outside the airport, 42 you know, due to local people and hunters because we're 43 limited on travel but they could travel in, a lot of 44 them traveled in to Kotzebue to go out hunting. It's 45 kind of a, you know, double-edged sword there, it's 46 like what do we do, we can't do anything, you know, 47 because it's the FederalParkland, they're all ableto --48 Federal public lands, we're only trying to -- at that 49 time we were only trying to protect our community 50

1 because if one person went to the village and visited several families with Covid, well, you just infected 2 3 possibly 20 or more people. And our healthcare system here just can't handle that kind of a crash so we were 4 5 trying to limit the -- we wanted to limit the amount of 6 people coming into Kotzebue but we couldn't. There was 7 a lot of conflict between hunters and local people 8 here at the airport. 9 10 That's all I have for right now. 11 12 Thank you. 13 14 CHAIRMAN BAKER: Thank you, Mike. 15 Hannah, would you please restate the question. I want to say that the question that we're on is clarification 16 17 between air traffic or actual non-local hunters on the 18 ground for OSM's work purposes. 19 20 DR. VOORHEES: Yes, that's correct, Mr. 21 Chair. 22 23 CHAIRMAN BAKER: Thank you, Hannah. 24 So, again, my stance on this and I've been very vocal 25 but just to clarify for that question. As Mike said it 26 is a combination of air traffic and boots on the ground 27 but, predominately what we're seeing is it's boots on the ground just because the hunters that we're talking 28 29 about are being taken so far north of Kotzebue, or east 30 of Kotzebue or wherever the herd may be, just like Mike 31 said, as early as the beginning of August, earlier, and 32 earlier in the season when they aren't really making 33 the southern migration yet. This particular season it 34 would be just the number of hunters. I stated 35 yesterday that at least two air transporters here in 36 the region that aren't really based in the region, they 37 mainly get their business during the hunting season 38 each had 200 clients that they were flying out which 39 adds up to at least 400 non-resident, non-local, non-Federally-qualified subsistence users coming in and 40 41 going far out into the field to get caribou. There can 42 be the argument that air traffic does hinder local 43 hunters, say, that are stalking caribou or attempting 44 to get close to a herd, but the vast majority of 45 complaints at this time would be from boots on the 46 ground and hunter location. 47 48 DR. VOORHEES: Thank you for that 49 clarification. That was all very good information. So 50

0260 1 the next question I have is are there any concerns about potential side effects of the closure. I know 2 3 one example of that that's been mentioned is 4 concentration of non-local hunters hunting on State 5 lands around communities. I just wanted to pose that 6 to the Council. 7 8 MR. HOWARTH: Mr. Chair. 9 10 CHAIRMAN BAKER: Go ahead, is that 11 Wilbur. 12 13 MR. HOWARTH: It's Wilbur, yeah. 14 15 CHAIRMAN BAKER: Yes, please, Wilbur, 16 go ahead. 17 18 MR. HOWARTH: Yes. Back to Page 157, 19 and where Noatak was getting their caribou and stuff, 20 crossing their river and they're telling us a lot of 21 caribou were crossing and that wasn't too far out of Noatak at the time. And -- but we still have a big 22 23 portion of the State land in the green there where all 24 the traffic, planes, have been going, and just sitting 25 and waiting for them there and they never get to come 26 all the way through Kiana, Noorvik, so there's a lot of 27 State land there that we -- I know we've been fighting for years to close that area but we got to work with 28 29 the State somehow. 30 31 Thank you. 32 33 CHAIRMAN BAKER: Thank you, Wilbur. 34 anyone else wish to provide an answer to Hannah. I 35 have one if no one else has anything. 36 37 (No comments) 38 39 CHAIRMAN BAKER: So, Hannah, my stance on this question of potential conflicts and the 40 potential of non-local hunters going on to State land 41 42 or being concentrated into different areas. The thing 43 is at this point in time that's what would be 44 preferable just in that if the non-local people are hunting the same area as local people, there, you're 45 46 able to make sure that everyone is following kind of 47 the same kind of community guidelines of, like has been 48 brought up of different agencies, like staying on the 49 south side of the river, of allowing the first group to 50

1 pass, and as has been shown many times there's more than enough caribou for everyone it's just that we need 2 3 them to be migrating through these areas for it to make 4 an impact on the local people. So in the event that this closure were to happen, conflicts, I feel, would 5 6 be minimal just because they would be able to be 7 resolved with local knowledge and traditional use 8 knowledge.

10 DR. VOORHEES: Thank you for that 11 perspective. So the next question I have is does the 12 Council have ideas about alternative ways to address 13 the problem in Unit 23 but don't go as far as closing 14 both units. For example, would it be desirable to 15 expand the current targeted closure while following -you know not expanding to all of Unit 23 and 26A, but 16 17 expanding to a smaller subset, and, if so, are there particular areas where caribou are being deflected and 18 19 what are the areas of greatest concern to you. You 20 know, how could we go about documenting that.

22 CHAIRMAN BAKER: Hannah, this is Thomas 23 One of the suggested changes that's been made Baker. 24 to me and I'd like to bring up at this time is people 25 have brought up not allowing non-Federally-qualified 26 users to hunt north of the Noatak River itself, and 27 just kind of waiting for the animals to cross to the side of the river just allowing for that 28 south 29 traditional knowledge of waiting for them to get to a 30 certain point and letting X amount of animals pass by. 31 I don't know how the rest of the Council feels, but if 32 that were a compromise that we would have to make, I 33 feel that waiting until the caribou have crossed some 34 of the major rivers, whether it be the Noatak or the 35 Kobuk, and then allowing outside hunters to hunt that 36 would be preferable than closing both, and all of 23 37 and 26A.

39 DR. VOORHEES: Thank you, Mr. Chair. And of course we'd really welcome any more input on 40 41 this now or going forward. And if no other Council 42 members have comment on that, I guess another idea that 43 OSM had was documenting if protecting traditional use 44 areas and caribou hunting camps, so I guess are there areas that people used to hunt for caribou now but that 45 46 you're avoiding because of non-local hunters, or key 47 traditional areas. I know that may this is, you know, 48 individual or community specific, and maybe not 49 something everyone would want to share but that's 50

0261

9

21

0262 1 another thought that we had in terms of strategies for 2 targeted protections. If anyone has comments on that. 3 MR. KRAMER: 4 Mr. Chairman, this is 5 Michael. 6 7 CHAIRMAN BAKER: Yes, please, go ahead, 8 Mike. 9 10 MR. KRAMER: Yeah, my suggestion is is, 11 you know, it's in our culture to allow the first ones 12 to come by. Like I said earlier, I said, we've seen 13 hunters come up from like August 1st until the end of 14 August and usually we don't try to go up to go hunting 15 until Labor weekend or beyond Labor Day weekend. You know they're north of the Noatak and they're targeting 16 17 these animals on State lands, north of Noatak, north of 18 the Kivalina or on the Kivalina River, or Wulik. You 19 know, they're not allowing the first bunches to come 20 through. I think what the State needs to do and us, as Advisory Council, is to allow out of 21 a government state hunters to only hunt from September 15th to 22 23 October 15th, that way you're allowing migrations to 24 It also allows local people to be travel unhindered. 25 able to go hunt in their traditional areas that they've 26 done in the rivers for many years. That way that's 27 allowing the first group to come through unhindered and you're also allowing, you know, our customary hunting 28 29 areas to be used again when they travel through there 30 unhindered. You know the main problem is air traffic. 31 We know that they don't harvest very many but it's the 32 air traffic. You know you got a plane flying to and 33 from on a daily basis with multiple hunters on board, 34 that's one of my main concerns. That was kind of one 35 of my ideas I kind of thought up, you know, that, hey, 36 we have to wait until the first bunches come through 37 why can't they wait until the first bunches come 38 through unhindered, you know, because the Fish and Game 39 here has such a say on our commercial fishing season, 40 when it could be open and when it could be closed, when 41 can they have a period, when they can't have a period, 42 why can't they do the same thing when it comes down to 43 our caribou herd. We're only protecting, you know, our 44 subsistence resources and our subsistence way of life 45 that way. 46 47 Thank you. 48 49 CHAIRMAN BAKER: Thank you, Mike. Does 50

0263 1 anyone else have any response or discussion for Hannah. 2 3 MS. ATKINSON: Hi, this is Hannah 4 Atkinson with the National Park Service. I have some 5 information about the delayed entry area that the Park Service uses that is determined, a timeline to allow 6 7 caribou to pass through. If -- if -- I appreciate that this is a time for the Council members to respond to 8 9 questions but if that would help discussion I am happy 10 to share. 11 12 CHAIRMAN BAKER: Yes, please, Hannah 13 Atkinson, I think that would help. 14 15 MS. ATKINSON: Okay. So what I wanted 16 to share about the delayed entry area and this is 17 something that we've been discussing in the National 18 Park Service and we've been having meetings about this 19 and just reviewing what we know from the topic 20 different strategies that we've tried. So the delayed 21 entry area is like the western portion of the Noatak 22 National Preserve so it includes like the Noatak River, 23 and the Kelly and Tisikug and then down -- it includes 24 the Eli and the Aggi and so it and -- and it's a map 25 and it's like overlaying the other things that are in 26 place right now, but the delayed entry area is given to 27 -- it's in the stipulations for the commercial use 28 authorizations, the permits that are given to the we can 29 transporters which give like background 30 information on that -- we haven't done a presentation 31 on that yet at this meeting, and we are happy to share 32 information if that would help, but the delayed entry area is closed -- it says in the stipulations that the 33 34 transporters cannot drop off hunters in that area until 35 -- from August 8th until September 22nd, is what it 36 says. And then one thing in our discussions, Kyle, 37 looking at the collar data, so this is just based on 38 collar data, but one thing we noticed is that it's not 39 really fulfilling the intended purpose which was to 40 allow the caribou to migrate through and hunters to get the caribou that they need, in part, because the 41 42 migration is not -- the collared caribou are not moving 43 through that area as much as they have in years past 44 so, you know, just because of the way that caribou migration varies and because of the -- how it varies in 45 46 the year, you know, it doesn't stay within those dates 47 that it's not fulfilling its intended purpose. So I 48 think that -- like it's good to explore those options 49 of like a time period that might protect the caribou 50

1 migration but I just wanted to bring up that that was something in play when the Park Service -- with input 2 from the RACs and the SRCs and the Unit 23 working 3 4 group put that into the stipulations for the CUAs we 5 were hoping to protect that lead group and it did not And I think that there is 6 really work as intended. 7 more to be studied as to why but I think that it wasn't very adaptive to the caribou movements, which are very 8 9 dynamic. And we wanted it to be adaptive but it didn't 10 turn out that way. 11 12 And so that's what I have to say about 13 the delayed entry area. If there's any questions about 14 locations, or not locations but the CUA holders that 15 are in the Park Service and what they report back to the Park Service, we have that information. 16 17 18 CHAIRMAN BAKER: Thank you, Hannah. 19 Does anyone have any questions for Hannah Atkinson. 20 21 (No comments) 22 23 CHAIRMAN BAKER: Does anyone have any 24 further discussion or input for Hannah Voorhees. 25 26 (No comments) 27 28 DR. VOORHEES: Mr. Chair, this is 29 Hannah Voorhees. 30 31 CHAIRMAN BAKER: Yes, please. 32 DR. VOORHEES: 33 I just want to just note, following up on Hannah Atkinson's comments that 34 35 there's a map of the controlled use areas in place 36 currently on Page 167 of your meeting material, just 37 for your reference, there are a few in Unit 23 that are relevant. And also in the analysis in your meeting 38 39 materials, there is information on what the dates of 40 those CUAs are and the stipulations attached. 41 42 So I also wanted to respond to Mike's 43 comments and thank him for those, and note that , you 44 know, there may be avenues through State regulations as well that the Council may want to pursue and parallel. 45 46 I believe one option would be submitting a proposal to 47 the Board of Game to restrict the use of aircraft for 48 caribou hunting and another option would be to submit a 49 proposal requesting that the dates for -- especially 50

0265 1 for non-resident hunters be changed. I wondered if anyone has any comments on that, I just wanted to put 2 3 it out there. 4 5 Thank you. 6 7 MR. KRAMER: Mr. Chairman, this is 8 Michael. 9 10 CHAIRMAN BAKER: Yes, please, Mike. 11 12 MR. KRAMER: Yeah, as I grew up, you 13 know, my father I pretty much grew up in the back seat 14 of a SuperCub. My dad, you know, back in the days when 15 he used to live here and hunt with us we believed that we -- we had a deep respect for the hunters in the 16 17 river, my dad did. So we flew through -- you know we'd 18 leave Kotzebue, we'd go straight towards Hugo's 19 Mountain, through the Squirrel and we'd maintain a 20 certain altitude and then we would go hunt in places 21 south of the Noatak River, like up in the Eli, you 22 know, and upper Aggi, up in the Cutler where, you know, 23 back in the day that -- you know I would see sight 24 unseen, you know if you have an airplane way back in 25 the mountains and south of the Noatak then it was never 26 really seen. Because my dad would take paths, you 27 know, to where it did not hinder, did not bother 28 subsistence hunters that were just mainly hunting in 29 the river, and that was the only place they could hunt, 30 you know, was just off the river. So you know my dad 31 had a very, very deep respect for the people that were 32 down there hunting. I see these days, I've been up 33 there at the Aggi, and, you know, watch caribou back 34 there two, three miles back and away from the Noatak 35 River just watching them and I'm seeing airplanes just 36 travel right, you know, right from -- I'd have to say 37 from Nath*(ph) Creek up the Aggi, right through that 38 corridor, you know, but back in the day we used to 39 travel straight through here to Hugo's Mountain and 40 then, you know, into the mountains in the Squirrel, and NorthFork and then go farther from there. But, you 41 42 know, I see a lot of air traffic just kind of spread out in this lower portion of the Noatak, and I'm not 43 44 too sure which paths they take beyond the Noatak, you 45 know, the Aggi, Nath Creek and Eli, you know, west/east 46 of the Noatak River and that area. But my father, we 47 grew up with a very deep respect for the people hunting 48 down below because we hunted out of an airplane. Yeah, 49 we had a boat, but we had an airplane and it took us to 50

1 places where there was literally nobody, you know, we were bothering nobody. But with the air traffic now 2 days, they all spread out, they're all traveling to 3 4 different areas and, you know, if the State can't help us, you know, to benefit the caribou coming through and 5 delay commercial services, you know, areas -- you know 6 7 drop-offs into the areas where the migration is then, you know, they might have to start coming up with just 8 9 a specific corridor where these aircrafts could fly 10 through and not deviate from that corridor. Like I 11 said my dad would fly straight line from Kotzebue to 12 Hugo's and then into the Squirrel and then north that 13 way we didn't bother people down below hunting in the 14 rivers. 15 16 That's all I have for now. Thank you 17 for your time. 18 19 CHAIRMAN BAKER: Thank you, Mike. 20 Anyone else with any input for Hannah Voorhees, or any 21 questions. 22 23 (No comments) 24 25 CHAIRMAN BAKER: Hannah Voorhees, do 26 you have any more questions or more to present? 27 28 DR. VOORHEES: Thank you, Mr. Chair. I 29 do have a couple more questions, I'll try to be quick. 30 But I just wanted to respond to Mike and everyone, you 31 know, and say I continually hear that people feel that 32 there needs to be respect for local subsistence needs 33 and traditional rules and practices and completely 34 understand and respect that. And I am -- you know, 35 better education of non-locals has been put forth as one option. As we heard from some of the ${\tt ADF\&G}$ 36 37 representatives on the line there is already a set of 38 requirements or training requirements for non-local 39 hunters, or I guess hunters accessing the area by air, but, yeah, if there's any way to, you know, try to 40 41 bring non-local practice better in line with local 42 practice, I think, you know, I'm on board as an analyst 43 to help think those possibilities. 44 45 And I guess, so two -- no, just really 46 one final question, which is are there any other suggested alternatives solutions or approaches --47 48 alternative approaches that could help solve this 49 problem. I'll just put that out there one more time, 50

0267 1 thank you. 2 3 (No comments) 4 5 And I do believe we've DR. VOORHEES: 6 covered that topic pretty extensively so if there are 7 no comments I just want to thank you for your time. 8 9 Thank you. 10 11 CHAIRMAN BAKER: Thank you, Hannah, for 12 facilitating this portion. And hopefully we can -- if 13 anyone has any further comments would they be able to 14 just send those over to you in an email if they weren't 15 able to join us today or what would be a good way to 16 send any further comments along. 17 18 DR. VOORHEES: Sorry, Mr. Chair, could 19 you repeat that last comment. 20 21 CHAIRMAN BAKER: Oh, yeah, I was just 22 saying thank you for facilitating that portion and if 23 there were any members of the Council who weren't able 24 to join us and they had some comments would they be 25 able to just shoot you an email, or how would we best 26 be able to pass that along if they had any input on the 27 questions you were asking this afternoon. 28 29 DR. VOORHEES: Certainly. Yes, email 30 or phone would be -- I would be very happy to hear from 31 anyone who might have additional comments. I forgot to 32 note that -- I just wanted to kind of underline 33 upcoming opportunities for input. 34 35 So on top of the public hearings, which 36 I mentioned earlier, we'll also have the winter 2022 37 RAC meetings and then the actual Federal Subsistence 38 Board meeting, which will likely be in April 2022. 39 40 Sorry, just one moment, I just wanted 41 to also give you some more information on our timeline. 42 43 So we've been conducting outreach phone 44 calls with the Western Arctic Caribou Herd Working 45 Group, which was another entity that the Board asked 46 for input from and their Executive Committee asked that 47 we do it that way instead of at their actual meeting 48 since they were time limited, and then we'll also be 49 holding a discussion, just very briefly, at their 50

0268 actual December meeting. And let's see other OSM Staff 1 jump in if there's anything I've missed, but I 2 can 3 think that's all the information I have for you now. 4 5 Thanks, again, for sharing your 6 knowledge and perspectives. 7 8 MS. GREDIAGIN: Through the Chair, this 9 is Lisa. And maybe Hannah already mentioned this but I 10 just wanted all the Council members to be aware that 11 OSM is compiling a lot of information, you know, so 12 feedback from the Council today and other stakeholders 13 from other hearings and the Western Arctic Caribou Herd 14 Working Group and then updating the analysis and then 15 at your winter meeting this will come back before the 16 Council again with an updated analysis for the Council 17 to actually vote and take action again on this special 18 action and then it will go back before the Board most 19 likely in April for final Board action. So I just 20 wanted the Council to be aware that this will come up 21 again at your winter meeting and it'll actually be an 22 action item to vote on, the special action and the 23 updated Staff analysis. 24 25 Thanks. 26 27 CHAIRMAN BAKER: Thank you for that 28 clarification, Lisa. If no one has any objections, I 29 believe it's time to move on to the last big thing on 30 the agenda which is agency reports and just remind 31 everyone that.... 32 33 MS. SWEENEY: Mr. Chair, this is 34 Brittany Sweeney, could I ask one question. 35 36 CHAIRMAN BAKER: Yes, please, Brittany. 37 38 MS. SWEENEY: Okay. This is a question 39 maybe for the OSM Staff, but prior to this meeting I was told that members of the public would have the 40 41 opportunity to comment and engage in the discussion on 42 WSA21-01 and so Hannah when you were asking your 43 questions, I was unclear if that was just for members 44 of the Council to provide input, or whether any members of the public who may be online would be able to 45 46 comment on the record at this time or if that will only 47 be allowed through the upcoming hearing. 48 49 Thank you. 50

1 DR. VOORHEES: Thanks, Brittany, 2 the Chair. Yes, those questions were through 3 specifically for Council members. I leave it up to the 4 Chair if he would like to invite comments and, yes, I 5 would repeat that there will be three public comments --6 I mean public hearings held in the next several weeks, 7 by the end of December they will be complete. 8 9 CHAIRMAN BAKER: Brittany, do you know 10 if at this time -- or I'll just ask is there anyone on 11 the line right now who is a member of the public who 12 was hoping to share their opinion on any of the 13 questions on WSA21-01. 14 15 MS. BALLOT: Good afternoon, Mr. Chair, 16 this is Tonya Ballot with the Native Village of 17 Selawik, also a community member, long-time resident. 18 19 CHAIRMAN BAKER: Hi, Tonya. 20 21 MS. BALLOT: Hey, would this be a good 22 time for me, I'm not sure if I missed the tribal 23 But you know how I feel personally about portion. 24 trying to continue the closure of Unit 23 for non-25 resident hunters, or either changing the timeframe from 26 when they are allowed to come up here. I know that, you 27 know, Alaska is the most beautiful place on Earth and even in the 40 below it's still pretty, you know, and people come up here for adventure, for -- to -- for 28 29 30 pleasure, you know, and it gives money to guides and 31 stuff but -- but right now it is a critical time in our 32 We're going through a pandemic, people are region. suffering to provide food and meat for their table and 33 34 for their families and I will reiterate what Michael 35 has said, what different people have said that, you 36 know, we're -- it's scarce, our freezers are empty and 37 we -- we're not able to provide food for our families, 38 we have to get it ordered in, flown in. We're not able 39 children to hunt and subsist and to teach our culturally survive. And, you know, I heard somebody 40 talking earlier about herding and how they worked long 41 42 ago. And, you know, traditional knowledge, well, we've 43 lost a bunch of elders in every community and the 44 with them, and traditional knowledge went we're struggling to pass down that traditional knowledge 45 46 because we, ourselves, are still learning and trying to 47 understand. Global warming is a big part of it, you 48 know, the food that they eat is getting scarce and 49 maybe it's staying too wet or, you know, we got to 50

1 consider all the factors. But I will strongly voice my concern, if we could prevent the man-made distraction, 2 3 then let's do that, let's work hard to, you know, give 4 the folks that come here from Montana, Missouri, and I even heard somebody from West Virginia back in February 5 when we were first having those hearings on this very 6 7 topic, and, you know, if we can have them come at a later date or not at all, you know, we need to stand up 8 9 strong, we need to be strong, we need to be more vocal 10 in our communities to protect our most important food 11 source. We're not going down to Montana or West 12 Virginia to hunt their deer and their elk, you know, we 13 want to protect our food and we have to do whatever we 14 can, whatever it takes to do that or else, you know, 15 we're going to lose quite a bit, not only our folks, we're using our cultural subsistence skills and things 16 17 like that. 18 19 And I really appreciate the time and 20 there's a lot of information and I just thank everybody for doing what they can and we just need to work a 21 22 little bit harder every day. 23 24 Thank you. 25 26 CHAIRMAN BAKER: Thank you, Tonya. Any 27 other members of the public who were hoping to speak on 28 WSA21-01. 29 30 MR. HARRIS: Mr. Chairman, Cyrus 31 Harris. 32 33 CHAIRMAN BAKER: Yes, please, Cyrus. 34 35 MR. HARRIS: Yeah, hello. Well, first 36 of all I'd really like to comment to this group here, 37 you know, keeping this WSA21-01 alive when it got kind 38 of like tabled last year by the Federal Subsistence 39 It all makes sense in a way and it's something Board. that I do support for many reasons. And I think you'd 40 41 get a whole more larger audience if this meeting were 42 to be live on air on KOTZ, you'd get many calls from 43 many people because we hear it all the time about all 44 conflict that's been going on throughout the the earlier part of the hunting season. 45 46 47 Thank you. 48 49 CHAIRMAN BAKER: Thank you for that, 50

0271 1 Cyrus. Anyone else from the public. 2 3 MS. BROWN: Mr. Chair. 4 5 CHAIRMAN BAKER: Yes. 6 7 MS. BROWN: This is Melissa Brown, and I am from Selawik. And I just wanted to comment that 8 9 it's really sad that we didn't get our share of the 10 caribou this year. We went out boating and they 11 reached about right below the mountains over there and 12 they turned back for whatever reason and the next day 13 we tried going out but the river was already frozen. 14 15 That's just -- I would support the later dates for the people, the non-resident people to 16 17 come in later. And it's just -- I don't know, really 18 sad, for people not to fill their people when we try to 19 clean it out and wait for the caribou and it never 20 really -- they're not here. 21 22 Thank you. 23 24 CHAIRMAN BAKER: Thank you, Melissa. 25 Anyone else from the public. 26 27 MR. MANNIX: Mr. Chair, this is Jacob 28 Mannix at Backcountry and Anglers. 29 30 CHAIRMAN BAKER: Yes, Mr. Mannix, 31 please. 32 33 MR. MANNIX: Yeah, so there's a lot 34 that I'd like to say and I'll hold off on a lot of for 35 the public hearings. But, you know, on a personal note, I just want to say that listening in on this 36 37 meeting for the last couple days when I've been able to has been pretty eye opening for me. There's been a lot 38 39 of compelling testimony from local folks in the region, there's been a lot of great testimony from agency 40 41 Staff; I appreciate that greatly. 42 43 I doubt anybody on this phone call 44 I live in Nome. I'm a Federallyknows who I am. 45 qualified subsistence user. I have a positive C&T for 46 the caribou up there in Unit 23. I can relate in some 47 ways to the frustrations about access. As far as 48 access and caribou from Nome, you know, for me, the 49 last caribou I got from here was in the spring of 2020 50

and I snowmachined from Nome all the way almost to 1 Buckland, it was 450 miles roundtrip and we brought 2 3 back two caribou. So access is hard. It can be 4 difficult, it's hard to put food in your freezer sometimes. This year our salmon runs were real bad in 5 6 Nome, our seine season got closed. I was fortunate 7 enough to be able to put quite a few silvers in my freezer but even those runs were tough to get to. 8 Ι did all that fishing with rod and reel, it took a lot 9 10 of time. I don't have the vast amount of traditional 11 knowledge that a lot of folks on the phone have spoken 12 I've only lived in Nome for five years, about today. 13 so I still have a lot to learn. I have a lot to learn 14 about the subsistence culture in Western Alaska. I've 15 a lot to learn about the caribou. And that's a large part of the reason why I'm on this call. 16 17

0272

18 Our organization was opposed to the 19 closure of the Federal public lands, that's something 20 -- you know, public land access is something that our organization works on pretty hard. The other thing 21 22 that we work on pretty hard is habitat conservation and 23 wildlife conservation. And that's one concern with 24 this proposal that I have, is I'm not looking a year 25 into the future, or two years into the future or three 26 years into the future, regardless of the outcome of 27 this proposal, whether there is a closure or whether 28 there is not a closure, these conversations are still 29 going to be continuing into the future and my concern 30 is about the rift that creates between hunters and 31 anglers regardless of whether you call yourself a 32 subsistence hunter or a sporthunter or whatever. There 33 are a lot of challenges that have been talked about on 34 this phone call regarding climate change, and various 35 threats to fish and wildlife in Northwest Alaska. 36 Those threats are going to require a lot of people to 37 come together and sit at a table and talk to each other 38 about solutions to make sure that we have fish and 39 wildlife resources, not five years from now, not 10 years from now but for our grandchildren. 40 I say that That's something that I believe in, 41 wholeheartedly. 42 that's something that my organization believes in. So 43 I'm invested in continuing this conversation for the 44 long haul. If this proposal goes through, and there is a closure, my organization will likely come out with a 45 46 statement in opposition to it. I do not view the 47 subsistence hunters or anywhere in Alaska to be adversaries, we will continue to have disagreements 48 49 regardless of the issue. But I think it's important to 50

0273 1 just understand that, you know, I guess the goal for the long-term is that a lot of the things that we want 2 3 are the same. 4 5 I'll leave it at that for now. Т 6 greatly appreciate the time that the Council members 7 have taken out of their personal lives, away from work, and away from family to give their input and let us all 8 listen and share their knowledge. I thank the agency 9 10 Staff. And I hope that I will be able to help hunters 11 and anglers work on long-term solutions that are best 12 for the habitat and fish and wildlife that rely on 13 those places. 14 15 Thank you, Mr. Chair. 16 17 CHAIRMAN BAKER: Thank you, Mr. Mannix. 18 I believe we have time for one or two more quick 19 opinions if we have anyone else from the public. 20 21 MR. KRAMER: Mr. Chairman, this is 22 Michael. 23 24 CHAIRMAN BAKER: Yes, Michael. 25 26 MR. KRAMER: Hey, I just want to let 27 you know I'm going to have to sign off. I'm at work 28 right now. So it's been a pleasure with working all you guys. I'll see you guys at our next meeting but I 29 30 got to get back to work. I wish I could take part in 31 the rest of it but I'll try again. 32 Thank you, Mike. 33 BAKER: CHAIRMAN 34 Thanks for the head's up and thanks for being here. I 35 understand your schedule isn't the easiest to get around with airport work but thanks for joining us. 36 37 And so with that I'm not hearing anybody else for 38 public comment on WSA21-01. It's 3:59 now..... 39 40 DR. VOORHEES: Mr. Chair. 41 42 CHAIRMAN BAKER: Yes. 43 44 DR. VOORHEES: This is Hannah Voorhees. 45 I just wanted to let everyone know that I am able to 46 give you information on the exact date and time of the 47 first upcoming public hearing. It will be on 48 Wednesday, November 17th from 4:00 p.m. to 6:00 p.m. 49 And I'll just give you the phone number and passcode 50

0274 1 now. It will be distributed through multiple channels. But the number is 888-942-9690 and the passcode is 2 3 6071806. 4 5 Thank you. 6 7 CHAIRMAN BAKER: Thank you for that 8 Hannah. If anyone didn't get that we'll be sure -- I'm 9 sure it will be disseminated by social media by 10 different agencies. And with that we need to get on to 11 the agency report section of the agenda. Just to 12 remind everyone there will be a time limit of 15 13 minutes for each report, and we'll start off on -- at 14 this time we don't we have any tribal governments 15 signed up to speak, but I'd like to ask if there are any tribal governments that have anything to present 16 17 that they'd like to present now. 18 19 20 (No comments) 21 22 CHAIRMAN BAKER: If there are no tribal 23 governments the same offer goes out to Native 24 organizations. 25 26 (No comments) 27 28 CHAIRMAN BAKER: Hearing none, I will 29 go down to the U.S. Fish and Wildlife Service. We'll 30 go with the Selawik National Wildlife Refuge. 31 32 MS. GEORGETTE: Well, good afternoon, 33 Mr. Chair, and Council. My name is Susan Georgette. My 34 Inupiaq Name is (In Inupiaq) I'm the manager at 35 Selawik Refuge. I've worked here at the Refuge for 36 about 15 years and I've lived in Kotzebue for about 30 37 years. 38 39 Selawik Refuge includes the Federal lands and most of the Selawik River Valley, the north 40 41 side of Selawik Lake and the Kobuk River Delta. We're 42 part of the Fish and Wildlife Service and the Refuge is 43 one of more than 500 that are established by Congress 44 across the country. We have eight people who work for Two of them are based in Selawik, Sonny Berry has 45 us. 46 worked with us for quite a few years and he's really 47 our expert in the field and helps facilitate a lot of 48 our field work. The other person who joined us just 49 last month is Melissa Brown in Selawik as our Refuge 50

0275 1 Information Technician, and, Melissa, if you're on the call could you introduce yourself quickly. 2 3 4 MS. BROWN: Yeah, my name is Melissa 5 Brown and I'm from Selawik. I grew up here in Selawik 6 and thank you for having me today. 7 8 MS. GEORGETTE: Thank you. We're happy 9 The other new Staff we have is Will to have you. 10 Wiese. He's our new Assistant Manager. And, Will, if 11 you're on the call could you introduce yourself 12 briefly. 13 14 MS. WIESE: Yes. Mr. Chair. Members of 15 the Council. This is Will Wiese. Like Susan said I'm Assistant Manager so I kind of assist with 16 the everything here. 17 I just got to Kotzebue in March. 18 Before that I was up in Kaktovik for a few years 19 working for the Fish and Wildlife Service there on 20 polar bear issues, subsistence issues, oil and gas. I 21 was the liaison for Fish and Wildlife Service to the 22 community of Kaktovik. So I know a little bit about caribou, I know a little bit about cold places. And, 23 24 yeah, I'm excited to be here. I am not quite used to 25 the big city life of Kotzebue yet but I'm starting to 26 settle in. When I'm not at work you might see me on 27 the trail or on the water, in the spring out catching geese, in the summer fishing and berries and trying to 28 29 catch moose and caribou in the fall and bringing that 30 home and sharing with my family, friends and community. 31 So that's a little bit about me. I look forward to 32 working with you all for a very long time. 33 34 MS. GEORGETTE: Thanks, Will. I've 35 mentioned this before to the Council but our program 36 here mainly focuses on fish and aquatic habitat. Our 37 one biologist Bill Carter, is a fish biologist and he's 38 the only fish biologist that's based in Kotzebue in any 39 the agencies here. also have a strong of We communications and outreach program that Brittany 40 41 Sweeney runs with Christina Nelson and Melissa Brown. 42 43 Covid has kept us from doing some of 44 our usual field work and youth activities this past year but we have been able to get a few things done. 45 46 One of the things I wanted to mention is that we did some work with the University of Alaska-Fairbanks on 47 48 beaver pond mapping on Selawik Refuge. This is all 49 remote work from satellite images dating back to the 50

0276 1 1950s. And as you know beavers were pretty much not at all on the Refuge in the 1950s. They gradually started 2 moving west in the 1970s and '80s and by the early 3 2000s they were throughout the Selawik River Valley. 4 5 It was interesting to learn that the density of beaver 6 ponds and dams on the Refuge has not really changed 7 since about 2006. So that means that the Selawik Valley is pretty much saturated with beaver, that it 8 9 can't really carry any more beaver dams and ponds than 10 it does right now. You would not be surprised to know 11 that Selawik lowlands have some of the highest beaver 12 densitiesin Northwest Alaska. Andthis doesn't solve --13 this project doesn't solve the challenges that people 14 have with beavers in our region, it's mainly looking at 15 how climate change has allowed beavers to move and what 16 their impact might be on the landscape. One of the 17 things that happens with beaver dams and ponds is that 18 it allows the water to warm up and when the water warms 19 up it thaws the nearby permafrost and makes creeks 20 So we've been working on that, and the wider. professor we've been working with is expanding his work 21 22 to other parts of Northwest Alaska including an 23 indigenous knowledge section. 24 25 I also want to mention that in 2019 26 before the pandemic we did some interviews with elders in Selawik with the UAF oral history program to 27 28 document their stories about the muskrat trade in 29 Selawik that went on a lot in the mid-1900s, and those interviews were finally edited and completed 30 and 31 they're available at the UAF online oral history 32 program. So you can listen to Emma Ramoth, May Walton, 33 Pauline Ramoth, Grant Ballot and Sally Gallahorn on 34 that. 35 36 Will's going to give a quick update on 37 a couple other things, followed by Brittany, so, Will 38 go ahead. 39 40 Yeah, this is Will Wiese MR. WIESE: 41 again. So a couple of projects we were able to work on 42 this summer included putting some water temperature 43 monitors in rivers on the Refuge. We started doing this back in 2017, I believe it was, the first one, and 44 we've got five out now and these water temperature 45 46 monitors are in the upper Selawik, the Tag, Kugarak 47 Rivers and we're -- they're just small monitors. They 48 get anchored in and sit out all year and then we come 49 back in the summer and pull out the temperature loggers

1 out and so we can't kind of see what the water temperature is today but we can get temperatures every 2 3 hour so we can see over so we can see over the course 4 of a year and over the course of days what the 5 And I heard a lot of talk temperature looks like. earlier today from Council Member Schaeffer and others 6 7 about, you know, the importance of understanding water temperature and how a big of effect it can have on fish 8 9 kills and that kind of thing. And so this is a project 10 we're hoping to continue and expand to other rivers on 11 the Refuge and possibly outside the Refuge, too, with 12 partners. And in addition to that we're hoping to 13 expand and look more at the flow rates of the rivers on 14 the Refuge. And obviously this year was a really rainy 15 year and water levels were really high much of the year and we'd like to have a better way of being able to 16 17 sort of quantify that. 18

19 Other things I'll mention, we heard 20 about the herring die-off here at the Refuge. And, 21 again, thanks to some folks on this call, actually, for 22 letting us know about it and giving us the information 23 We worked with, and are still working with we have. 24 Alex Whiting and the Native Village of Kotzebue to try 25 and get our best idea of the cause and I think as 26 Council Member Schaeffer talked about this morning, 27 those herring could have been stressed from high 28 amounts of freshwater, other causes, you know, 29 preliminary results from labs coming back say that some 30 of those fish may have had a viral infection. And so 31 looking at all the evidence and talking to Alex Whiting 32 we're thinking that some sort of disease outbreak, 33 virus may be at play and especially at play with other 34 factors mixed in. You know, herring are not good at 35 social distancing, they school up pretty tight and so it'd be fairly easy for a disease to transmit amongst 36 37 them. And we're hoping to get more results back and 38 get a more definitive answer. 39

40 Other things I'll mention quick, we did 41 take a look at the thaw slump this years. We didn't 42 see large amounts of sedimentation in the Selawik River 43 but that mud slide is active, there's some movement 44 there. 45

And, finally, Susan mentioned beavers. One project we got to do this year was go out to the Selawik Hot Springs in the summertime and myself and Bill Carter, our Fish Biologist, and Raymond Woods from 50

1 Shungnak all went out there and took a look at the bath house and the cabins out there because we heard last 2 3 winter that there was flooding, that beavers had built 4 a dam up stream and the cabins were flooding. And we 5 were pleasantly surprised to get out there and there wasn't major damage to the cabins and kind of did an 6 7 assessment of those and got a lot of pictures. And it really looks like there is an old dam up stream, it 8 9 wasn't active when we were there this summer. And it 10 looks like between the beaver dam and sort of an ice 11 dam, that had possibly formed last winter, that's what 12 caused the flooding but luckily the beaver dam didn't 13 appear to be -- or the beaver hut didn't appear to be 14 active or in play this summer. 15 16 So that's what I've got, I'm going to 17 hand it off to Brittany. 18 19 MS. SWEENEY: All right, thank you, 20 Will. This is Brittany Sweeney speaking. (In Native). 21 The Outreach Specialist for Selawik Refuge. This is my 22 11th year at Selawik Refuge. So I'm just going to give 23 a couple updates on some of the projects that we've 24 done in our outreach program. Christina Nelson on our 25 Staff spent a week at Camp (In Native) as an 26 instructor. Melissa Brown, who just introduced 27 herself, had the great idea of doing story time over VHF in Selawik. I know kids have been out of school 28 29 there for like five weeks now but she's doing nightly 30 story times. 31 32 The Refuge does maintain an active 33 Facebook page to keep folks informed. It's designed 34 with our regional audience in mind. We work hard to 35 share information on hunting regulations and closures 36 in a manner that's designed for people to -- for it to 37 be understandable. 38 39 We just recently had a project with the Northwest Arctic Borough Search and Rescue Program 40 41 where we were able to use some Refuge funds to get new 42 signs for all the shelter cabins. I'm excited because 43 they'll feature the traditional Inupiaq place names. 44 So for example instead of saying Aggi River, it'll say (In Native), and we'll be working with Sonny and the 45 46 Search and Rescue to get all those posted on the 47 shelter cabins this winter. 48 49 So thank you all for your time and I'll 50

0279 1 turn it back over to Susan. 2 3 MS. GEORGETTE: Thank you. The last 4 thing I wanted to give an update on is the transporter permits. Commercial activities require permits on the 5 Refuge so that would include air taxis and boat 6 7 charters but not private pilots or private boaters. The western part of the Refuge, the Refuge lands near 8 9 Selawik, Noorvik and Kiana are closed to transporters. 10 Four air taxi permits were issued by Selawik Refuge 11 this year. That's the same number that's been issued 12 for the last several years. The permittees don't need 13 to report their -- the number of hunters until the end 14 of December, but two of them have already reported and 15 neither took any hunters to the Refuge this year. The Refuge 20 years ago got a fair amount of hunters, non-16 local hunters, I mean up to 200 people probably but 17 18 with the moose season closed to non-residents in Alaska 19 and with the delayed caribou migration there's been 20 very little hunting activity on the Refuge recently. 21 Last year there was one party of two hunters. 22 23 So that's the conclusion of our report. 24 I want to thank all the tribal governments in Selawik 25 and along the Kobuk River for their willingness to be 26 our partners and in many cases, our friends, in our 27 work on the Refuge. IT's really what makes our work 28 meaningful to all of us, so thank you. 29 30 CHAIRMAN BAKER: Thank you, Susan, and 31 to all your Staff. Do we have any brief questions for 32 Selawik National Wildlife Refuge folks. 33 34 MR. BALLOT: this is Percy I do, 35 Ballot. 36 37 CHAIRMAN BAKER: At this time we're 38 going to keep it just to the Council members. Any 39 Council members have any questions before we move on. 40 41 (No comments) 42 43 CHAIRMAN BAKER: Hearing none, we'll go 44 to the National Park Service and we'll start with the 45 Western Arctic Parklands. 46 47 (Teleconference interference 48 participants not muted) 49 50

0280 1 CHAIRMAN BAKER: I'm sorry, what was 2 that. 3 4 MR. SCHAEFFER: Mr. Chair, can you hear 5 me. 6 7 CHAIRMAN BAKER: Yes. 8 9 MR. SCHAEFFER: Hi, this is Damon 10 Schaeffer with NANA. I got kicked off the call and I 11 might have missed the spot on the agenda to just 12 provide a short update. 13 14 CHAIRMAN BAKER: Oh, hi, Damon, yes, we 15 started off with the tribal and Native organizations. If you'd like to give your agency report you can go 16 17 aheadanddo thatnow andthenwe'll gowith thePark Service. 18 19 MS. SCHAEFFER: Okay, great, appreciate 20 Thank you. I'll keep it short, I know we're short it. 21 on time. So our trespass season, I just want to 22 provide a short update. I will be at the winter 23 meeting delivering our fully detailed end of season 24 report. So just to provide a short update. 25 26 This year we did have another season, 27 Trespass Program. We started off in the first week of 28 August patrolling and went through the first week of 29 October, is when we shut down, and then we closed this 30 year's season with we employed 19 officers. We did a 31 lot of patrolling. It was a very wet year. But 32 overall everyone was safe and we had a pretty good season, I felt. We appreciate support from the other 33 34 agencies, the Wildlife Refuge, the Park Rangers, the 35 Wildlife Trooper, Steve Canteen, he was great, so yeah I will be at the winter meeting and I will provide a 36 37 more detailed report then. 38 39 But I'm open to answer any questions if 40 there are any. 41 42 CHAIRMAN BAKER: Great, thank you, 43 Are there any members of the RAC who have any Damon. 44 questions for Damon and the NANA portions of the agency 45 reports. 46 47 (No comments) 48 49 CHAIRMAN BAKER: Hearing none, thank 50

1 you, again, Damon, for your report. If anyone does have any questions we will pass on your contact 2 information and look froward to hearing from you again 3 4 at the winter meeting. 5 6 MR. SCHAEFFER: Great, thank you. 7 8 CHAIRMAN BAKER: All right, thank you, 9 And now we can move on to the Western again, Damon. 10 Arctic Parklands, National Park Service. 11 12 MS. KOELSCH: Hello, through the Chair. 13 This is Jeanette Koelsch, Acting Superintendent Western 14 Arctic National Parklands. I began my acting in August 15 and I will end my acting in December. For those of you who don't know me, I am usually 16 and still the Superintendent of Bering Landbridge National Preserve 17 18 in Nome. i've been the Superintendent in Nome for 19 about 12 years working with Western Arctic National 20 Parklands out of Kotzebue. I do have a short timeline to provide you about a new Superintendent. 21 22 23 So the National Park Service will have 24 another Acting Superintendent after myself and I'm not 25 sure who that will be. But we are hoping that a new Superintendent is hired by February or March there in 26 27 And my report on that is really short and Kotzebue. 28 now I'd like to move on to Hannah Atkinson. 29 30 MS. ATKINSON: Ηi, good afternoon 31 everyone. Through the Chair. This is Hannah Atkinson. 32 I'm the Subsistence Coordinator and (In Native). 33 Cultural Anthropologist for the National Park Service. 34 35 The first thing that I'll update you on 36 is that the Cape Krusenstern and Kobuk Valley SRCs are 37 going to be meeting. Cape Krusenstern tomorrow, November 3rd from 1 to 5, and Kobuk Valley November 4th 38 39 from 1 to 5 on Thursday. And we were not able to squeeze in their meetings prior to the RAC. We usually 40 41 try to do that so that they can provide comments on the 42 proposals but it didn't work this year so I welcome you 43 all to attend that if you have some more teleconference 44 time available to you. We will be working over WSA21-01, having more discussion on that issue of protecting 45 46 caribou hunt opportunities and the closure of Federal 47 lands. 48 49 So that is my update on the SRCs. SRC 50

0282
1 is Subsistence Resource Commission. I'm going through
2 it pretty fast but please let me know if you have any
3 questions.
4

5 And then I also wanted to let you know 6 about some research that I have been leading the Park 7 Service and working with different researchers on. A lot of it dovetails from issues that are brought up by 8 9 Subsistence Resource Commission members and RAC members 10 and so a lot of it has to do with caribou. So one of 11 the projects that the Park Service has been working on 12 and this came up after the 2017 discussions about the 13 proposal to close Federal lands, is study of 14 significant traditional hunting areas and significance 15 of caribou to the people in Noatak and then what dovetailed from that a little bit is a place names 16 17 research project. And so in consultation with the 18 Native Village of Noatak and talking about significant 19 places to harvest caribou there was a lot of Inupiag 20 names being used and some community members, Ricky Ashby and Hilda Booth that were very interested in 21 22 doing a project. So we're going to do field work for 23 that project this summer and it got postponed due to 24 Covid19 but I had the pleasure of working with an ANSEP 25 student, Alaska Native Science and Engineering Program. 26 My intern, her name was Iona Browning, and she was 27 raised in Kotzebue and has family in Noatak and got to 28 travel to Noatak as a part of this project. Wasn't 29 able to go out on the boat trip this year but hopefully 30 we'll get to work again with her this summer and she 31 was just really excited about the topic of Inupiag 32 place names and was a great student to work with. 33

34 I also wanted to bring up an intern 35 that was hired by Maniilaq Tribal Government Services, 36 we have a partnership with them to coordinate the 37 Subsistence Resource Commission and the intern that we 38 have this summer is Tiana Capelli, she has family in 39 Kiana and Noatak and other places around the region. She's Eva Hardy's daughter. And she was able to do a 40 41 great project this summer on traditional Inupiag values 42 of caribou hunting and she combined interviews that she 43 did this summer with interviews that were done in 2018 44 by another student and turned them into a series of three minute videos about traditional hunting values. 45 46 So I really appreciated working with those interns this 47 summer and welcome anyone else interested in a career 48 in subsistence, to talk to me.

0283 1 And we have Raime going to give an 2 update and Joe Dollemolle also going to give an update. 3 But I'll just say one more thing, is, I'm really 4 missing seeing you all in person and the opportunities 5 that we have to talk one on one at those meetings. And I'd encourage you to call or you can come over to the 6 7 Park Service office and meet with me or the Park Service Staff at any time and have those one on one 8 discussions and that can be just so helpful to us 9 working together and sharing information and really 10 11 appreciate everything that was shared today. 12 13 Thank you. 14 15 MR. FRONSTIN: Hi, good afternoon, this is Raime Fronstin, Wildlife Biologist. 16 Through the Chair. So I have placed the wildlife update in your 17 18 packets and Hannah sent them to OSM so you should all 19 have those. And in the interest of time I'm just going 20 to be discussing the muskox harvest information because yesterday we felt like there was some questions about 21 22 it. 23 24 And so the Park Service and Alaska Fish 25 and Game in Kotzebue monitor the Cape Thompson muskoxen 26 population and harvest numbers are decided by 27 population sizes and status. So, you know, larger -when the population size is large and increasing we can 28 29 have larger harvest numbers and vice versa. And the 30 NPS and Alaska Fish and Game split the permits each 31 ADF&G, or Alaska Fish and Game issue their year. 32 permits for their hunt through their Tier II harvest system and the Park Service uses a random lottery to 33 34 determine who receives permits. And in June every year 35 we open the sign up for those people who would like to 36 enter and then in late July we do a random drawing for 37 each of the hunts, which are FX2312 and that's the hunt 38 for the Noatak Preserve area and then FX2303, which is 39 the hunt for Cape Krusenstern. And then the muskoxen harvest season begins August 1st and ends March 15th. 40 41 42 Any questions on that. 43 44 (No comments) 45 46 MR. FRONSTIN: Otherwise Joe is next. 47 48 (No comments) 49 50

0284 1 MR. FRONSTIN: Thank you. 2 3 MR. DOLLEMOLLE: (In Native) Joe 4 Dollemolle. I'm the District Ranger for the Western Arctic National Parklands. My wife is Albe Atoruk 5 Dollemolle from Kiana and my mother is Lois Dollemolle. 6 7 My brother, Daniel and I grew up in Kotzebue. My wife and I returned home in early 2008 after working 8 elsewhere in Alaska and the Lower 48 for some time. 9 10 11 Just wanted to give you a basic summary 12 of visiting resource protection activities for Western 13 Arctic Parkland this year. 14 15 So first of all plans continue to move 16 forward, but they've been delayed due to Covid, to 17 study the issues and impacts of subsistence timber 18 harvest in Cape Krusenstern National Monument after 19 concerns by subsistence users about potentially user 20 conflicts and increased number of timber harvesters from Kotzebue residents. Working with the Native 21 22 Village of Kotzebue and the U.S. Forest Service on this 23 project. 24 25 I'm also excited to announce that after 26 a request by advisory groups, such as this Council, to 27 have more rangers in the field. The Park Service has 28 hired another law enforcement ranger permanently based 29 in Kotzebue. This is going to be James (Indiscernible) 30 and he has worked as a ranger for last seven years 31 working in Kotzebue for about the last three summers, 32 but only the summers during those times so he'll be 33 with us full-time and we're pretty excited to have him 34 on board with us. 35 36 For law enforcement operations during 37 the fall hunting season, the National Park Service continues to work with our Federal, State and NANA 38 39 Trespass Partners to coordinate patrols and share 40 resources and enable better coverage in the field and communications with hunters, tribes and the general 41 42 public. Park Service rangers were able to patrol the 43 Kobuk River and sections of the Noatak River by boat 44 and we utilized a ranger pilot in a fixed wing airplane 45 as well as a helicopter to patrol and land on fly-in 46 hunting camps in the Noatak National Preserve with an 47 emphasis on the closed and restricted areas within the 48 Preserve. In addition to the NPS, a Bureau of Land 49 Management ranger pilot flew patrols and the Alaska 50

Wildlife Troopers actively patrolled and contacted 1 hunting groups within Noatak for most of the fall 2 3 hunting season. Rangers contacted at least 60 hunters 4 in the field during these patrols. The only violations 5 observed were several minor incidents where hunters failed to immediately stamp their harvest tickets upon 6 7 a successful kill, however, in all of those cases though a locking tag had already been properly used. 8 We had one minor case of failure to salvage all edible 9 10 meat from a caribou after a bear had destroyed portions 11 of a caribou rib cage, and no citations were issued in 12 that case. We also assisted the Troopers with one case 13 which is currently still under investigation. During 14 these patrols we found no violations of the various 15 closures in the Noatak National Preserve. We believe this is a good indication that these closures and our 16 17 education and enforcement is generally being respected 18 by those non-Federally-qualified caribou hunters, 19 transporters and aircraft that the closures were 20 designed to restrict and has reduced direct conflicts 21 with subsistence users. And the vast majority of 22 commercially transported hunters were observed in and 23 around the Anasak River* drainage with a few hunting 24 parties scattered in other areas of the Preserve and 25 they were all for the most part east of the Nimiuktuk*River and north of the Noatak River at least 26 27 through mid-September. We did not contact any 28 Federally-qualified subsistence users in the field, but 29 from the air we observed numerous boats, assuming from 30 Noatak, all along the Noatak River as far out as Cotton 31 Later in talking to Noatak residents, it Creek. 32 appeared that the hunters from Noatak were relatively 33 successful in their hunts starting around the second 34 week or so of September. The Park Service will have 35 2021 data on the number of hunters, animals and 36 estimated flights transported to the field by big game 37 transporters and other commercial means, at least on 38 NPS lands, after those reports are provided by the 39 companies after November 15th. 40

As always, if local residents are 41 42 interested in exploring jobs, particularly those in law 43 enforcement on the National Park Service or report 44 concerns, violations or to provide advice on how the 45 NPS can improve public outreach and patrol strategies, 46 please contact me, I'm going to give my phone number. 47 That phone number for myself is (907) 385-8234. Again, 48 that's (907) 385-8234.

49 50

1 I'd like to thank all the Council members for what you do to advocate and protect 2 3 subsistence issues and for your advice to agency 4 representatives such as myself so that we can improve 5 how we protect a very important and unique subsistence 6 way of life. 7 8 Thank you. 9 10 CHAIRMAN BAKER: Thank you everyone at 11 Western Arctic Parklands. If there's no questions for 12 the Western Arctic Parklands folks, we will just move 13 over to the Gates of the Arctic National Park and 14 Preserve people. 15 16 MS. OKADA: Thank you, Mr. Chair. My 17 name is Marcy Okada. I'm the Subsistence Coordinator 18 for Gates of the Arctic National Park and Preserve and 19 I'd like to refer you to Page 255 in your meeting 20 packet. This is what we'll be going over today. 21 22 So Gates of the Arctic National Park 23 and Preserve lies within the Northwest Arctic, North 24 Slope, and Western Interior region. We also have a 25 Subsistence Resource Commission, and our last meeting 26 was on April 14th. This is a venue where SRC members 27 can receive updates on such things as the Ambler Mining 28 District Road and as well as management updates from 29 Park Staff. Our next meeting is going to be held in 30 two weeks on November 16th, via teleconference. 31 32 Moving right along to Western Arctic 33 Caribou Herd update. You already heard an update from 34 our Wildlife Biologist, Kyle Joly. So I'm going to 35 move right to our next moose survey. 36 37 Our moose survey in and around Gates of 38 the Arctic National Park and Preserve is planned for 39 late March in 2022. The last survey was conducted in 2015. The survey is going to be based out of Bettles 40 41 and it should take about a little less than a week to 42 be conducted. Most of the survey is going to be done 43 within the Western Interior region. 44 45 Sheep surveys were conducted, as you 46 can see in the handout, by the map, surveys were 47 conducted mostly on the eastern portion of the Gates of 48 the Arctic National Park and Preserve so from Anaktuvuk 49 Pass down to the Wiseman area. The survey results are 50

0287 1 still being analyzed and we have a sheep biologist who conducts these surveys and his name is Will Deacy. 2 3 4 Lastly, I'd just like to share a little 5 bit of information about a conference that's being planned for May 2023. It's a joint meeting of the 6 7 North American Caribou Workshop and Arctic Ungulate Conference. It'll be held in Anchorage and it provides 8 9 the opportunity to bring international managers, 10 researchers, indigenous and local knowledge holders and 11 other stakeholders together so folks can share their 12 knowledge on caribou, muskoxen, dall sheep, moose and 13 reindeer. It's also an opportunity to share research 14 findings and bring people together to provide 15 opportunity for exchanging viewpoints, concerns and recommendations regarding the health, management, youth 16 17 and study of these animal species. Kyle Joly, our 18 Wildlife Biologist, is on the organizing committee and 19 good contact information is in the handout if folks 20 want to reach out to him. 21 22 So that was just a quick update. Ιf 23 folks don't have any questions I'd like to pass it on 24 to Jeff Rasic who can provide an update on the Ambler 25 Mining District Road. 26 27 (No comments) 28 29 MR. RASIC: Hi, thanks, Marcy. This is 30 Jeff, can everybody hear me. 31 32 CHAIRMAN BAKER: Yes, thank you. 33 34 MR. RASIC: Through the Chair. Thanks 35 for making time for me. I am Jeff Rasic, I am the Chief 36 of Resources for Gates of the Arctic National Park and 37 I'm calling from Fairbanks today. 38 39 I wanted to provide a brief status report on Ambler Road. This is a project that people 40 41 are familiar with. It's been in the works for several 42 years. The Park Service received an application from 43 AIDEA, the Alaska Industrial Development and Export 44 Authority in 2015 and for the last six years the Park Service, along with other Federal agencies, namely the 45 46 BLM and Army Corps of Engineers have been evaluating conducting environmental 47 the application and 48 compliance. In January 2021, just about 10 months ago 49 that phase of the project ended and the new phase 50

0288 1 began. The major Federal permits for the Ambler Road have now been issued, the Park Service for a 26 mile 2 segment of the road and the BLM for the remainder of 3 4 the 211 or so mile route so, again, I want to emphasize 5 that that major turning point has happened, the major Federal permits have been issued. The project is now 6 7 in the pre-construction or pre-development phase. The question now has turned to how will the road be 8 developed, the specific details of the design and 9 10 engineering of the road are being worked on. So this 11 last summer AIDEA's contractors conducted some modest 12 amount of work out in the field that included cultural 13 resource surveys, geotechnical work, and hydrology. 14 Focused on bridge crossings on Park Service lands, that 15 was at the Kobuk River, where a bridge crossing will be. So our role now has turned to issuing the smaller 16 access permits for specific bouts of work during what 17 18 will be a few year phase of pre-development activity. 19 We're consulting with local communities, government to 20 government consultation is ongoing. A subsistence working group is being formed to provide input to 21 22 AIDEA. AIDEA is behind that effort and it's in its 23 early stages, so that's a topic to stay attuned to. 24 And then another note is that the field crews working 25 out there now have community liaisons with them, 26 community advisors, they've emphasized recruiting from 27 the upper Kobuk, Alatna, Allakaket, Bettles, and Evansville, the communities that are most immediately 28 29 adjacent to the project area. 30 31 I'll leave it there unless there are 32 any questions I can answer. 33 34 Thank you. 35 36 (No comments) 37 38 CHAIRMAN BAKER: Thank you. Anv 39 questions from the Council regarding Mr. Rasic's 40 presentation. 41 42 (No comments) 43 44 CHAIRMAN BAKER: Anything else from 45 Gates of the Arctic National Park and Preserve. 46 47 MS. OKADA: That's it, Mr. Chair. 48 Thank you for your time. 49 50

1 CHAIRMAN BAKER: Thank you, Marcy, and 2 Jeff for your presentations. Much thank you We'll move on to Bureau of Land 3 appreciated. 4 Management, is that Tom Sparks that'll be speaking with 5 us. 6 7 MR. SPARKS: Yes, Sir, Chairman Baker. 8 Pleased to be with you the last couple of days, I know 9 it's been long days for everyone. 10 11 We have a written report, it's on Page 12 257 through 260 in your packet, and I think rather than 13 going through that I'll just make myself available for 14 any comments that any member may have. 15 16 CHAIRMAN BAKER: Any questions from the 17 Council for Tom, or BLM, in general. 18 19 MR. BALLOT: This is Percy Ballot, am I 20 able to ask questions. 21 22 CHAIRMAN BAKER: Just for the sake of 23 time here we're going to keep it to the Council, but if 24 there are no Council questions at this time I'll allow 25 you to have a question, Mr. Ballot. 26 Thank you, I appreciate 27 MR. BALLOT: 28 it. I'm just wondering about the activities for 29 sporthunting or drop-offs or whatever you want to call 30 them up in upper Buckland River, Selawik area. Do you 31 have -- where would I get that report? 32 33 MR. SPARKS: I believe that Buckland has 34 been closed to sporthunting. We do have a number of --35 we call them special recreation permits, and we have a 36 number that we've issued up in the Squirrel River area 37 but they've all been inactive except one in 2020. We 38 had some activity, there were only four clients with 39 that one guide permit that we issued. 40 41 MR. BALLOT: Okay. So you just have 42 one up there but they're seeing activity up there 43 earlier this summer, who would I talk to about that, 44 can somebody email it to me and their email contact and 45 talk about this? 46 47 MR. SPARKS: Through the Chair. Percy, 48 can you can send me an email, Tsparks@blm.gov. 49 50

0290 1 MR. BALLOT: Okay, thank you. 2 3 MR. SPARKS: I suspect that maybe 4 private planes are flying up that way, Percy. But I'm 5 just speculating there. Please send me an email. You 6 can also call me at 443-2177. Thank you. 7 8 MR. BALLOT: Thank you. 9 10 CHAIRMAN BAKER: Thank you, Tom and 11 Percy. Anything else for the BLM. 12 13 (No comments) 14 15 CHAIRMAN BAKER: Is there any closing 16 comments you'd like to make, Tom. 17 18 MR. SPARKS: Well, just you know a lot 19 of people have expressed the appreciation for getting 20 together in person and I'm certainly hoping that we can 21 do that. 22 23 I did want to mention just for those 24 locally in Kotzebue, BLM did finally close the office 25 there in Kotzebue. The city of Kotzebue ended up with 26 the two buildings on a lot that we had leased from a 27 private individual there and sure want to express my appreciation for the community in helping us through 28 29 that process. 30 31 Thank you, very much, Mr. Chair. 32 33 CHAIRMAN BAKER: Thank you, Mr. Sparks. 34 So with that we'll move on to the Alaska Department of 35 Fish and Game, and up first I have Alaska Wildlife Troopers, do we have anyone representing the Wildlife 36 37 Troopers this afternoon. 38 39 (No comments) 40 41 CHAIRMAN BAKER: And if we don't have 42 any Wildlife Troopers, next would be the Wildlife 43 Biologist, Alex Hanson, would that be you. 44 45 MR. HANSON: Yeah, Mr. Chair, this is 46 Alex Hanson. I believe I've said plenty so I would 47 defer to Christie Osburn if she has anything to report. 48 49 MS. OSBURN: Hi, Mr. Chair, and members 50

1 of the Council. This is Christie Osburn with the Alaska Department of Fish and Game. I'm the Area 2 3 Biologist here. I've lived in Kotzebue for the last 4 two and a half years or so but have recently moved into 5 this position. A couple new other additions to our 6 Fish and Game office are Nichole Edmunson (ph), she's 7 not able to make it on the call today but she has joined us as our new Regional Biologist. 8 Another new 9 addition is Georgie Phillips, and she is now our Board 10 Support member for our Advisory Committee meetings. So 11 if you hear some new voices in the office please feel 12 free to introduce yourselves to Nichole and Georgie. 13 14 And then as far as other information 15 we've received a request from the RAC for the Department to provide updates on moose, bear, sheep and 16 17 We've talked a bit about beaver already so beaver. 18 I'll forego that discussion for the sake of time. And 19 additionally a lot of our surveys are conducted 20 collaboratively with the Park Service and Raime have provided materials 21 Fronstin will that have information on some of the surveys that we've already 22 23 completed this year. 24 25 So I'll try and be fairly brief and 26 start with a moose update. Again, this is -- our 27 surveys are conducted in partnership with the Park 28 Service and Fish and Wildlife Service. Last year we did surveys in the Selawik area. We completed an

29 30 abundance survey in April and that produced an 31 abundance estimate of 1,036 moose and observed 10 32 calves per 100 adults. This is relatively similar to the last estimate for Selawik which was completed in 33 34 2016 that found 940 moose and 14 calves per 100 adults. 35 This similarity between the two estimates suggests that 36 the population may have reached a low density 37 stability, so while the current recruitment rates -- so 38 the recruitment rates would be the number of calves 39 coming into the adult population is still relatively 40 low, they are not unusual for this survey area. Α 41 composition survey for the Selawik area was also 42 completed in the fall of 2020 and during the fall 43 composition survey we found 38 bulls per 100 cows, nine 44 calves per 100 cows, and six calves for 100 adults. So 45 the bull/cow ratio is within the average range of the 46 area but our calf ratios are slightly lower than 47 average. And then as far as our upcoming surveys, we 48 plan to survey the lower Kobuk area for moose this year 49 and that will start with the fall composition survey. 50

1 We're actually hoping to dive right into that in the next few weeks and I'm hoping that most of your 2 3 communities have received some notice about that at 4 this point. But the survey will entail areas of the Squirrel River drainage and then the Kobuk River 5 drainage down stream of Ambler. We'll be using one 6 7 SuperCub for this survey and we'll be flying for about four days total. So this will be a red and white 8 and informational fliers have 9 SuperCub, been 10 distributed, but if you have any questions, please, 11 feel free to call our Kotzebue office for more info. 12 13 And then the last little bit of moose 14 information that I have is regarding harvest. So we've 15 got two moose harvest options. One is a registration permit, it's the RM880. Many of you probably have 16 heard of this or know of it. We distribute it for a 17 18 limited time only in the supper. And then the other is 19 a general season harvest ticket. And both of those are 20 only available to resident hunters, we have no non-21 resident moose hunt at this point. And to-date a total of 600 of our registration permits were issued, that 22 23 was for the RM880 season. Of those 41 moose have 24 already been reported harvested. And then as a 25 friendly reminder, if you have already harvested moose 26 or know someone who has, please remember to give our 27 office a call so that we can get your moose as 28 reported. 29 30 So that's all I've got for moose. I'11 31 go ahead and move on if no one has questions regarding 32 moose. 33 34 (No comments) 35 36 CHAIRMAN BAKER: Just one question 37 regarding the airplane you mentioned Christie. 38 39 MS. OSBURN: Yeah, go ahead. 40 CHAIRMAN BAKER: I've seen the notices 41 42 that it will be active. Are the -- I haven't seen any 43 of the pictures though, for that airplane, are the tail 44 numbers -- is the tail number published or at least visible in the pictures just in case people see it and 45 46 want to know if that's the actual plane that they're 47 seeing. 48 49 MS. OSBURN: Mr. Chair, yes, that's a 50

1 good question. At the time of the distribution of the fliers I wasn't sure what aircraft would be in use. 2 So 3 the number is not published on the flier. That's It'll be 4 something that I can make available though. 5 an Arctic Backcountry SuperCub, it's red and white, and I don't know the tail number offhand, but it is labeled 6 7 Arctic Backcountry Flying. And like I said, I suspect that we'll be about four days total of flight. It will 8 9 be a relatively low level survey. We typically will 10 fly anywhere between 300 to 800 feet and you will see 11 us circling an area essentially for these fall 12 composition surveys. We're going out and we're trying 13 to determine the ratio of bulls to cows. So this -- if 14 anyone does see an aircraft, feel free to jot down the 15 tail number, and if you have any concerns I will have left the aircraft tail number with our Kotzebue Fish 16 and Game office, and I'll also give notice to the 17 18 Wildlife Troopers. And so if you contact you can 19 confirm if that aircraft is us flying the moose 20 composition survey. 21 22 CHAIRMAN BAKER: Great, thank you, 23 Christie. 24 25 MS. OSBURN: Yes, you're welcome. I'11 26 briefly move on to move on to bear. I don't have much 27 information here. Many folks and members of the public 28 have noticed or have felt that they've seen an increase 29 in bear in the area. I was curious whether Will Deacy 30 with the Park Service would be on the call today, but I 31 believe that he is -- the Park Service is considering a 32 bear survey, abundance survey in the lower Noatak this 33 year. I don't know if that has been confirmed at this 34 point, but the Department of Fish and Game has not 35 conducted a bear survey in this area for several years. 36 One was completed in partnership on the Seward 37 Peninsula this last summer and I'm just going to take a 38 brief look here to see if Raime's information covered 39

any of the results from the brown bear survey that was completed there. That's not -- if that is something 40 41 that the Council is interested in I'm sure that we can 42 get that information. As far as bear harvest goes for 43 Unit 23, we still have a two bear bag limit in place 44 for Alaska residents with a season of August 1st through May 31st. No harvest ticket is required on 45 46 State managed lands but you are required to salvage 47 hide and skull. So far this year we've sealed about 44 48 bears in Unit 23 and that would have been since July of 49 this last year. On average we seem to get about 50 50

0294 1 bears per year harvested. 2 3 And that's all of the updates that I 4 have for bear. If there's any questions I'll pause 5 here. 6 7 8 (No comments) 9 10 MS. OSBURN: All right. I'll continue 11 on to brief comments about sheep. We were unable to 12 complete the sheep survey of the DeLong Mountains this 13 year, primarily due to concurrent projects and some 14 very poor weather conditions in July this summer. The 15 last trend counts that were conducted in 2018 implied some relative stability in the population. 16 The 2020 17 count was only partially completed and thereby not 18 comparable. However, we plan to conduct a survey this 19 July in the DeLong Mountains and we'll hopefully have 20 an update for next fall meeting. 21 22 That is all of the information that I 23 prepared to share but I'm happy to answer any 24 questions. 25 26 CHAIRMAN BAKER: Thank you, Christie. 27 Any Council members have any questions for Christie. 28 29 (No comments) 30 31 CHAIRMAN BAKER: Hearing none, thank 32 you again for your Biologist report Christie. We'll 33 move on down to the Subsistence Division, does Helen 34 Cold and/or Caroline Brown have anything to share. 35 36 MS. BROWN: Yes, thank you so much. My 37 name is Caroline Brown and I'm the Statewide Research 38 Director for the Subsistence Division for Fish and Game 39 and I'm here in Fairbanks. And I'll be giving this presentation on behalf of Helen Cold, who is our Arctic 40 41 lead. She went on maternity leave last weekend and so 42 while she's enjoying some time with her new baby I will 43 try to cover this for you guys and if there are any 44 questions I'll do my best to answer them or at least 45 get them to Helen so she can. 46 47 There's a couple of projects I want to 48 update the Council on. And I think these materials 49 should be in your supplemental materials, or these 50

1 slides should be in your supplemental materials. But the first project that I want to update the Council on 2 3 is a project that's funded by Fish and Wildlife Service 4 with OSM and it's a traditional ecological knowledge of 5 Dolly Varden and whitefish species in Northwest Alaska. 6 That project will be focusing on the communities of 7 Deering, Kotzebue and Noatak. And the project has been 8 delayed because of Covid, you know, documenting 9 traditional knowledge is pretty dependent on being able 10 to have conversations in person with people and 11 conducting ethnographic interviews. So we are working with the community for field work planning and developing contingency plans to make sure we're 12 13 14 protecting the community's health and safety. But that 15 project -- I know that Helen is in conversation with 16 the communities right now about that and hopefully we 17 can get that one underway. 18

19 The second project, Susan Georgette 20 briefly mentioned, and that's called the Arctic Beaver 21 Observation Network and that one is funded by the 22 National Science Foundation and it's a project with Ken 23 Tape, who is the professor that she was referencing and 24 he's been doing a lot of work documenting beaver 25 colonization in Northwest Alaska and he asked us to 26 come on and work with him documenting indigenous 27 knowledge of beaver ecology and the impacts of beaver 28 presence on fish and subsistence access and Arctic 29 community well being in general. The communities that 30 we'll be working with for that project are Shungnak, 31 Kotzebue, and Noatak. And we hope to be -- well, we're 32 starting that project now, we were working with the 33 communities ahead of time when we proposed this 34 research to NSF so we're going to be working over the 35 next five years documenting traditional knowledge as 36 well as biological metrics and remote censusing and GIS 37 on beaver ecology and impacts on the landscape. Again, 38 that's another project that involves, you know, a lot 39 of community input and so we're trying to be super 40 careful about contingency planning to preserve 41 community safety. 42

43 A third project we are working on is 44 the National Park Service and the Bering with LandBridge Ethnographic Overview and Assessment. 45 And 46 that is with Bering LandBridge zone communities for you 47 guys that's Deering. And this project really entails 48 pulling together a comprehensive literature review on 49 research in the area in that zone and also community 50

1 consultations to identify research needs and major concerns that will help the National Park Service guide 2 3 their research program. And so that project started 4 back in 2020 and we've made a lot of progress on the comprehensive literature review but we have, again, 5 6 community consultations until things are a bit safer. 7 So we are hoping to do that this coming year, you know, 8 or next fall perhaps and into the following year.

10 A fourth project is the Western Arctic 11 Caribou Herd Harvest Assessments. We work on that 12 project in partnership with Fish and Game, Department 13 of Wildlife Conservation. And that is -- probably many 14 of you are familiar with this project, we have been 15 conducting household surveys about large mammal harvest with a focus on caribou in eight communities within the 16 17 range of the Western Arctic Caribou Herd. The focus 18 area communities are Golovin, White Mountain, 19 Shishmaref, Selawik, Shungnak, Noatak, Deering and 20 Kobuk. We started this project in 2019 and collected 21 data that year. Covid forced us to postpone for the 2020 year anduntil last spring, and sowe surveyed in --22 23 in spring of this year we surveyed in Deering, Noatak, 24 Shishmaref, and Kobuk. We're currently analyzing those 25 data now before reviewing with communities. And then next spring, 2022, we'll be working with Shungnak, 26 27 White Mountain, Selawik and Golovin. And so hopefully 28 we'll be getting some of that information out to the communities and working with communities on those 29 30 surveys. Interestingly this last spring we actually 31 did kind of a hybrid version of remote and in-person 32 surveys using local research assistants and it went 33 really well so I think that that sets up nicely for 34 next spring.

36 Α final project is а Community 37 Subsistence Harvest Assessment in the community of Kiana, and that is also being funded by the National 38 39 Park Service. And this will be to update subsistence harvest data on customary and traditional uses of 40 41 wildlife by residents of Kiana and this is another 42 project that has been postponed. It was scheduled to 43 start in 2020 but we postponed it to make sure we were 44 able to be safe and respectful of communities and their And so hopefully we will be working -- we will 45 needs. 46 be conducting that survey next spring so next spring 47 sometime between maybe January or February or March and 48 April of 2022. I believe that with this project 49 specifically the community lead has had a meeting with 50

0296

9

1 the tribal council and they are, you know, to provide information and answer any questions and they -- the 2 council is considering the project right now. 3 4 5 And I think that's all I have in terms 6 of projects to update the Council on. We do have an 7 OSM proposal under consideration, the Traditional Ecological Knowledge of Salmon in the Kotzebue Sound 8 but I believe that OSM went over these projects and got 9 10 feedback, so that's all I have right now. I would be 11 happy to take any questions. 12 13 CHAIRMAN BAKER: Thank you, Caroline. 14 Do any members of the Council have any questions at 15 this time. 16 17 (No comments) 18 19 CHAIRMAN BAKER: It doesn't seem that 20 we have any questions so thank you, Caroline, and best 21 wishes to Helen, really appre..... 22 23 MS. BROWN: I will let her know. Thank 24 you guys so much for your time. 25 26 CHAIRMAN BAKER:really appreciate 27 the report. Thank you so much. Next, we will go on to Office of Subsistence Management and I believe that'll 28 29 be Lisa. 30 31 MS. GREDIAGIN: Thank you, Mr. Chair. 32 Members of the Council. For the record this is Lisa 33 Grediagin. 34 35 And on behalf of OSM I want to thank 36 all Council members for your exceptional work that you 37 do on behalf of your communities and region during 38 these trying times. We value your expertise and 39 contribution of knowledge and experience to the regulatory process. It has been a very difficult for 40 41 all of us dealing with the Covid19 environment. 42 43 learned As you from Chairman 44 Christianson's letter dated August 20th, 2021, we are holding all 10 fall 2021 Regional Advisory Council 45 46 meetings via teleconference. This decision was made 47 with the utmost consideration and concern for the 48 health and safety of all Council members, families, 49 rural communities, the public and Staff who are all 50

1 part of the Council meetings. The health and safety of everyone is our highest priority. The DOI guidelines 2 3 advise that people avoid travel and refrain from 4 meeting in person to minimize risk and help prevent the spread of Covid19. The Regional Advisory Councils are 5 foundation of Alaska's Federal 6 the Subsistence 7 Management Program. The Federal Subsistence Management 8 Program recognizes that in-person meetings are preferable, however, until we can ensure the safety of 9 10 all participants we will follow current guidance and 11 hold all meetings via teleconference. We thank you for 12 willing to participate in be this lengthy teleconferences and appreciate your patience as we deal 13 14 with the various technical issues that arise from the 15 poor telephonic connections, the vast distances 16 involved and differing communication systems throughout 17 the state. 18 19 Some updates on the OSM Staff. Since 20 your last Council meeting in winter 2021 the following OSM Staffing changes have occurred. 21 We are verv 22 pleased to announce that Amee Howard has joined OSM as 23 our new Deputy Assistant Regional Director. Amee 24 previously worked in OSM as policy coordinator. 25 26 We are also very pleased to see the 27 number of Staff that worked at OSM for awhile grew with 28 the program and got promoted. 29 30 Katya Wessels was promoted from Council 31 Coordinator to Supervisor of the Council Coordination 32 Division. 33 34 Myself, Lisa Grediagin, was promoted 35 from Wildlife Biologist to Supervisor of the Wildlife 36 Division. 37 38 Robbin LaVine promoted was from 39 Anthropologist to the Policy Coordinator position. 40 Additional good news is that three 41 42 wildlife biologist positions at OSM were filled. Tom 43 Plank came to us from the Bureau of Land Management in 44 Bryan Ubelaker came to OSM from BLM Utah. in Anchorage. And Kendra Holman came to OSM from the U.S. 45 46 Army Corps of Engineers in Anchorage. 47 48 We also had some departures at OSM 49 through retirement and new opportunities. 50

0299 1 We bid a fond farewell to Donald Mike, 2 Caron McKee and Zach Stevenson. 3 4 The OSM team is diligently working on 5 building capacity and will be filling several new 6 positions in our Anthropology, Council Coordination, 7 Fisheries and Regulatory Divisions, along with adding 8 additional administrative support. 9 10 Moving on to RealID for travel to 11 Council meetings. Over the past two years we have been 12 reminding Council members about the change in 13 requirements for IDs at airports. Beginning May 3rd, 14 2023 every air traveler will need to present a RealID 15 compliant driver's license or other acceptable form of identification, such as a passport, to fly within the 16 17 United States. This is applicable even when you fly on 18 small Bush carriers. Please note that all Council 19 members will need to make sure they have their required 20 RealID for travel to the fall 2023 Council meeting. 21 22 And, lastly some updates on the lawsuit 23 from the State of Alaska. 24 25 As you were previously briefed, on 26 August 10th, 2020 the State of Alaska filed a lawsuit 27 against the Federal Subsistence Board after it adopted Emergency Special Action WSA19-14. This special action 28 29 allowed the Village of Kake to engage in a community 30 harvest of two antlered moose and five male Sitka 31 black-tailed deer. Also included in the lawsuit was temporary special action WSA20-3 which closed Federal 32 public lands in Units 13A and 13B to non-Federally-33 34 qualified moose and caribou hunters. As part of the 35 the State asked the court to issue two lawsuit 36 preliminary injunctions. One to prevent the Unit 13 37 closure from taking effect and another vacating the 38 Kake hunt and prohibiting the Board from allowing any 39 additional emergency hunts related to the impacts of Covid19. On September 18th the U.S. District Court 40 41 denied the State's request for a preliminary injunction 42 on the Unit 13 closure. The court found that, because 43 the State has not demonstrated either a likelihood of success or serious questions on the merits of its 44 45 claims, the court need not consider the remaining 46 elements of the preliminary injunction analysis. 47 48 Two months later on November the 18th, 49 Court also denied the State's motion for a the 50

0300 1 preliminary injunction on the Kake hunt after Judge Gleason concluded that the State had not demonstrated a 2 likelihood of success on the merits, raised serious 3 4 questions on the merits of its claim, or demonstrated 5 any likelihood of irreparable harm. 6 7 While these rulings on preliminary 8 injunction are encouraging, they did not resolve the litigation. Recent developments are that settlement 9 10 negotiations between the Department of Justice, the DOI 11 Solicitor's Office, the USDA Office of General Counsel, 12 and the State proved unsuccessful. A briefing was 13 completed at the end of August 2021 and we are now 14 awaiting the Court's decision. 15 16 Based on legal guidance, Program Staff 17 does not comment on any active litigation directed 18 against the Federal Subsistence Board beyond what we 19 have reported here. 20 21 Thank you, Mr. Chair, that completes 22 the report unless there are any questions. 23 24 CHAIRMAN BAKER: Thank you, Lisa. Do 25 any members of the Council have any questions for Lisa 26 or OSM at this time. 27 28 (No comments) 29 30 CHAIRMAN BAKER: Hearing no questions 31 or comments, thank you for that Lisa and to all of our 32 We'll move on to future meeting dates and OSM Staff. 33 we just need to confirm how many members of the Council 34 are still on the phone at this time. Just running down 35 the list. Attamuk are you still on. 36 37 (No comments) 38 39 CHAIRMAN BAKER: I believe he wasn't 40 going to be able to stay with us. There's myself. Mr. 41 Kramer had to go back to work. Calvin Moto are you on 42 the phone. 43 44 (No comments) 45 46 CHAIRMAN BAKER: Wilbur Howarth. 47 48 MR. HOWARTH: Yes, I'm here. 49 50

CHAIRMAN BAKER: Robert Schaeffer. MR. SCHAEFFER: Bob will be fine. CHAIRMAN BAKER: Elmer Armstrong. MR. ARMSTRONG: I'm here. CHAIRMAN BAKER: Brian Jones. (No comments) CHAIRMAN BAKER: Barbara Atoruk. (No comments) CHAIRMAN BAKER: So it appears that we only have four members of the Council at this time, Katya. Do you have any recommendations being as we don't have a quorum. MS. WESSELS: My recommendation is that we take five minute break and I'll try to call the Council members that are not on the phone and see if they can call back in. So if I understand correctly so we have you, Wilbur, Elmer and Attamuk, right? CHAIRMAN BAKER: So the people we have on the phone are myself, Wilbur, Bob and Elmer. MS. WESSELS: Okay. All right. Let me try to call a couple of Council members and see if they can get back on. CHAIRMAN BAKER: Thank you, Katya. We will take a brief break until we can get some more people on for a quorum. (Off record) (On record) (Teleconference interference participants not muted) CHAIRMAN BAKER: Katya, are you there? MS. WESSELS: Yes, I'm here and Barbara called in.

0302 1 CHAIRMAN BAKER: So that would make 2 do we need anybody else or will that be five people, 3 sufficient? 4 5 MS. WESSELS: Five is a quorum because 6 you have nine seated members. Quorum is half, plus one 7 so that's five people, is a quorum. 8 9 CHAIRMAN BAKER: All right, well, thank 10 you for that. And thank you, Barb, for calling back 11 in. So we're down to the future meeting date and we 12 just need to confirm the winter 2022 meeting date and 13 location. 14 15 MS. ATORUK: Okay. 16 17 WESSELS: MS. Yeah, currently it is 18 February 14th and 15th in Kotzebue. 19 20 MS. ATORUK: Yes, I was looking at that 21 this morning when we were having our meeting and then 22 looking at for the future meeting, fall 2022, I would 23 again suggest that we have it on November 1 and 2 again 24 because we have some -- it was good this time because 25 everyone else have met already and we saw their votes 26 on how they think on the ones that we propose. So if 27 everybody's in agreement, I would suggest November 1 28 and 2, 2022. 29 30 CHAIRMAN BAKER: Does anyone have any 31 issues for those dates for the winter meeting. 32 33 MS. ATORUK: Oh, the winter meetings, 34 I'm okay with for February 14 and 15. I'm good with 35 that. I'm good with those dates, we picked those a few years back or a year ago. But what I'm trying to 36 37 suggest of the fall 2022 when you guys meet then, I was suggesting November 1 and 2 again to be the last leg of 38 39 the statewide Regional Council meetings, that way if there's any questions we have where we have other 40 41 regions in sharing like with the North Slope, like on 42 that Unit 26A then we can always get their information 43 during your next meeting. 44 45 CHAIRMAN BAKER: Okay. Understood, 46 thank you, Barbara. At this time do we need to vote on 47 that or are we just in consensus that February 14th and 48 15 will be confirmed for the winter meeting and then we 49 can select October 31st and November 1st of 2022 for 50

0303 1 the fall meeting. Does anyone have any objections to 2 that. 3 4 MS. ATORUK: So moved. 5 6 MR. ARMSTRONG: Second. 7 8 MS. WESSELS: Yeah, you don't really 9 need to make a motion if everyone is in consensus and 10 you have a quorum that is fine. 11 12 MS. ATORUK: Okay. 13 14 CHAIRMAN BAKER: All right, thank you, 15 Katya. So with that we'll..... 16 17 MS. WESSELS: So it's October 31st and 18 November 1st, the dates for the fall 2022 meeting. 19 20 CHAIRMAN BAKER: Yes. Yes. 21 22 MS. WESSELS: Okay. 23 24 CHAIRMAN BAKER: So if there's no other 25 questions on that we'll go to closing comments. Barbara, do you have any closing comments. 26 27 28 MS. ATORUK: Yes, I think the winter 29 meeting will be my last meeting. I'm not going to 30 reapply for this position. I'm going to look around to 31 see if someone else from Kiana can apply, if not I'm 32 going to be asking the upper Kobuk, someone from upper 33 Kobuk to apply or nominate somebody in because we need 34 that on the Council. We're mostly lower Kobuk and the 35 Sound Council for right now. But I really appreciated and enjoyed this meeting because I can continually be 36 37 on the teleconference and hearing all your voices and 38 knowing who you are is a plus so I really enjoyed it 39 and you guys go forward with whatever challenges are 40 ahead of you and don't forget us that are living out 41 here and hunting and gathering and fishing. So Taikuu 42 for the time, good luck. 43 44 CHAIRMAN BAKER: Thank you, Barbara. 45 And thank you for all your time on the Council. 46 (Teleconference interference 47 48 participants not muted) 49 50

0304 1 CHAIRMAN BAKER: Elmer Armstrong, do 2 you have any closing comments. 3 4 (No comments) 5 6 MS. ATORUK: I guess he's not there. 7 8 CHAIRMAN BAKER: Elmer Armstrong. 9 10 MR. ARMSTRONG: Sorry, I was washing my 11 hands. Okay good discussions. Good reports. I'11 12 think about running again but I know Barbara expressed 13 more participation from other villages and my seat is a 14 one year term. 15 16 MS. ATORUK: No, you're not done until 17 2022. 18 19 MR. ARMSTRONG: Yeah, I know 2022. 20 21 MS. ATORUK: Yeah, you have one more 22 year. 23 24 MR. ARMSTRONG: Yeah. For me, it's been pretty good. I really feel that the Council is 25 26 doing good. We struggle together as a region going 27 through this hardship of not filling our freezers with 28 caribou. I know I got my moose, I did salmon fishing, 29 I got some whitefish. Just living through the season, 30 it's important for everyone to at least have food in 31 their freezers through the season. 32 33 Other than that, good reports. Good 34 meeting. Thank you. 35 36 CHAIRMAN BAKER: Thank you, Elmer. Bob 37 Schaeffer, any closing comments. 38 39 MR. SCHAEFFER: Yeah, I quess I got 40 into this thing because I really, really feel for what's happening with our resources. And, you know, 41 42 before in the past, you know, we never had that kind of 43 pressure on them and then all of a sudden everybody's 44 eyeballing up here because it's the only healthy herd 45 left in the state and now we've got a tremendous amount 46 of pressure on the herd and I -- we've been caribou 47 people for thousands of years and, you know, it's all 48 of a sudden it seems like the buffalo syndrome is all 49 over again and I just don't want that to happen. Not 50

1 for me, mostly for my children, my grandchildren and my great-grandchildren as time goes on. I just want to 2 see if I canparticipate and help in any way wecan to --3 4 you know, to -- with these issues -- to come up with the outside influences, you know, talking about a 5 powerful lobbying when you talk about -- about 6 7 sportsmen and the amount of money that they could throw at policymakers that can change policy for the worst 8 9 and I just feel that something like this maybe I can 10 make a difference.

12 Secondly, I'm concerned about global 13 warming and how it's going to affect the rest of our 14 subsistence resources because it's going to -- it's 15 going to happen regularly. Like the herring die-off last year, very similar to what happened this year when 16 17 the water just got too fresh, you know, you put a bunch 18 of saltwater fish in a saltwater tank and you change it 19 to freshwater, guess what happens to the fish, it dies. 20 That's just the way it is and things are happening very 21 negatively with what's happening with global warming. And I just want to let the agencies know that are here 22 23 that work with us on a daily basis, you know, trying to 24 do their jobs, to keep in the forefront, you know, with 25 global warming and its impacts are doing -- not only 26 with the environment but the animals that live on it.

28 Anyway, I just wanted to put that in 29 there. But I think having people like Barb and Attamuk 30 on a committee like this is one of the attractors that 31 I thought was a good thing because they're very 32 outspoken, very knowledgeable and I guess if I was them 33 I would consider -- what, we have just a couple of 34 meetings a year, but yet on the other hand we've got a 35 hell of a job to do and it's kind of stressful at times, but that's one of the sacrifices you make when 36 37 you -- you know, when you decide to tackle those issues 38 and try to preserve our way of life. So I would 39 reconsider bowing out and if you can help, by God, you 40 know, we could sure use you on a Board like this. And 41 then, of course, those that aren't attending, maybe 42 they should be replaced, you know, because if you're 43 not.... 44

44 45 46

MS. ATORUK: Yeah.

47 MR. SCHAEFFER:going to 48 participate on something that's important as this, I 49 think we should ask them to resign or we just replace 50

0305

11

0306 1 them with someone what really cares and someone that's out spoken and someone that will stand up when need be. 2 3 So that's my comments for the day. 4 5 Thank you all, and see you next time. 6 7 CHAIRMAN BAKER: Thank you, Bob. 8 Wilbur, any closing comments. 9 10 MR. HOWARTH: Yeah, I would like to say 11 thanks to everyone that called in today and thanks, 12 Bob, for all your global warming, I learn something 13 every day from up this way. And, yes, I would like to 14 see more studies on our lichen. I know they are -- it 15 takes awhile for the lichen to grow. And I also would like to find out about the next meeting for the Ambler 16 17 Road because I only went once and that was Arctic 18 Borough called our office here at the IRA at Noorvik 19 and they paid my way to Fairbanks for that road project 20 and I gave a report on all our fish and stuff that goes 21 up the river. Because we found out they were going to 22 build bridges to get to Ambler so, yeah. And we 23 started monitoring the waters out -- as soon as it 24 freeze up good enough I would like to go out with our 25 environmentalist Lonnie Tibbits and do some water 26 sampling. We have the equipment to do it. 27 28 And thanks, Mr. Baker, it's been a good 29 meeting and I'll listen in or chat with you guys on the 30 next meeting. 31 32 Taikuu. 33 34 CHAIRMAN BAKER: Thank you, Wilbur, for 35 those comments. And for myself, I'd just like to thank 36 all the Staff and everyone who's been presenting, the 37 people from the public who have taken the time to call 38 in and provide any testimony. It's all part of the 39 process and thanks again for everyone who took the time This is how we make things happen is by 40 to share. 41 having people call in to these meetings and making sure 42 that we have our voices heard when things are on the 43 table to be talked about. So for all the issues that we've brought up, plans, strategies and discussions, 44 hopefully we can keep things moving and keep moving 45 46 Thank you, again, to all the Staff for forward. 47 coordinating this. 48 49 And, with that, it is 5:35 and I would 50

0307 1 like to entertain adjournment if there's no further 2 discussion. 3 4 MS. ATORUK: Mr. Chair. 5 6 CHAIRMAN BAKER: Yes. 7 8 MR. BALLOT: Mr. Chair. 9 10 MS. ATORUK: Can I make a comment. 11 12 CHAIRMAN BAKER: Yes, who's speaking. 13 14 MS. ATORUK: Barbara. 15 16 MR. BALLOT: This is Percy. 17 18 CHAIRMAN BAKER: Go ahead, Barb. 19 20 Well, after listening to MS. ATORUK: Robert, thanks, Bobby. But since we've always had 21 22 problems having representatives from up river, the 23 three villages up river, Ambler, Shungnak, Kobuk, since 24 Louie left we've had problems in having representation 25 from up river, I am originally from up river, and I know 26 what goes on up river, their hunting, gathering, 27 fishing, I hear from them every day by phone call. Ιf I should decide to reapply that's who I would go in to 28 29 represent because Brian is not doing it, he's not going 30 to do it, he hasn't called in. He's just called in to 31 say I'm not going to call in. So that would be one 32 option that I would reapply for this position. 33 34 And also if our Coordinator would mail 35 us a hard copy of Ross' letter on the Sounder of September 30th. That is a good letter for the Council 36 37 to chew on, to read, and study from it, there is some 38 good information in there and he's right on with a lot 39 of stuff he said in there. So we need to get a copy of 40 that. 41 42 And, Wilbur, you need to get a hold of 43 BLM for that Ambler Road. Actually we don't have any 44 say on that because we're on subsistence and a lot of people do attend from the upper Kobuk villages and this 45 46 last fall they had a meeting, about a couple weeks ago, 47 and they had the representative go, an elder from here 48 in Kiana so I don't know how that is going, how they 49 are setting that up and I'm sure there's a coordinator 50

0308 1 somewhere that you can get ahold of with BLM and set up 2 your meeting with them through your IRA. 3 4 Thank you, Mr. Chair. 5 6 CHAIRMAN BAKER: Thank you, Barbara. 7 8 WESSELS: Mr. Chair, I have a MS. 9 question for Barbara. Barbara, which letter are you 10 referring to specifically? 11 12 MS. ATORUK: Ross Schaeffer's letter on 13 the Sounder on caribou. 14 15 MS. WESSELS: Okay, thank you. 16 17 MR. BALLOT: Mr. Chairman, it's Percy 18 Ballot. 19 20 CHAIRMAN BAKER: Yes, Percy. 21 22 MR. BALLOT: Am I allowed to speak. 23 24 CHAIRMAN BAKER: We're about to close 25 up but if you have something you can go ahead. 26 27 MR. BALLOT: Well, Mr. Chairman, you sent a notice to me and my village about this being a 28 29 public meeting and the right to participate. I took it 30 wholeheartedly to take my time and even call back to 31 hear because I know how important the job and the 32 responsibilities that this group does. I know Bobby 33 Schaeffer. I know Michael. I know Barb. I've worked 34 with them for 20 years. And I had a 98 percent record 35 of making all my meetings and being in the know and 36 hearing from people and getting to hear other people. 37 So I took myself seriously there and I still do. I called because I was worried and a couple of times I 38 39 think we might have started off the wrong way but I felt that I wasn't able to question some of the things 40 that I wanted to ask because the Selawik Wildlife 41 42 Refuge is -- Buckland is included in there. We have 43 common interest in animals and stuff. And I hope that 44 next year, Mr. Chairman, that when you have your agenda that you -- I hear you including to the RAC members 45 46 only and that kind of -- I think you should be able to 47 have a spot in there for questions from all those 48 reports from the public. I did have a couple of 49 questions. And no disrespect at all, I just want -- if 50

you're going to do your job fully then you should be hearing and if there's other people that have questions like I had, and I'll call -- just so people can ask my question -- but think about that for your next meeting. Thank you. CHAIRMAN BAKER: Thank you. Duly noted. And no disrespect to you as well, Mr. Ballot, thank you for your time and your opinions. So with that it is 5:40, I'd like to close up our winter meeting. Thank you, everyone who has participated. If you have any questions feel free to reach out to any of the agencies, or to OSM Staff and thanks everyone and have a safe winter. MS. ATORUK: Motion to adjourn. MR. HOWARTH: Second. MS. ATORUK: Motion to -- aye. CHAIRMAN BAKER: Moved and seconded, all in favor please say aye. IN UNISON: Aye. CHAIRMAN BAKER: Thank you, everyone. (Off record) (END OF PROCEEDINGS)

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 through contain a full, true and correct Transcript of the NORTHWEST ARCTIC SUBSISTENCE REGIONAL ADVISORY COUNCIL MEETING, VOLUME II taken electronically on the 2nd day of November 2021; 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 27th day of November 2021. Salena A. Hile Notary Public, State of Alaska My Commission Expires: 09/16/22