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1	KODIAK/ALEUTIANS SUBSISTENCE	
2 3	REGIONAL ADVISORY COUNCIL	
4	PUBLIC MEETING	
5 6		
ю 7		
8	VOLUME II	
9 10		
11	Kodiak, Alaska	
12	March 30, 2023	
13 14	9:15 a.m.	
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17 18	COUNCIL MEMBERS PRESENT:	
10 19	Della Trumble, Chair	
20	Patrick Holmes	
21	Richard Koso	
22	Samuel Rohrer Chris Price	
24	Coral Chernoff	
25 26	Rebecca Skinner	
20 27		
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29 30	Regional Council Coordinator, Lisa Scarbrough	Hutchinson-
30 31	Scarbrough	
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0174 1 PROCEEDINGS 2 3 (Kodiak, Alaska - 3/30/2023) 4 5 (On record) 6 7 ACTING CHAIR SKINNER: All right. 8 We're going to go ahead and call the meeting to order this morning. We're going to start with introductions 9 again and then we're going to do public and tribal 10 11 comment and then we've moved up Jackie Keating, subsistence research presentation to first thing. And 12 13 then we'll continue on down the agenda. So we'll go 14 ahead and start with introductions, I'll do it the same 15 as I did yesterday. 16 17 Running through, do we have any tribes 18 in the room or online. 19 20 MADAME CHAIR TRUMBLE: Madame Chair, 21 Rebecca. 22 23 ACTING CHAIR SKINNER: Yeah, do ahead. 24 25 MADAME CHAIR TRUMBLE: This is Della. 26 You might want to start with your roll call, see if you 27 have a quorum. 28 29 ACTING CHAIR SKINNER: Oh, okay. We'll 30 start with that. All right. Can we do a roll call and 31 quorum check. 32 33 Thanks, Della. 34 35 MS. HUTCHINSON-SCARBROUGH: Good 36 And this is Lisa Hutchinsonmorning, Council. 37 Scarbrough for the record, the Council Coordinator. 38 39 Patrick Holmes. 40 41 MR. HOLMES: Here. 42 43 MS. HUTCHINSON-SCARBROUGH: Richard 44 Koso. 45 46 (No comments) 47 48 MS. HUTCHINSON-SCARBROUGH: We'll come 49 back to him. 50

0175 1 Sam Rohrer. 2 3 MR. ROHRER: Present. 4 5 MS. HUTCHINSON-SCARBROUGH: Chris 6 Price. 7 8 MR. PRICE: Here. 9 10 MS. HUTCHINSON-SCARBROUGH: Coral 11 Chernoff. 12 13 MS. CHERNOFF: Here. 14 15 MS. HUTCHINSON-SCARBROUGH: Della 16 Trumble. I know you're here. 17 18 MADAME CHAIR TRUMBLE: Here. 19 20 MS. HUTCHINSON-SCARBROUGH: Rebecca 21 Skinner. 22 23 ACTING CHAIR SKINNER: Here. 24 25 MS. HUTCHINSON-SCARBROUGH: Natasha 26 Hayden, were you able to join us. 27 28 (No comments) 29 30 MS. HUTCHINSON-SCARBROUGH: And, 31 Richard Koso, are you there yet. 32 33 (No comments) 34 35 MS. HUTCHINSON-SCARBROUGH: Okay. We 36 have seven present and we do have a quorum currently. 37 38 Thank you. 39 40 ACTING CHAIR SKINNER: All right. 41 Thank you. Okay. Going on to introductions, are there 42 any tribes online or in the room. 43 44 MS. LEKANOFF: Good morning, Madame 45 Chair and Board. Rachel Lekanoff with Qawalangin Tribe of Unalaska. 46 47 48 MS. SALIMEN: Good morning, Madame 49 Chair. My name is Mandy Salimen, I am with the 50

0176 1 Qawalangin Tribe of Unalaska. 2 3 Thank you. 4 5 ACTING CHAIR SKINNER: All right. Are 6 there any ANCSA corporations in the room or online. 7 8 MS. PETERSON: Good morning, Madame Chair and Council. I'm Amy Peterson, Koniag Community 9 10 Affairs Liaison. 11 12 ACTING CHAIR SKINNER: All right. 13 Going down to government side, do we have Alaska 14 Department of Fish and Game in the room. 15 16 (No comments) 17 18 ACTING CHAIR SKINNER: Okay. Seeing 19 none, do we have Alaska Department of Fish and Game 20 online. 21 22 MS. KEATING: Good morning. This is 23 Jackie Keating with Subsistence. 24 25 MS. KRUEGER: Good morning. This is 26 Kelly Krueger and Mark Lavine with Sport Fish in 27 Kodiak. 28 29 MR. BURCH: Good morning. This is Mark 30 Burch from the Department of Fish and Game from the 31 Palmer office. 32 33 ACTING CHAIR SKINNER: All right. 34 Moving on to Federal agencies. Do we have OSM in the 35 room. 36 37 MR. ROBERTS: Good morning. This is 38 Jason Roberts, Anthropologist with OSM. 39 40 MS. GREDIAGIN: Hi. This is Lisa 41 Grediagin, Wildlife Division Supervisor with OSM. 42 43 MS. HOLMAN: Good morning. This is 44 Kendra Holman, Wildlife Biologist with OSM. 45 46 MR. LIND: (In Native) Madame Chair, 47 Board members. Good morning. Orville Lind, Native 48 Liaison for OSM. 49 50

0177 1 ACTING CHAIR SKINNER: All right. Do we have more OSM representatives online. 2 3 4 MS. LaVINE: Good morning, Madame Chair, members of the Council. This is Robbin LaVine, 5 6 Subsistence Policy Coordinator. 7 8 MR. STONE: Good morning, Madame Chair. 9 This is Jarred Stone, Fisheries Biologist with the 10 Office of Subsistence Management. 11 12 ACTING CHAIR SKINNER: All right. Do 13 we have BIA in the room. 14 15 MR. CHEN: Aloha. Glenn Chen for the 16 BIA. 17 18 ACTING CHAIR SKINNER: Thanks. Do we 19 have anyone else from BIA online. 20 21 (No comments) 22 23 ACTING CHAIR SKINNER: Okay. Fish and 24 Wildlife Service in the room. 25 26 MR. WILLIAMS: Good morning, Madame 27 Jeff Williams, Alaska Maritime National Chair. 28 Wildlife Refuge. 29 30 ACTING CHAIR SKINNER: Okay. We're 31 going to go ahead and start in the room first. 32 33 Go ahead. 34 35 MR. BRADY: Good morning. This is Mike 36 Brady, Refuge Manager, Kodiak National Wildlife Refuge. 37 38 MR. HERNANDEZ: Good morning. This is 39 Danny Hernandez with National Wildlife Refuge. 40 41 MR. PYLE: Good morning. This is Bill 42 Pyle, Kodiak National Wildlife Refuge. 43 44 MS. DANIELLE: Good morning. My name 45 is Danielle, I'm the Deputy Refuge Manager at Kodiak. 46 47 ACTING CHAIR SKINNER: Welcome. I 48 heard you just arrived recently. 49 50

0178 MS. WILLIAMS: Good morning. My name 1 is Alison Williams, I'm the Wildlife Biologist for 2 Izembek National Wildlife Refuge. 3 4 5 ACTING CHAIR SKINNER: All right. Fish 6 and Wildlife Service online. 7 8 MS. FOSADO: Good morning, members of 9 the Council. I'm Maria Fosado, Refuge Manager at 10 Izembek. 11 12 MS. MELENDEZ: Good morning, Madame 13 Chair and the Council. This is Leticia Melendez, 14 Izembek National Wildlife Refuge. 15 16 ACTING CHAIR SKINNER: All right. Do 17 we have anyone on from National Maritime. 18 19 (No comments) 20 21 ACTING CHAIR SKINNER: Okay. Do we 22 have any other Federal agency..... 23 24 MR. WILLIAMS: Good morning. 25 26 ACTING CHAIR SKINNER: Yep, go ahead. 27 28 MR. WILLIAMS: Again sorry for jumping 29 the line there again. Jeff Williams, Alaska Maritime 30 National Wildlife Refuge. Good morning. 31 32 ACTING CHAIR SKINNER: Thank you. 33 Anyone else from Fish and Wildlife Service online. 34 35 (No comments) 36 37 ACTING CHAIR SKINNER: Okay. Do we 38 have anyone from Marine Mammals. 39 40 (No comments) 41 42 ACTING CHAIR SKINNER: All right. Any 43 other Federal agencies online. 44 45 Good morning, Madame MR. RISDAHL: 46 Chair and Council Members. This is Greg Risdahl, USDA 47 Forest Service Subsistence Program Leader. 48 49 ACTING CHAIR SKINNER: Hi, Greg. Ι 50

0179 1 apologize once again for skipping over Forest Service. 2 MR. RISDAHL: No. No, you asked for 3 4 any other Federal agencies so I'm good. 5 6 Thank you. 7 8 ACTING CHAIR SKINNER: Yeah, but I made 9 a note to myself yesterday when that happened. 10 11 All right. Are there any other Federal 12 agencies online. 13 14 (No comments) 15 ACTING CHAIR SKINNER: Okay. We're 16 17 going to go ahead and go around the Council table 18 starting with Chris Price. 19 20 MR. PRICE: Good morning. Chris Price 21 from Unalaska. 22 23 MR. ROHRER: Good morning. Sam Rohrer 24 from Kodiak. 25 26 MS. CHERNOFF: Good morning. Coral 27 Chernoff from Kodiak. 28 29 MR. HOLMES: Greetings. Pat Holmes. I 30 brought in Liam Sua to keep an eye on us today. 31 32 ACTING CHAIR SKINNER: And Council 33 members online. 34 35 MADAME CHAIR TRUMBLE: Della Trumble, 36 King Cove. 37 38 ACTING CHAIR SKINNER: And I am Rebecca 39 Skinner from Kodiak. I'm going to stand down for just 40 a second. 41 42 So the -- multiple phone lines are 43 breaking up. Do we -- is there any -- do you have any 44 idea why that's happening? No. 45 46 (Laughter) 47 48 REPORTER: I mean, you're plugged into 49 the wall here. So.... 50

0180 1 ACTING CHAIR SKINNER: Okay. 2 3 REPORTER: I mean, it's..... 4 5 ACTING CHAIR SKINNER: And nothing's 6 different from yesterday. 7 8 REPORTER: No. 9 10 ACTING CHAIR SKINNER: Okay. Okay. 11 We're just having -- the phone lines are breaking up a 12 little bit for people calling in. So just make sure 13 that you're as close to your microphone. I don't think 14 it's microphones, it seems to be the phone lines. 15 16 And then Lisa wanted to make Okay. 17 some announcements about the appointments. 18 19 MS. HUTCHINSON-SCARBROUGH: Yes. Again 20 good morning, Madame Chair, members of the Council. 21 And welcome again to a second day of our Regional 22 Advisory Council meeting for the Kodiak/Aleutians. And 23 again it's just a pleasure to be helping with you on 24 this meeting, it's been very productive and I'm looking 25 forward to all the agency reports this afternoon and 26 getting to more business. 27 28 I do want to make a correction, it was 29 a major faux pas I made yesterday, I was a little bit 30 tired and flustered, but I wanted to just really 31 welcome our newly reappointed Council members, I made 32 an error of who I said that was yesterday. So it's Sam 33 Rohrer and Patrick Holmes and Richard Koso. So I'm 34 really happy that you're continuing to serve, all of 35 you are continuing to serve on this Council. You're very valuable to your communities and to the Council. 36 37 So thank you. 38 39 And also anybody that's in the room 40 please remember to resign in on the sign-in sheet. And 41 those of you online if you need meeting materials again 42 you can go to the Office of Subsistence Management 43 website and click on the regions and go to 44 Kodiak/Aleutians and then you can find the meeting 45 materials there. 46 47 Thank you, Madame Chair. 48 49 ACTING CHAIR SKINNER: All right. 50

0181 1 Thank you. And then a reminder to everyone that at 11:00 a.m. we have the time certain presentation from 2 3 the Department of Interior, Indian Affairs briefing 4 regarding Office of Subsistence Management. And that 5 will be Bryan Newland, the Assistant Secretary. So at 11:00 a.m. we will be taking that presentation. 6 7 Okay. So moving on to public and tribal comment on nonagenda items. Is there any public 8 9 10 or tribes that wish to give comment on nonagenda items. 11 We'll take in the room first. 12 13 (No comments) 14 15 ACTING CHAIR SKINNER: Okay. Seeing 16 none, is there anyone online. 17 18 (No comments) 19 20 ACTING CHAIR SKINNER: Okay. Hearing 21 none, we'll go back to our agenda and we are at update 22 on subsistence research projects and this will be 23 Jackie Keating, Chance Wilcox, Division of Subsistence, 24 Alaska Fish and Game. 25 26 MS. KEATING: Good morning, Madame 27 Chair. Thank you. (Indiscernible - distortion)..... 28 29 REPORTER: Hang on a second. 30 31 HUTCHINSON-SCARBROUGH: MS. Okay. 32 Jackie, could you hold on. We're having some break up. 33 Hold on just a second. 34 35 (Pause) 36 37 ACTING CHAIR SKINNER: Jackie, if 38 you're online, can you start talking so we can see if 39 this clears up the issue. 40 41 (No comments) 42 43 ACTING CHAIR SKINNER: Jackie, are you still online. 44 45 46 (No comments) 47 48 ACTING CHAIR SKINNER: All right. Can 49 anyone online try speaking so we can see if it cleared 50

0182 1 up the phone issue. 2 3 MR. KALER: Hi, this is Robb Kaler, I'm 4 with the Fish and Wildlife Service, Migratory Bird. 5 Can you hear me? 6 7 ACTING CHAIR SKINNER: Yes. And you're 8 coming in very clearly. 9 10 Thank you. 11 12 MR. KALER: Yeah. And then sometimes 13 if you put a cell phone in a large bowl it helps 14 amplify it. It's..... 15 16 (Laughing) 17 18 MR. KALER:antiquated. 19 20 REPORTER: Della, are you there. 21 22 MADAME CHAIR TRUMBLE: Yeah, I'm here. 23 I can hear everybody loud and clear. 24 25 REPORTER: Okay. You sound much 26 better. 27 28 ACTING CHAIR SKINNER: All right. 29 Jackie, have you dialed back in. 30 31 (No comments) 32 Okay. So I 33 ACTING CHAIR SKINNER: 34 think what we're going to do unless Jackie dials in 35 before I'm done talking, we're going to go on to the next agenda item and then we'll come back after that 36 37 once Jackie has dialed back in. 38 39 So I'll just check. Jackie, did you 40 dial in. 41 42 (No comments) 43 44 ACTING CHAIR SKINNER: Okay. 45 46 MS. KEATING: Good morning. I just got 47 back. 48 49 ACTING CHAIR SKINNER: Perfect. Go 50

0183 1 ahead. 2 3 MS. KEATING: And can you hear me okay? 4 5 ACTING CHAIR SKINNER: Yes, and it 6 seems like we cleared up the sound quality issue. 7 8 Thank you. 9 10 MS. KEATING: Fantastic. Thank you. 11 Well, good morning and again, Madame Chair and members 12 of the Council. For the record my name is Jackie 13 Keating. I am the Southcentral Subsistence Resource 14 Specialist for the Department of Fish and Game. And 15 I'm very sad to not be there with all of you today. 16 We're currently out in Unalaska and working on a survey 17 project that I'll give an update on shortly here. So 18 thanks very much for moving me up in the agenda so that 19 we can keep all of that moving. And I also wanted to 20 say it was really nice to see a lot of folks in person 21 at Board of Game last week. So glad everybody's 22 together this week. 23 24 We've provided our normal one page 25 update and I believe it's Page 100 of your meeting 26 books. Oh, I first wanted to just really briefly walk 27 through that and give a couple of updates from most of 28 our projects that are funded by the Fisheries Resource 29 Monitoring Program for your region. Then I have a 30 couple updates after that as well. 31 32 So I'll start with project 18-450. That was the comprehensive harvest surveys that we 33 34 completed out here in Unalaska. And that project 35 officially wrapped up just this past December in 2022. 36 So we just wanted to let everybody know we do have the 37 full technical paper for that now available online. 38 The link to that is listed in the meeting book. 39 40 20-450, that For project was the 41 comprehensive harvest surveys that we completed on the 42 Kodiak road system right around this time last year. 43 Since the fall RAC meeting we did host a community data 44 review in early November and I wanted to thank the 45 Council members that actually came to that meeting. It 46 was really awesome to see folks and get feedback on the 47 preliminary data. We will be returning sometime this 48 summer to conduct some additional key respondent 49 interviews and then the final publication of that 50

0184 1 technical paper will be in June of 2024. 2 3 Project 20-454, reliable estimates of 4 subsistence harvest in Ouzinkie and Port Lions. Ι 5 believe Bill Pyle mentioned this yesterday, but this 6 February we traveled to Ouzinkie and then over to Port 7 Lions to conduct a census survey sample in both communities. I want to first thank both the Kodiak 8 Refuge and Amy Peterson for all of their support. We 9 10 had the privilege of Amy coming out in the field with 11 us for both trips and she was an enormous help both 12 with, you know, mentoring Staff and helping, you know, 13 utilize her local connections and informing us of 14 things that were important in the area and then of 15 course keeping everybody well fed too. So working with Amy was awesome. Our plan is to return in the fall and 16 17 do community data review meetings in both communities 18 and then we'll be publishing that final report in 19 December of 2024. 20 21 And the project 22-452, that is the 22 False Pass and Nelson Lagoon subsistence harvest 23 monitoring and traditional ecological knowledge and 24 investigation. So Chance Wilcox and Bronwyn Jones are the southwest Staff for the Division. 25 They'll be 26 traveling to both communities for the scoping meetings 27 from May 24th through June 2nd. And then this project 28 is for study year 2023 so we will be conducting those 29 surveys in early winter of 2024. For these communities 30 for the first time we'll be doing comprehensive since 31 the '80s so it's going to be really great to update 32 those baseline harvest data and be able to talk with 33 community members. 34 35 For project outside of OSM. As I 36 mentioned we're currently out in Unalaska with the 37 entire southern region research team to do household 38 harvest surveys just for salmon and halibut. This 39 project is funded by the Alaska Sustainable Salmon Fund and it's a partnership with the Q Tribe and with the 40 41 Division of Commercial Fisheries. So we're working 42 closely with Tyler Lawson and Aleutian Aerial to 43 understand total escapement of the McLee's Lake system. 44 Part of that is conducting these household harvest surveys and doing some work to understand benefits and 45 46 barriers of subsistence permit program out here. So we 47 are currently working on a random sample of 200 48 households. We have folks out and knocking on doors 49 today through probably the next week and a half and 50

0185 1 then we'll be back in the fall to do a community data review meeting. 2 3 4 And then just a couple of other updates 5 from our Division. By the time this groups meets again 6 in the fall we'll have some staff changes to report. 7 Our southern region Program Manager, Robin Dublin will be retiring at the end of the month so we're currently 8 9 in the process of hiring her replacement. And then in 10 addition our Deputy Director, Lisa Olson, will be 11 retiring effective July 1 so we're currently working on 12 plans for her replacement as well. 13 14 And lastly I just wanted to say it was 15 really great to see you last week at the Board of Game, 16 that there were several people from communities that came and provided public testimony. And there were 17 18 even a few instances of folks referencing data in the 19 community subsistence information system which is 20 exactly what we hope that all these projects will be 21 It's for communities to have reliable used for. 22 information to help make informed decisions. So it was 23 really cool to see that and I always just like to plug 24 that we are always happy to work with communities to 25 help folks understand where to find that data and how 26 to use it and, you know, have us help be part of the 27 process there if folks are putting in proposals for 28 either the State or Federal system, we can kind of help 29 walk through out to utilize those data. 30 31 So that's all I have and I'm happy to 32 answer any questions if there are any. 33 34 Thank you very much for your time. 35 36 Madame Chair. 37 38 ACTING CHAIR SKINNER: Thank you. Are 39 there any questions or comments. 40 41 Go ahead, Pat. 42 43 MR. HOLMES: Yeah, this is Pat. I just want to thank you for getting this whole program 44 rolling again because there's been such a deficit of 45 information coming from the villages and particularly 46 47 out west. And so I want to thank you and your entire 48 team should be receiving accolades I think from the 49 Council. I don't think I'm speaking out of line, but I 50

0186 1 think it's just swell that you folks are able to get 2 back in the groove. 3 4 Thank you. 5 6 ACTING CHAIR SKINNER: Any further 7 comments or questions. 8 9 (No comments) 10 11 ACTING CHAIR SKINNER: All right. 12 Seeing and hearing none, thank you, Jackie, and good 13 luck with your out -- your fieldwork out in the 14 community later today. 15 16 We'll go ahead and..... 17 18 MS. KEATING: Great. Thank you very 19 much. 20 21 ACTING CHAIR SKINNER: Thank you. 22 We'll go ahead and move back to the regular order of 23 our agenda. So we're under 14 which is reports. 14a 24 is tribal governments. So are there any reports from 25 tribal governments in the room. 26 27 MS. SALIMEN: Good morning, Madame 28 Chair and Council members. My name is Mandy Salimen 29 and I am the Environmental Program Director for the 30 Qawalangin Tribe of Unalaska. I would like to provide 31 you with a short update with what the Q Tribe 32 Environmental Department has been up to. While all --33 not all the programs deal with subsistence directly, it 34 all deals with the subsistence way of life. 35 36 To start our resilience program has 37 nearly completed their adaptive management plan and now 38 we are moving towards our vulnerability assessment. 39 We're focused on community outreach, knowledge and knowledge sharing efforts. These efforts will assist 40 41 us in developing capacity tools to combat climate 42 change and its affects. 43 44 Our remediation team is gearing up for 45 a busy field season. Ongoing projects include building 46 out site inventory, reviewing and commenting on 47 documents and collaborating with the OC on site 48 priorities. We have -- we are looking for contractors 49 for screw pick removal debris and asbestos removal, 50

1 removing trans -- transformer equipment and PCB We are also collaborating with the 2 sampling. 3 university to host a workshop this summer teaching 4 local communities and tribal members about 5 environmental sampling. 6 7 Our recycling program is currently 8 working on a grant to assist us in becoming a recycling 9 hub. We have been researching equipment and uses for 10 end products for that recycling material. We have 11 partnered with Matson and Zender to continue our 12 recycling program and have been reaching out to the OC, 13 the city and neighboring communities to -- for ideas 14 and cooperation. 15 16 So and then I'm going to pass it over 17 to our fisheries Program Manager. 18 19 MS. LEKANOFF: Good morning, Chair. 20 This is Rachel Lekanoff again for the record. I'm the 21 Fisheries Manager for the Qawalangin Tribe of Unalaska. I just started this past December. Since I've started 22 23 we've been busy planning for our upcoming field season. 24 So in summer of 2023 we'll continue to work with ADF&G 25 so that's with Tyler Lawson and Matt Keyse especially 26 to operate the McLee's Lake salmon weir to monitor the 27 local sockeye run for subsistence use. 28 29 We're also -- the Fisheries Program we 30 -- we have also just found out we were awarded the Fish 31 and Wildlife Partners Program funds for 2024 and 2025 32 so we will be able to continue that co-management 33 relationship with ADF&G. We're also planning to mentor 34 students and any young fisheries professional by 35 working with the Alaska Native Science and Engineering 36 Program to utilize them as or employ them as interns at 37 the weir. 38 39 And then looking forward we're also starting to look at plans, I think Chris mentioned this 40 41 a little bit yesterday, but we're in the process of 42 looking -- scoping out grants and opportunities to help 43 clean up Unalaska Lake which is smack dab in the middle 44 of town, to address some potential World War II contamination there and also get a better idea of what 45 46 that run that goes into town through Ililik Creek and 47 Unalaska Lake are doing. So hopefully better monitor 48 those. 49

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0188 1 But yeah, thank you. 2 3 Happy to be here. 4 5 ACTING CHAIR SKINNER: All right. Do we have any questions from Council 6 Thank you. 7 members or comments. 8 9 Coral, go ahead and then Pat. 10 11 MS. CHERNOFF: Yeah, I just want to 12 thank you both for being here, really appreciate the 13 reports. It's always nice to see people in person and 14 it's nice to see young people working. And it sounds 15 like you're working on a lot of really important projects. So thank you for being here. 16 17 18 MS. SALIMEN: Through the Chair. Thank 19 you guys for having us, we're learning a lot. 20 So thank you. 21 22 23 MR. HOLMES: Madame Chair, ladies. I 24 really appreciate you coming. We chatted before and 25 with Chris' encouragement I did quite a bit of 26 contacting with the Fish and Game Habitat Division and 27 Jeanette Alas, I think she might have worked for Fish 28 and Wildlife Service out at Adak at one time, but she's 29 the Habitat Biologist for the region now. And she went 30 through literally tons of paper and emails and she 31 found a copy of that draft rehabilitation plan for 32 Unalaska late. And so it never got published. My colleague that I worked with on that wrote it up, but 33 34 they ran out of money and I think he was probably 35 encouraged to retire like I was about that time and so the whole thing disappeared. But I will do my best to 36 37 send that to you folks so that'll give you a place to 38 start and then you can work with Jeanette and also with 39 Tyler. And I would suspect that being -- that's part of the Maritime Refuge, I suspect that Jeff Williams or 40 41 one of this Staff would probably need to be involved in 42 a joint planning and working group on that. 43 44 But there's some very simple things that can be done to reduce the silt load in the lake 45 which in my mind is what's really holding back the 46 47 population because you can go up on the hill or put up 48 a step ladder or -- by the lake and to see that there's 49 so few places they can spawn and that's probably why 50

0189 1 your population hardly ever gets more than four or 500. And I know the community through your Fish and Game 2 Advisory Committee has been working for years on trying 3 4 to get community agreements on reducing harvest and anything they can to make that work. And I think that 5 the Council's decision at our last meeting to put a 6 7 hold on changing any additional harvest tools for that area, hopefully that will help as well. And so it'll 8 9 be years before things will change, but I think that 10 you ladies from my chat with you have a lot of moxie 11 and will get the job done. 12 13 So thank you so much. 14 15 MS. SALIMEN: Through the Chair. Thank 16 you, Mr. Holmes. 17 18 ACTING CHAIR SKINNER: All right. Are 19 there further comments or questions. 20 21 (No comments) 22 23 ACTING CHAIR SKINNER: Okay. Seeing 24 and hearing none, thank you. 25 26 All right. Are there any other tribes 27 online or in the room who wish to give a report. 28 29 (No comments) 30 31 ACTING CHAIR SKINNER: Okay. Seeing or 32 hearing none, are there any Native organizations in the 33 room or online who wish to give a report. 34 35 (No comments) 36 37 ACTING CHAIR SKINNER: Okay. Seeing 38 and hearing none, I'm now on 14c, U.S. Fish and 39 Wildlife Service, little i is Alaska Maritime National 40 Wildlife Refuge activity reports, spring, 2023. And 41 this will be Jeff Williams with Fish and Wildlife 42 Service. 43 44 MR. WILLIAMS: Good morning, Madame Chair, members of the Council. Jeff Williams, Alaska 45 46 Maritime National Wildlife Refuge, Deputy Manager. I 47 have some materials that I provided to you in your 48 meeting book on Page 81 it should be. A short report 49 with an attachment right there associated with it, a 50

0190 report card on seabird productivity in 2023. 1 2 3 A couple of topics of interest to the 4 Board. One is a caribou population on Adak. The 5 Alaska Volcano Observatory, they will be working in the Aleutians and monitoring and updating -- upgrading some 6 7 of their sites in the summer. We are aware of the activities. We -- the Refuge is connected, their 8 Volcano Observatory, with the Alaska Department of Fish 9 10 and Game Biologist to make arrangements for an aerial 11 survey of caribou that -- well, I think due to some 12 scheduling issues that fall trip -- I mean, excuse me, the summer/spring trip wouldn't happen, but I think 13 14 they're scheduled now to conduct that survey on Adak in 15 the fall, sometime in September. The Refuge will support that work through logistical report, through 16 17 our bunkhouse that we have there in Adak and hopefully 18 we can get a new survey for the number of caribou on 19 Adak. 20 21 The Refuge is also continuing its involvement in planning for the feasibility of removing 22 23 rats from the Aleutian Islands. Last summer a team of several people consisting of USDA researchers and a 24 25 group from the nongovernmental organization I'm In 26 Conservation, spent a couple of weeks on Great Sitkin. 27 They looked at a variety of items that would be 28 necessary to evaluate the possibility of removing rats 29 from the large island, it's been done around the world 30 in numerous places, but only once before in the 31 Aleutian Islands. So they particularly looked at 32 nontoxic forms of sample bait and how well it persists in a freshwater environment, the fish presence in 33 34 streams, the distribution of rats kind of in upland 35 areas, it's taking the very large volcano with a summit 36 of over 5,000 feet, active fumaroles, active volcano, 37 lots of World War II infrastructure for rats to be in 38 much like Unalaska. 39 40 There's cooperators, I've -- preparing 41 their reports. We have -- we're reviewing a draft of 42 one of those reports now so we anticipate that we'll be 43 able to release in the near future here, in the next 44 couple months. 45 46 Seabird monitoring. One of the major 47 functions of this Refuge is to keep track and numbers 48 on seabirds throughout the region, one of the major 49 resources. So Staff members in September would -- we 50

-- at the September meeting we didn't quite have our 1 report card, that's now -- that's on page -- I think it 2 3 should be 83 of your meeting book. You'll also hear 4 and see that report in a later talk by Robb Kaler who's -- that's in Tab 9 also on that report on seabirds 5 So the Refuge produces this annual 6 across Alaska. 7 report card, it's backed up by a lot of rigid and statistically reliable data, but it's just the thing 8 that most people want to see, how well are birds --9 10 seabirds doing in Alaska and it tells part of the 11 picture. 2023 was one of the best years on record for 12 productivity, that is the number of eggs laid and the 13 number of chicks produced across Alaska, across many 14 different regions of Alaska and many different species 15 of Alaska that feed at all different portions of the 16 marine food web. It was significantly above average. 17 And that's the good news. 18

19 The bad news, you'll hear a talk in a 20 few minutes from Supervisory Wildlife Biologist Heather 21 Renner about a few of the other things, in particular 22 the Refuge Biologist and others associated with our 23 monitoring program wrote a paper recently in 2020 or so 24 that documented a die-off of birds throughout Alaska 25 during the marine heatwave of 2015 and 2016. And in 26 Heather's talk in a few minutes that thought was 27 that there was somewhere around a half million to a 28 million seabirds died during that, murres, two species 29 of murres, common and thick-bill murres. These same 30 researchers and by looking at our subsequent land based 31 monitoring, not just a count of carcasses found on 32 beaches and done in extrapolation, that means that that 33 number was much higher now because those birds have not 34 returned back to colonies throughout the Aleutians and 35 the Bering Sea. And I won't steal any of Heather's thunder, but she'll fill you in on more of that. But 36 37 that work is possible because of this monitoring 38 systems that the Refuge conducts. 39

40 So we're planning, the Refuge Staff are planning for Refuge summer activities. 41 We plan to 42 support culture camps in Unalaska, Sand Point and the 43 Pribilofs with grants and also Staff involvement in those locations. Our visitor services Staff has 44 45 already visited the communities of Sitka, St. Paul and 46 Unalaska in this winter and fall to get school programs 47 and community outreach. 48

49 A big project for the Refuge is the 50

1 Kachemak Bay shorebird festival. That's the largest wildlife festival in Alaska and that'll be starting in 2 3 May. Many of you have attended that. That'll be May 4 3rd through 7th I believe. 5 6 The end -- reversing a trend and we had 7 a hard time with Staff members over a number of years now and declining budgets, we were able to get on two 8 new Staff members. Adrian McGill will be a supervisory 9 10 visitor's service person. She'll help us out with 11 leading outreach and educational Staff here in Alas --12 in Homer. And Adrian is coming to us from the Chugach 13 National Forest just up the road. 14 15 Another person is a Biologist for the 16 Bering Sea unit, Matt Russtan, he comes from the Bureau 17 of Indian -- excuse me, Bureau of Land Management 18 rather and he will be as I said the Wildlife Biologist 19 for Bering Sea and also the Chukchi Sea regions of the 20 Refuge. 21 22 In other news just to keep the Council 23 aware of other things, mainly as it regards to food 24 security and contaminates, is a fair number of 25 activities that are happening across the Refuge. In 26 particular the Army Corps of Engineers, Department of 27 Energy, FAA, are making plans to remediate contaminated sites and/or investigate them again on several Refuge 28 29 islands. The Army Corps of Engineers will be on Tanaga 30 Island doing munitions, unexploded ordnance 31 remediation, there's a planned visit also to Cape 32 Wislow there in Unalaska, just a small site visit, 33 Department of Energy will be visiting Amchitka Island 34 as part of their five year sampling along with the U.S. 35 Navy, will also be doing some PCB monitoring from a site specific location there. And finally the FAA will 36 37 be doing work at Caton Island in the Sanak Island 38 Basically that's an interesting one that the group. 39 lead contaminated paint in some buildings did impact in a former archeological site. So tribal consultations 40 41 have been going on there and archaeologists and Fish 42 and Wildlife Service in permitting along with the FAA. 43 So those are some -- also of interest to the Council. 44 45 Finally the -- the Refuge finally 46 closed on the remediation of a former cabin on the 47 Amchitka. Already DEC signed off on it. It's not 48 often that a contaminated site gets signed off on and 49 it's something to celebrate when it does happen. So 50

0193 1 portions of Amchitka are now cleaner. 2 3 And finally our Refuge vessel, that's 4 our pickup truck to visit around the Refuge is -- the 5 contract is let, it will be going to Seattle for a significant midlife refit, a complete major overall in 6 7 engines and top to bottom. That's like within the summer and fall, I should say this year, October of '23 8 into spring of '24. 9 10 11 That's my presentation for the Council. 12 I encourage you to look at the report card, it's a 13 great one page document to let you know how things are 14 And like I said it's backed up by rigid, going. 15 statistically valid reports of many hundreds of pages and it's hard to distill that into a simple graphic, 16 17 it does give you an idea across regions how but 18 seabirds who we view as monitors of the marine health 19 are doing across the State. 20 21 Thank you, Madame Chair. 22 23 I'd be happy to answer any questions if 24 there are any. 25 26 ACTING CHAIR SKINNER: Thank you. Are 27 there any comments or questions from Council members. 28 29 MR. KOSO: Madame Chair. 30 31 ACTING CHAIR SKINNER: Pat, go ahead. 32 33 MR. HOLMES: Yeah, Jeff I wanted to 34 thank you for all your hard work and outreach and your 35 help on us trying to develop some solutions for Lake Andrews and some of the other places where there's 36 37 salmon shortcomings on returns. And I think that your 38 folks work and your outreach is exemplary. And I've 39 heard some positive comments from some of the places that you folks have been working at with the school 40 41 kids and things. And I think that your work on the 42 hazardous materials is really great. I know in '82 43 when we stopped at Tanaga there were literally piles of 44 munitions and -- I mean, they just left their magazines on the cot and all the garbage and junk when they left. 45 46 And I did contact the Army disposal at that time and 47 they went out and had, I don't know, thousands of 48 pounds of stuff that they burnt on the old runway 49 there. And so I'm sure there's still tons more there 50

0194 1 and other places. And so I particularly recall some of the dumps on some of the islands where they just backed 2 up to the ocean and shoveled in or dumped truckloads of 3 4 things. So I think that that will help a lot. 5 6 And I think your rat program hopefully 7 will be successful. What was the other island that you folks worked on rats before, was that Amchitka or 8 Kiska, I don't -- I forgot? 9 10 11 MR. WILLIAMS: Yeah, through the Chair. 12 Yeah, Pat, thank you very much. I appreciate the 13 comments and all your work on the Lake Andy work. Т 14 continue to learn from you and see new ways of seeing 15 things there. 16 17 Thank you. 18 19 The other island that rats have been 20 successfully removed from, 7,000 acres in the west central Aleutian Islands, a island formally known as 21 22 Rat Island, from rats introduced in the 1700s. In 2008 23 the program was successful, it has restored that 24 island. It has now been renamed to the Unangam name of 25 Hawadax. So it is now known as Hawadax. 26 27 ACTING CHAIR SKINNER: All right. And, 28 Rick Koso, were you trying to jump in. 29 30 MR. KOSO: Yeah, I -- yes, Madame 31 Chair. Yeah, Jeff, thanks for all your work there on 32 our last meeting we had with the locals and stuff at 33 Adak here on the caribou situation. And I did talk to 34 some of the guides since then and they really had a 35 concern that there were no more big bulls with any racks of any size left there and they were kind of 36 37 hoping that that would change the -- you know, the 38 amount of caribou that they can kill at least on the 39 bull side to one bull per person, I think right now it's five, but I understand that there's still too much 40 41 caribou on the Island and you want to get down to 150 42 animals, you know. I kind of disagree with that 43 number, I think it should be quite higher than that, 44 but, you know, you guys know a little more about the biology than I do. So anyway I just want to know if 45 they'd con -- any of those people contacted you on 46 47 that, the caribou part of it? 48 49 MR. WILLIAMS: Yes, thank you. Through 50

1 the Chair, Rick. I'm aware that Lisa has had contact, but nothing directly here at the headquarters. 2 But I 3 think a person or two has talked to Lisa Spinner, our 4 person on Adak. And I'm aware of some of that, but only about one -- I think only instance that I know of 5 So but I have made notes of 6 someone has contacted. 7 that and I'll try to follow-up with that. 8 9 Thank you for the report. 10 11 MR. KOSO: I've got one other question. 12 I know on Kagalaska I know you said there was more 13 caribou that would swim across to Kagalaska. I know 14 you spent a tremendous amount of money to kill 10 15 caribou here a couple years back. Did you guys -- I know it's really nice to think that we're going to have 16 17 a helicopter and maybe get a real count on the Island 18 here hopefully this summer. Do you know anything more 19 on the Kagalaska as far as the caribou moving over 20 there? 21 22 MR. WILLIAMS: Through the Chair. Yes, 23 Rick, we did produce a small report and I think that it 24 was distributed to you and if you can't place it I'd be 25 happy to resend that to you. A person on Adak needs to 26 -- that was able to fly a aerial survey on Kagalaska, 27 the actual date escapes me, within the last couple years here. But subsequent to that we have no new 28 29 information. We just -- we anticipate that they -- it 30 will continue to grow. So it's a novel environment, Kagalaska is, caribou have swum over there. It has not 31 32 been grazed. Adak is becoming overgrazed because of 33 the former number of caribou that were on the Island. 34 So I would only expect to see more animals on Kagalaska 35 during the next survey which hopefully will happen in 36 conjunction with the fall Adak caribou survey this 37 fall. 38 39 MR. KOSO: Okay. Thank you, Jeff, for 40 all you do there. I appreciate that. 41 42 So that's all I have. 43 44 ACTING CHAIR SKINNER: All right. Are 45 there any further questions or comments. 46 47 (No comments) 48 49 ACTING CHAIR SKINNER: All right. 50

0196 Seeing and hearing none, thank you, and we'll move on 1 to the next agenda item. And that would be 2 Okay. National Wildlife Refuge activity 3 14cii, Izembek 4 report, September, 2022 to January, 2023. 5 6 Maria Fosado or Alison Williams, Fish 7 and Wildlife Service. 8 MS. WILLIAMS: 9 Yeah. Good morning, 10 Madame Chair and members of the Council. For the 11 record my name is Alison Williams, I am the Wildlife 12 Biologist for Izembek National Wildlife Refuge. And 13 this morning I will be reading out our activity report 14 on what we've been doing since our last RAC meeting. 15 And I have a few updates to add to it as well. Online we also have our Refuge Manager, Maria Fosado and our 16 Deputy Refuge Manager, Leticia Melendez. 17 And so we 18 will all be available to answer any questions that you 19 have on our report. 20 21 So starting with some of the avian work 22 that we've had going on, we've continued the monitoring 23 for highly pathogenic avian influenza. So we had USGS 24 Staff present in Cold Bay from August through the end 25 of October to sample for avian influenza during the 26 height of avian presence at Izembek. Samples were 27 taken from hunter harvested birds and from the 28 environment to test for the presence and -- presence This was 29 type of avian influenza viruses. and 30 particularly important work during the current outbreak 31 of the H5N1 virus that has been documented nationwide 32 in domestic and wild birds. This year we did not --33 this fall we did not notice any major mortality events 34 that were suspected to be avian influenza, but some of 35 the samples that were collected did test positive for 36 avian influenza. So it was confirmed to be present at 37 Izembek. 38 39 The next project that I will report on 40 is our brant age ratio surveys. We conducted this survey October 3rd through the 14th. We had a total of 41 42 eight observers that participated in the survey and it 43 was conducted by foot and boat throughout Izembek 44 Lagoon and the surrounding areas. Over the course of the survey we counted about 49,000 brant from 101 45 46 different flocks and it was used to model an estimate 47 of productivity of the year. The productivity estimate 48 for 2022 indicated that approximately 15 percent of the 49 fall staging population were juvenile first year birds. 50

0197 1 This was below the long term average of 24 percent, but it had little affect on the currently weekly decreasing 2 3 long term trend of productivity which appears to be 4 declining about .6 percent per year. 5 6 I will be giving a presentation on the 7 details of this survey this afternoon and hope that I 8 can provide more clarity on how this survey works. 9 10 The next project that I will report on 11 is our brant captures that we conducted for the first 12 time this year. We assisted in the first local attempt to capture brant by nighttime spotlighting on Izembek 13 14 Lagoon with the objective of affixing location 15 transmitters to brant shortly before their migration away from Izembek. The project is a collaboration with 16 17 the USGS Alaska Science Center as a part of Bureau of 18 funded Ocean Energy Management study on brant 19 migration. The information from this study will be 20 used by BOEM to analyze potential affects to black brant and other migrating waterfowl from offshore wind 21 22 energy projects on the Pacific coast of the U.S. We 23 conducted capture attempts from October 16 and 23rd and 24 over the course of four capture days we learned a lot 25 and captured seven brant of which four were fitted with 26 transmitters. And at -- since the conclusion of the 27 project about two of those were harvested at Izembek 28 Lagoon. 29 30 So USGS is planning to deploy about 80 31 more transmitters this summer on the North Slope of 32 Alaska to continue this study. 33 34 I'll next move on to our caribou projects. For the Federal subsistence hunt of Unit 9D 35 36 which is the Southern Alaska Peninsula Caribou Herd. 37 It's split into two hunting periods. The first is 38 August 1st through September 30th and the second half 39 is open November 15th through March 31st. The dates 40 run concurrently with the Alaska Department of Fish and 41 Game's sport hunt. After consultation with ADF&G they 42 support the U.S. Fish and Wildlife Service mirroring 43 the State resident harvest regulations and currently the harvest limit of caribou in 9D is three per hunter. 44 45 To date there have not been any harvest reports 46 received by the Refuge from participating communities. 47 48 For this Federal subsistence hunt in 49 Unit 10 which is Unimak Island. The residents of Cold 50

1 Bay and Nelson Lagoon have been added to the Federal registration hunt in Unit 10. The hunt period is 2 30 of 2022. 3 August 1st through September In 4 consultation with ADF&G there have been an increase in hunter harvest from a total of five to a total of 10 5 bull in Unit 10 and 15 permits were allocated. To date 6 7 we have not received any harvest reports from the 8 participating communities.

10 And the final piece I want to report on 11 caribou is our annual winter caribou population survey. 12 And before I get into this I want to specify what 13 survey we are talking about here. So there's a number 14 of surveys that are done on Unit 9D and 10 for caribou 15 and per historic agreements ADF&G is responsible for the spring surveys that look at pregnancy rates as well 16 17 as the fall surveys that look at age and sex 18 composition and Izembek Refuge is responsible for 19 winter surveys that just get population counts. So the 20 annual winter survey was originally scheduled for February 13th through the 23rd, but they were delayed 21 due to weather, but we were finally able to complete it 22 23 March 20th through 25th. So I have an update I'll read 24 on that. 25

26 For this year's survey we were able to 27 cover both Unimak Island and the southern Alaska The survey consists of flying about 600 28 Peninsula. 29 feet above ground level along survey transects that 30 have been used throughout the history of the winter 31 This year's survey yielded extremely low survey. 32 counts where we only saw 32 caribou on Unimak Island 33 and 30 on the Alaska Peninsula. The results of the 34 survey are concerning, but we believe that they're 35 inconclusive and need to be explored further. Several 36 factors could have contributed to these historic low 37 counts such as the weather, the visibility and the 38 distribution of caribou during the survey. Weather on 39 the southern Alaska Peninsula this winter has been windier and stormier than the previous and it may have 40 41 affected the caribou's behavior or distribution. 42 Visibility during the survey was good and the survey 43 consisted of two very experienced crew aerial 44 observers. In most of the survey area snow cover was patchy or bare and since caribou at this time of year 45 46 are pale in color they stood out well on the landscape 47 and as such we feel confident that observers were able 48 to detect a large proportion of caribou present on the 49 landscape.

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1 But during the fall and the winter Izembek did receive several reports from locals about 2 their difficulties in finding and harvesting caribou. 3 4 Some locals reported seeing few to no caribou from the 5 air in places where they previously had seen caribou 6 and some reports also came in of caribou sightings in 7 areas that caribou have only begun to frequent in 8 recent years including on offshore islands.

10 And in the several days following the 11 conclusion of the survey a majority of the snow cover 12 at higher altitudes and in the mountains began to melt 13 and as we transitted back over the survey area on the 14 southern Alaska Peninsula to attend the meeting we 15 detected 52 caribou from about 2,500 feet above ground level. So this confirmed our ability to detect caribou 16 on the landscape from altitude and the idea that they 17 18 are consistently moving across the landscape and in and 19 out of that survey area. We did not see any evidence 20 of mass mortality events which we believe we would have 21 if that were the case just due to the presence of any 22 carcasses or scavengers or predators and as such we 23 don't believe that this decrease in number is 24 exclusively due to mortality.

26 So all of this leads us to believe that 27 there was a shift this year in where the caribou wintered compared to the area that 28 has been 29 historically covered during this winter survey. It's 30 understood that caribou population numbers and 31 migratory pathways are highly dynamic and it appears 32 that this was the primary factor in the low 2023 count. 33 As such more work will need to be done and more surveys 34 conducted before we know the true population status of 35 the Southern Alaska Peninsula Caribou Herd and the 36 Unimak Caribou Herd. Due to the cloud cover and the 37 high winds we weren't able to extend our survey efforts 38 into the higher elevations, into areas that have not 39 been historically surveyed or to the offshore islands where there may be more caribou, but we are exploring 40 41 the possibility of conducting another count of caribou 42 in the spring when we will have another pilot back in 43 Cold Bay and when the caribou distribution may have 44 shifted again into those lower areas. 45

46 Moving on to our other mammal work that 47 we do. I'd like to start with our brown bear stream 48 survey. It was scheduled to occur last August through 49 September. The survey wasn't able to be completed just 50

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0200 1 due to logistical challenges and the weather. We had a very rainy summer and last winter down in Cold Bay, but 2 3 we were planning on resuming that again this summer. 4 5 For our habitat studies we are working 6 with the Water Resources Branch of Fish and Wildlife Service to retrieve and redeploy water temperature 7 monitoring sensors that are deployed in anadromous 8 streams across the Refuge and in streams that are 9 10 important for salmon and other fish. Some of the sites 11 haven't been visited since 2019 and these water 12 really important for temperature sensors are understanding water quality on the Refuge. And so we 13 14 have plans this April and May to visit 16 active 15 monitoring sites to retrieve and redeploy these censors 16 so we continue collecting data on water. 17 18 We also were able to do some outreach 19 events since our last time together. We did some local 20 events in Cold Bay including a pollinator education event where kids learned about pollinators and played 21 games to learn what it's like in the life of the bee. 22 23 We also put on a Halloween school detective event where 24 kids learned about animals skulls and how to identify 25 them. 26 27 And then another highlight of our winter this year was that we were able to host the King 28 29 Cove school ornithology and marine biology classes in 30 November and to provide the students with an 31 opportunity to tour the Refuge, learn about the Fish 32 and Wildlife Service and careers in public lands and of 33 course go birding on the Refuge. And we are really 34 hoping to establish this as a yearly visit to Izembek 35 and continue our involvement with the students in King 36 Cove. 37 38 Thank you for your time and at this 39 point we'd be happy to answer any questions you have. 40 41 Thanks. 42 43 ACTING CHAIR SKINNER: Are there any 44 questions or comments. 45 46 Go ahead, Pat. 47 48 MR. HOLMES: Yeah. Thank you very much 49 for the excellent report, Alison. And it's really -- I 50

1 think your guess on the distribution of caribou at higher altitudes beyond your normal survey areas is 2 3 probably pretty good. And what you might do to help on 4 your interoffice politics would be to have somebody 5 with their iPhone when they're flying surveys, just hold it up, attach it on the window so that people 6 7 could appreciate what flying is like on the Alaska Peninsula because when I used to do that it was -- made 8 some of the roller coaster rides in California seem 9 10 like child's play. And for a person to be able to sit 11 in the back of the plane, count critters without 12 barfing all over themselves is extremely -- it's really 13 something. 14 15 And so if on logistics а and discussions with other areas, if you need help from our 16 17 Council to reaffirm the -- what was a few years ago a 18 priority for you to be able to conduct your surveys for 19 the Service in Alaska, for the Refuges, please let us 20 know. I guess you can't really do that, that would be nonprofessional. But anyway we'll keep our ears open 21 22 and I think give you all the support that we can 23 what you're doing is so because important for 24 subsistence for folks in False Pass, Nelson Lagoon, 25 Sand Point. It's just I think a person that lives in 26 Anchorage and never gets out in the field or has never 27 been to those villages has no idea what it means to 28 those folks to be able to have those herds increase and 29 be able to get back to the level of subsistence hunts 30 they used to have. 31 32 So thanks a lot for all the work you're 33 doing. 34 35 ACTING CHAIR SKINNER: Thanks. I had a 36 few questions on the report. So for the brant captures 37 and for transmitter attachment I was wondering why only 38 four were fitted with transmitters, like what was your 39 decision criteria there? 40 41 MS. WILLIAMS: Yeah, through the Chair. 42 Thank you. That's an excellent question. So we only 43 attached to four just because largely the groups we 44 captured were an adult with juveniles and so they were 45 likely the same family group and they tend to migrate 46 to their wintering grounds together. And so we didn't 47 want to put all of our eggs in one basket so to say, 48 have data from really only one little group. And so we 49 tried to distribute them across family groups as well 50

0202 1 as there were a few we caught that were just juveniles on their own and we didn't feel confident that they 2 were going to survive and migrate with the transmitter 3 4 so we decided to leave them off. 5 6 ACTING CHAIR SKINNER: Okay. Thank 7 And then under the Federal subsistence hunt, you. Unimak Unit 10, I just wanted to make sure I understood 8 9 the -- the middle sentence. So am I understanding this correctly that the hunter harvest data you got came 10 11 from Fish and Game so there is harvest data and your 12 last sentence that you haven't had any harvest reports 13 submitted to the Refuge is just saying that there 14 haven't been any reports to the Refuge. Is that --15 you're just kind of breaking up where the data is 16 actually coming from and where it's reported? 17 18 MS. WILLIAMS: Yeah, my understanding 19 of this is that there were 15 permits that were 20 distributed to the community, but we have not received 21 any reports of harvest where the -- any of those 22 harvest tickets were successfully filled. And for this 23 question I may actually see if Leticia Melendez is --24 our Deputy Refuge Manager is online since she's the one 25 who deals with those permits and I may defer to her to 26 see if she has anything else to add. 27 28 MS. MELENDEZ: Yes, good morning, and the Council members. 29 Madame Chair Alison's 30 correct, we did have those permits distributed to the 31 participating communities and the Federal subsistence 32 hunt officially ends March 31st. And so we should be 33 seeing -- this is for Unit 9D, but for False Pass it is 34 a shorter hunt that is in August through October I 35 believe and to date we have not received any harvest 36 report, but they do come to the Refuge. 37 38 Did that answer your question? 39 40 Yeah, I think I ACTING CHAIR SKINNER: 41 actually just figured out. So that middle sentence 42 when it says an increase in hunter harvest, that just 43 means an increase in hunter harvest opportunity. I was 44 it as actual harvest, but this is just reading 45 opportunity. Okay. That answers my question there. 46 47 Thank you. 48 49 And then my last question has to 50

0203 1 do.... 2 3 MS. MELENDEZ: Right. Yes. You got 4 it. 5 6 ACTING CHAIR SKINNER: Thanks. With 7 the water temperature monitoring for the sensors that have been out since 2019, are these sensors such that 8 9 they will -- they have collected information between 10 2019 and today or do they have a limited life span? 11 12 MS. WILLIAMS: Yeah, through the Chair. 13 Thanks again for an excellent question. They do have 14 an estimate life span of up to five years where they 15 could potentially be recording data. Generally we try to visit them every year or every other year just 16 17 because periodically some are lost, they're anchored in 18 the streambed, but sometimes bears think they're toys 19 and pull them out or the waterway may change and those might wash away. And so even though they can record 20 data, we try to visit them more frequently. But we are 21 22 hoping to find them out there and if they are still out 23 there they have likely recorded data that's between our 24 last visit. 25 26 ACTING CHAIR SKINNER: Okay. Thank 27 you. Are there other questions and comments. 28 29 Coral, go ahead. 30 31 MS. CHERNOFF: Yeah, thank you for your 32 report. I applaud your outreach.... 33 34 MADAME CHAIR TRUMBLE: This is Della. 35 36 MS. CHERNOFF:community 37 activities, they look like a lot of fun. With the pollinator education event was that particular to --38 39 did you talk about particular Cold Bay area pollinating 40 or was it just a general like pollination in the life 41 of a bee overall? 42 43 MS. WILLIAMS: Yeah, through the Chair. 44 Thank you. We did keep it more general, a lot of our kids in Cold Bay are still pretty young and so we 45 46 didn't go into a lot of details, but don't about why 47 pollinators are important, what role they play in the 48 ecosystem and why. And we do have a little atlas of 49 bee species in Alaska. And so I think we looked at 50

0204 1 that with the kids and pointed out what ones are present in the area. 2 3 4 ACTING CHAIR SKINNER: All right. Are 5 there any further questions or comments. 6 7 Pat, go ahead. 8 9 MR. HOLMES: Briefly I'd just like to 10 make.... 11 12 MADAME CHAIR TRUMBLE: Madame Chair, 13 this is Della. 14 15 ACTING CHAIR SKINNER: Yeah, we'll go 16 ahead and take Pat and then Della. 17 18 Go ahead, Pat. 19 20 MR. HOLMES: I think that your outreach 21 efforts, continuing those are really good. I remember a manager or two back and when we went to King Cove for 22 23 a meeting and we got there and he was there and an 24 assistant and nobody was wearing uniforms, they were --25 just had the kids just squealing and laughing and just 26 having such a grand time. And to see that effort 27 coming from the Staff and from the Manager himself to be over there working with the kids I think is really 28 29 important because you folks really fill a good niche on 30 that. 31 32 Thank you. 33 34 ACTING CHAIR SKINNER: All right. 35 Della, go ahead. 36 37 MADAME CHAIR TRUMBLE: Thank you, Madame Chair. I guess I'm -- my -- start with the 38 39 brant. Do you have any indication, it looks like this has been declining at point .6 percent per year, of 40 41 basically what the cause may be on this, on the 42 decline? 43 44 MS. WILLIAMS: Thank you, Madame Chair. Yes, there has been a lot of discussion in the 45 waterfowl science community to try and understand 46 47 what's going on here. I believe the most prominent 48 idea is that we are seeing a decline in the number of 49 nests on the Yukon-Kuskokwim Delta and that is probably 50

contributing to the decline in the overall population. 1 It doesn't look like we're seeing the same decline on 2 the North Slope and so it's believed it's that YK Delta 3 4 population declining. 5 6 MADAME CHAIR TRUMBLE: Okay. Thank 7 you. And then on the brant captures on the transmitter you've got on here too the birds with transmitters have 8 been harvested. I -- do you have anything on are they 9 10 being returned, the transmitters, if they've been 11 basically harvested or how do you assume that or is 12 that -- how do you know that they've been harvested? 13 14 MS. WILLIAMS: Thank you, Madame Chair. 15 We knew they were harvested just because the hunters did report back to us that they had harvested it. Each 16 17 of these transmitters have contact data for the investigator at USGS that's leading the study. And so 18 19 they did contact us directly. We do like to get them 20 back because we can redeploy and reuse those transmitters and they can be costly. 21 So we generally encourage folks to return them, it's not mandatory, but 22 23 we do have some decoy ones that look the same, but they 24 don't have all the machinery so they're much less 25 expensive to produce. And we offer those in exchange 26 for the transmitters so that they can have the memento, 27 but we can also reuse the transmitters. 28 29 MADAME CHAIR TRUMBLE: Thank you. The 30 Federal subsistence hunt I know on 9D I did I believe 31 for -- give out four -- three or four applications --32 permits I should say. And I am aware that none of them 33 harvested a caribou. And particularly the one person 34 had gone down to Pavlof and they basically did not see 35 any caribou. And basically contributed it to Pavlof, 36 Pavlof was fairly active almost all winter. And 37 usually the theory with the hunters here has always 38 been whenever Pavlof is active that the caribou will 39 move. And I don't know if that's -- you basically said they're not -- they're basically not where they're 40 41 usually at. 42 43 And the other thing that's interesting 44 too this past winter is bears have been out all winter. I don't know how they -- how it's been in Cold Bay, but 45 46 I do know here that they pretty much -- people have 47 seen the tracks, seen the bears, all the -- all winter 48 long. 49 50

1 The other thing I think just to make the comment is on the -- working with the schools in 2 3 both Cold Bay and King Cove and I think that's a great 4 activity to continue. And I just want to share my 5 appreciation for that effort. 6 7 Thank you. 8 9 ACTING CHAIR SKINNER: All right. 10 Thanks. Are there any other questions or comments. 11 12 (No comments) 13 14 ACTING CHAIR SKINNER: All right. 15 Seeing and hearing none, thank you. 16 17 MADAME CHAIR TRUMBLE: One more 18 comment, Madame Chair. 19 20 ACTING CHAIR SKINNER: Yeah, go ahead, 21 Della. 22 23 MADAME CHAIR TRUMBLE: If we can -- if 24 -- once you get those surveys out on the caribou if you're able to share that I know I for one would 25 26 appreciate getting a copy. 27 28 MS. WILLIAMS: Yeah, when we -- Madame 29 Chair, thank you. When we report -- finish the surveys 30 we will be writing reports and we can make sure to 31 share the information with you. 32 33 MADAME CHAIR TRUMBLE: Thank you. 34 35 ACTING CHAIR SKINNER: All right. 36 Thanks. Okay. We'll go ahead and move on to the next 37 agenda item. And just to give people an idea of what 38 I'm thinking as far as breaks, I'm going to give a 39 break at 10:45 and then we'll need to be back here before 11:00 for our time certain call at 11:00. So 40 41 break at 10:45. And then depending on how thanks go I 42 got a note that Kate Martin is on -- needs to be on a 43 plane this afternoon so I may move that up to the 44 beginning of the Partners in Migratory Bird section if 45 that's okay with everyone. 46 47 But we'll go on to 14ciii which is 48 update on sea otters and associate nearshore ecosystem, 49 Kodiak area. And this is Dr. Paul Schuette, Marine 50

0207 1 Mammal Division of Fish and Wildlife Service. 2 3 DR. SCHUETTE: All right. Yeah, can 4 you hear me okay. 5 6 ACTING CHAIR SKINNER: We can. You're 7 coming in loud and clear. 8 DR. SCHUETTE: 9 All right. Thanks. 10 Yeah, so -- yeah, thanks for having me. My name's Paul 11 Schuette, I'm -- yeah, in the Marine Mammals office here in Anchorage. And our sea otter team, there's 12 13 just a couple of us right now, myself and Ben White's 14 (indiscernible - distortion) and our supervisor was 15 Jensen, he -- and she just moved down to (indiscernible - distortion) Fish and so I'm currently the acting 16 17 program lead probably for the next four months. So 18 feel free to direct any questions to me or Ben. 19 20 Yeah, so my main update I wanted to We've been 21 provide is on the stock assessment report. 22 working on stock assessment reports, we've got three 23 stocks with the otter and also for (indiscernible -24 distortion) this year. So we have our southeast stock 25 report, the southcentral stock report and then the 26 southwest stock report. And those are available --27 those are posted on the Federal Register February 8 I believe and they're -- I can provide the web address. 28 Those are available for downloading and there's a 29 30 comment period until early May and then we'll 31 (indiscernible - distortion) from the regulations 32 website. 33 34 So I just want to give a quick summary 35 of the southwest stock overall and there's a breakdown of the Kodiak area. So for those not familiar with the 36 37 stock assessment report these are basically meant to 38 provide a summary of the current population size, 39 (indiscernible - distortion) trend and then а calculation for potential biological removal from 40 41 harvest. And so for the southwest stock there's five 42 management units. So there's Kodiak, Kamishak, Alaska 43 Peninsula management (indiscernible - distortion) up 44 there and it's about the last of Bristol Bay, south Alaska Peninsula, eastern Aleutian and 45 western 46 Aleutians. So we basically kept estimates from each of 47 the five management units (indiscernible - distortion) 48 overall population estimate for the southwest stock 49 (indiscernible - simultaneous speech) 50

ACTING CHAIR SKINNER: I'm sorry to interrupt, you're -- but you're breaking up a little bit, if you could maybe move closer to your microphone or if you're on speaker phone maybe switch over to not using speaker phone.

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7 DR. SCHUETTE: Okay. Yeah, I'll hold 8 Yeah, so the overall population it closer to me. 9 estimate across the five management units is 51,985 sea 10 otters. And then if we look more closely at the 11 Kodiak, Kamishak, Alaska Peninsula management unit 12 there's an estimated 30,658 sea otters. And then if we look just more closely at Kodiak, I know the Refuge has 13 14 provided some numbers from the aerial survey that was 15 written up by McCray Cob and then some skiff based surveys. And when we put this together we worked --16 17 did work primarily with the Kodiak surveys from 2014 18 and that estimate of 13,274 otters. I think somewhere 19 between yeah, 13 and 15,000 otters instead of the 20 current estimate there.

--22 We've been as we've compiled the 23 well, I'll come back to some ideas on surveys and --24 estimates we've been placing but based on those 25 calculations to calculate their -- that harvest level 26 or potential biological removal. So the estimate for 27 all the southwest stock is 2,417 animals that could be 28 harvested with little impact on the entirety of the 29 southwest stock. According to the mark and tagging 30 recording program, bench program, the total recorded 31 harvest on average from 2017 to 2021 is 576 otters per 32 So it's way less than 1 percent of the total year. 33 harvest considered sustainable. And then just in the 34 last year or two there's been less than a hundred 35 otters harvested reported by the (indiscernible 36 distortion) program. For the southwest stock overall 37 most of those otters are harvested in and around the 38 Kodiak area. 39

40 So that's kind of a summary of the 41 stock assessment report. 42

43 We're -- I guess some next steps. So 44 I've been trying to talk with Robin Corcoran a lot more lately so that we can try to coordinate some aerial and 45 46 some boat based survey methods a little bit better 47 between our office and the Refuge, but we're also 48 working to do it across all five management units. So 49 throughout time and basically the very different types 50

1 of surveys done from the western Aleutian -- from the western Aleutians, the eastern Aleutians, from Minta 2 3 and Kodiak. We're really moving towards trying to 4 standardize our survey efforts not just in southwest, 5 but across southcentral and southeast so we can kind of make it easier to make comparisons across regions. And 6 7 one idea we're building on is we've invested a lot in the southeast Alaska in the last couple years so we did 8 9 a really massive aerial photo based survey across all 10 of southeast Alaska for the first time ever doing it 11 all in one year, Ben and myself and our colleagues from 12 National Park Service and USGS helped us develop the survey design and can fly it with support from Owyhee 13 14 Air Research out of Idaho to fly over 5,000 miles of 15 transects when we're in southeast. So we've been working on developing a (indiscernible - distortion) 16 17 population estimate that's going to be released here 18 pretty soon to the public. And what's nice about the 19 photo based method is it provides a (indiscernible -20 distortion) of data for use into the future and it's 21 safer than the observer based methods that have been 22 used in the past. And we're also using some new 23 population modeling that allows us to incorporate all 24 historical data for it to provide a more complete 25 picture of the population status and trends through 26 time. 27

28 So that's worked out really well in 29 southeast and I'd be happy to share some documents on 30 that survey. They're supposed to be available to the 31 public in the next week or so. But we want to try and 32 use southeast as a model for what we want to do in 33 southcentral and southwest is to try to incorporate all 34 historical data and aerial surveys and boat based 35 surveys into the integrated population models so we can 36 kind of commit to more adequate, comprehensive 37 (indiscernible - distortion) of sea otters across the range in Alaska. So that's where we're hoping to head 38 39 in the coming year or so is to work at the Refuge, work at the Park Service, USDS has done a lot of work 40 41 through time in the Aleutian chain, but that would 42 bring together a lot of different datasets into a more 43 comprehensive model. 44

So that's kind of some of our next steps. Also since we've invested a lot in the -- a group called the Southeast Stakeholder Working Group, we're trying to bring together various interests from commercial fisheries, subsistence users, tribal 50

1 representatives, Fish and Wildlife Service, ADF&G, nonprofit organizations and other stakeholders. 2 We 3 formed this group I guess it was in 2020 or 2021, I 4 can't remember, but it kicked off with a Stakeholder Working Group meeting in 2019, right before I came 5 So we've -- this group has kind of been 6 onboard. 7 evolving through time and from that stakeholder meeting in 2019 is what led to getting support 8 from 9 congressional representatives to help fund this massive 10 survey across southeast that we did last year. But I 11 think it's been really productive, a lot of good 12 conversations, we meet quarterly.

14 And so we're planning to do some 15 travel this summer, Ben and myself, back to some of the communities across southeast to kind of build on these 16 17 discussions and partnerships and talk about the results 18 of the population survey and what that means for, you 19 know, future practices at the local level. So we're --20 we want to kind of build on that model and Ben and I'd 21 like to come out to Kodiak in say the summer or fall 22 and that's as far as we've gotten so far is that we'd 23 like to come out to (indiscernible - distortion) and 24 engage with the Refuge and whoever else. And since Ben 25 and myself have not been out there in our current 26 positions at Wildlife Service so if anybody has any 27 ideas or comments, we're kind of at the brainstorming stage of when and where and what that -- that visit for 28 29 (indiscernible - distortion) engage more and think 30 about population surveys and (indiscernible 31 distortion) matters in the region. 32

33 So that's all I have on my notes here.
34 I'm happy to fill in any blanks if I cut out or you
35 couldn't hear me or if you have any questions.
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37 ACTING CHAIR SKINNER: Yeah, thanks. 38 So the line unfortunately has been kind of garbled and 39 you were a little bit hard to understand. So I'm hoping that you can shoot an email over to Lisa with 40 41 three pieces of information and I think this is what 42 you said. At the beginning you mentioned a link to 43 something, but I couldn't tell what the link was for. 44 But if you can send the link and explain what the link is. If that link is for the stock assessment document 45 46 that you referred to that would be great, if not please 47 include a link to the stock assessment document that 48 describing when you just gave you were your 49 presentation. So those are potentially two different 50

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1 things. Number 3, it sounded like you referenced a comment opportunity, but again I couldn't 2 quite 3 understand or make out what the comment opportunity 4 was. So if you can describe that in your email that 5 would be helpful and then Lisa can make sure that that 6 email gets to the Council so that we have that 7 information. 8 9 And then generally I had one other 10 question. For the Southeast Stakeholder Working Group, 11 the meeting that they had in 2019, did the final report 12 from that report ever get completed and published? 13 14 DR. SCHUETTE: Yes, good question. So 15 I -- yeah, I do have a Word document that I can just share with Lisa to get to everybody with everything 16 17 about the stock assessment report and everything I can 18 to help them that'll make it more clear for whatever 19 (indiscernible - distortion) them. Yeah, I'll also --20 I'll also put a link to the location of that final 21 report from the Stakeholder Working Group. There's a 22 website and there's an all report document..... 23 24 ACTING CHAIR SKINNER: Okay. 25 26 DR. SCHUETTE:and a website. 27 ACTING CHAIR SKINNER: Thank you. Are 28 29 there other comments and questions from Council 30 members. 31 32 Pat, go ahead. 33 34 MR. HOLMES: Yeah, thanks for your 35 I was wanting clarification on a few things. report. Are your surveys strictly line transects and do you use 36 37 the same transects year after year or are they stratified where you have a higher sampling in areas 38 39 where you have known populations or do you have adaptive sampling based on the density and therefore 40 41 increase the counts in areas where you have high --42 higher density of critters? 43 44 DR. SCHUETTE: Yeah, good question. So 45 in the past including the 2014 survey around -- area 46 survey in Kodiak that was using the (indiscernible -47 distortion) intensive method which was used a lot 48 throughout -- across the State. And those were pretty 49 much a systematic surveys on these spaced transect 50

1 lines extending out from the coastline. We -- we've been moving and southeast is a good example of the past 2 3 Board which I wanted to bring up for numerous reasons, 4 but one of the other reasons that I didn't mention was 5 (indiscernible - distortion) time. We're moving -- and using this integrated population modeling approach the 6 7 output of that we used to optimize our survey design. So it's basically -- it's not a -- it basically would 8 have the ability to propose like up to like a thousand 9 10 different survey designs that would include randomized, 11 transect, systematic, stratified and other designs of 12 transect placement in that it optimizes the work 13 precision or estimates of (indiscernible - distortion) 14 and you can kind of refine the model based on your 15 interests. Also Joe Isinger who's at USGS, used to be with Fish and Wildlife Service, has developed this 16 model which is (indiscernible - distortion) it's an 17 18 optimized survey design so it's kind of putting 19 transects in areas across the range, some areas that 20 are expected to have low densities to high densities. 21 You know, when you look at a map of it it kind of looks 22 like it's random, but -- a randomized transect, but it 23 is the new optimized variety of (indiscernible 24 distortion) but it's not evenly spaced. But the 25 transects do extend perpendicular to the coastline, you 26 don't fly the coastline, we fly out from the coast.

28 MR. HOLMES: Do you take into account 29 weather and wind direction because I noticed here in 30 Kodiak when we've got really strong northwest winds in 31 the winter the critters get a lot denser in places like 32 in Uganik Passage and up tight next to the shore. And 33 when we're having southeasters then it seems like the 34 critters are spread out more? And then a second 35 question along that line is how do you account for migrations and movements because we had a really 36 37 intense population move into Women's Bay here at Kodiak, I don't know, six, eight years ago of, you 38 39 know, close to a hundred otters in a very small bay and 40 since then there's been no king crab there, there's 41 been almost none off of the Buskin until this year I've 42 seen a few exzubia in the spring from the crabs, but 43 that's the first time I've got in 15, 20 years. And 44 so, you know, the critters tend to move around the island where there's food to eat and often that's the 45 46 same food that subsistence users avail themselves on. 47 And so keeping track of where the major part of the 48 population is I think is really important to local 49 folks so that they can avoid that or if people are 50

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hunters we don't take that many anymore, but so that they can avail themselves to trying to get a little more edge on for where they live. I'm sorry, I'm rambling, but do you account for -- I guess you're trying to find out what they're doing as far as movement with your surveys and having them adaptive; is that correct?

9 DR. SCHUETTE: Yeah. No, those are 10 great questions. So I'll go to the first question 11 first which was about weather. Yeah, we try to have 12 pretty strict rules on when -- when we fly due to 13 visibility knowing that sea otters can -- for one, they 14 can be kind of difficult to see if there's whitecaps. 15 So if there's a lot of whitecaps we won't fly. And likewise yeah, if it's -- it -- as she stated it's just 16 rough and it's too -- well, if it's too windy we won't 17 18 fly because the pilot won't let us fly, but, you know, 19 if there's weather that's not good for visibility -- if 20 we think that there's going to be differences in 21 sightability of otters based on weather then we 22 typically won't fly on those days. But we can also account for some of those variables in our population 23 24 model or we account for availability so we have methods 25 account for percentage of otters that are to 26 unavailable to be seen because they're water foraging. 27 So we can account for availability and we can also account for detection due to sea (indiscernible 28 29 distortion) and canopy kelp and other aspects that 30 might influence their ability to see sea otters. So 31 that's a big part of the surveys is just making sure 32 we're -- we have -- we're accounting for differences in 33 sightability of otters.

35 The second question is a really good 36 question and that's something we're working on, air 37 We actually have a big population survey mounts. across Cook Inlet right now that we're working on with 38 39 USDS and BOEM. And that goes from like Kachemak Bay, I think eastern Cook Inlet all the way to western Cook 40 Inlet down towards like Augustine Islands. 41 And it's 42 funded by BOEM primarily in areas overlapping the 43 potential lease or the lease box for oil and gas That's kind of the motivation behind 44 development. 45 those aerial surveys. And those are seasonal surveys 46 so we're trying to do three or four seasons worth of 47 aerial surveys across that so we can encapsulate the 48 movements related to the sea ice and forage resources 49 and shatter movements through time. So that's really 50

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1 one of the first efforts in the sea otter world, at least in Alaska, to start to look at seasonal change in 2 3 sea otter distribution. And we'd like to expand on 4 that in the future because I know that's of high interest to a lot of people, you know, not just -- most 5 sea otter surveys happen when the weather is good so 6 7 it's usually May or June, somewhere between May and August is when most sea otter surveys happen and 8 they're usually just flown over, you know, one period 9 10 of time and not repeated (indiscernible - distortion). 11 So we can kind -- yeah, we're -- it's basically a view 12 of where sea otters are in the summer unless they do the seasonal efforts in the future. There's also some 13 14 ideas about using tagged animals, monitor tagged 15 animals and look at their seasonal movements. And you can incorporate the seasonal movements against tagged 16 17 animals into the aerial surveys to try to explore 18 seasonal movements a little bit better. But we also --19 yeah, linking to the invertebrate (indiscernible -20 distortion) resources. Yeah, those are some of the 21 kind of ecological questions that are of interest to a 22 lot of people from subsistence users to commercial 23 fisheries that we're trying -- looking to explore more 24 in the future as well. 25

I don't know if that answers your question, but basically there's a couple ways we can get at seasonal movements that we're interested in trying to explore, but currently most surveys are just in the summer months.

32 Yeah, you did a good job MR. HOLMES: 33 there. I think that shows that you're trying to be a 34 little more precise in your surveys and survey 35 technique. I have one other question on genetics and 36 one of your predecessors a few years back made a 37 comment that genetics were distinct and that basically 38 Kodiak out to the Aleutians and then somebody else 39 commented on Prince William Sound in southeast. But as I recall back in the late '60s, early '70s before the 40 41 Marine Management Act shifted management Carl Snyder 42 with Fish and Game and several other people moved 43 otters from Amchitka to Prince William Sound and then 44 to southeast because the populations there were really 45 small. And so that's always been something that's 46 tickled my mind and I'm wondering if that just wasn't 47 the lack of experience on the part of the bureaucrat 48 that was talking to us because -- because of all those 49 transplants that were done, you know, I don't know that 50

1 you could really come up with some distinct genetic differences between the regions, it's more a matter of 2 3 administrative abilities to survey in different 4 geographic areas. 5 6 Thank you. 7 8 DR. SCHUETTE: Yeah, that's another good question. In my email I'll put a link to a recent 9 10 genetic paper on sea otters in Alaska that was 11 published in 2021 which might be helpful. I admittedly am not top of my head great on summarizing the 12 13 differences or lack thereof genetically for sea otters 14 in the region, but that paper is a pretty good summary. 15 16 MR. HOLMES: Yeah, that would be swell. 17 I think that would be of interest to me and I'm sure 18 some of my Tlingit friends down in southeast and folks 19 up in Prince William Sound. So if you could send that 20 to our Coordinator and perhaps the Coordinators for the 21 other RACs that have otters, I'm sure folks would be 22 quite interested in that paper. 23 24 Thank you very much, Sir, appreciate 25 your time. 26 27 DR. SCHUETTE: Yeah, thank you. 28 29 ACTING CHAIR SKINNER: All right. Are 30 there further comments or questions. 31 32 Coral, go ahead. 33 Thank you. 34 MS. CHERNOFF: I have a 35 question, are there any estimates on how many males and how many female otters there might be? 36 And then my 37 second question is how often do otters reproduce, do 38 they have one baby otter once a year or more? 39 40 DR. SCHUETTE: Yeah. So yeah, for reproduction yeah, they're pretty consistent, I think 41 42 it's every year or every two years. I wish Ben was on 43 the call he would be more affirmative in his answer, 44 but yeah, around that length of time in between. 45 46 The male versus females. We kind of 47 attempt that. One thing we try to do is keep track of 48 pup to mother ratios. So when you're flying you can --49 we want to be able to distinguish pups from adults so 50

0216 1 we can keep track of it that way and the pups are usually with their mothers, we can distinguish them 2 3 that way, but distinguishing lone males versus lone 4 females is a little bit more challenging from the air. 5 But yeah, the main metrics for sex is the female/pup 6 ratios or pup/female ratios. 7 8 ACTING CHAIR SKINNER: All right. Are 9 there any other questions or comments. 10 11 (No comments) 12 13 ACTING CHAIR SKINNER: All right. 14 Seeing and hearing none, that you Dr. Schuette, and 15 we'll just keep an eye out for the information, if you can send that to Lisa she'll make sure that all the 16 17 Council members get it. 18 19 So thank you very much. 20 21 DR. SCHUETTE: Yeah, thank you. 22 23 ACTING CHAIR SKINNER: Okay. So I did 24 say we were going to take a break around 10:45. I 25 think we'll take that a few minutes early. And then at 26 11:00 we have the time certain call with Mr. Newland 27 which I understand will go approximately 30 minutes. And then after that so sometime I assume around 28 11:45ish we will have -- we're going to move up Kate 29 30 Martin. So this would be the Atlas of Sea Duck Key 31 Habitat. And I did think about trying to squeeze it in 32 before 11:00, but I think that's really going to short 33 change that presentation. 34 35 So that's the -- the order of events. 36 So we'll go ahead and take a break now. If everyone 37 can make sure to be -- Council members back in your 38 seats a couple minutes before 11:00 so that we can be 39 ready for that 11:00 time certain. 40 41 Thanks. 42 43 (Off record) 44 45 (On record) 46 47 ACTING CHAIR SKINNER: I'm checking to 48 see if Bryan Newland is online. 49 50

0217 1 MR. NEWLAND: Yes, ma'am. 2 3 ACTING CHAIR SKINNER: All right. 4 Thank you. We weren't sure if we were going to 5 announce you or you were going to announce yourself. 6 So thank you. 7 8 So we're going to reconvene the meeting 9 we're going to hear from the Department of and 10 Interior, Indian Affairs briefing regarding Office of 11 Subsistence Management with Bryan Newland, Assistant 12 Secretary. 13 14 Go ahead. 15 16 MR. NEWLAND: Well, thank you, Chair, 17 and members of the Council. I'm really glad to be here 18 with you and I appreciate you all making time for me to 19 speak today. My name is Bryan Newland, I serve as the 20 Assistant Secretary for Indian Affairs here at the 21 Department of the Interior and I wanted to share just a 22 little bit about the Department's proposal to move the 23 Office of Subsistence Management from the Fish and 24 Wildlife Service to our office, in the Assistant Secretary for Indian Affairs hallway. 25 This proposal 26 was included in President Biden's proposed budget for 27 fiscal year 2024 which was recently released and shared 28 with Congress. 29 30 So as I think everybody on the call 31 knows last year the Department of the Interior and USDA 32 and the Department of Commerce hosted a number of tribal consultation sessions as well as listening 33 34 sessions on how we can improve the Federal Subsistence 35 Management Program to better meet subsistence needs in 36 Alaska. And those consultation sessions were aimed in 37 particular at Alaska Natives. One of the clearest and 38 most consistent comments and directives that we got 39 through these consultations was to move the Office of Subsistence Management out from the Fish and Wildlife 40 41 Service to the Office of the Secretary. Moving OSM 42 from Fish and Wildlife Service was also one of the 43 primary asks during the Department of Interior's 44 Statewide review of the Federal Subsistence Program And so this is a longstanding and 45 back in 2010. 46 consistent request from a lot of tribes and people 47 across the State of Alaska. And we based a lot of our 48 work on that feedback. 49

1 I think everybody on the call also understands that subsistence practices are important 2 and vital to the way of life in Alaska Native 3 communities and as well as for a lot of non-Native 4 5 rural Alaskans. In particular Alaska Native people depend heavily on subsistence practices for their 6 7 nutrition as well as for their cultural practices and 8 traditional ways of life.

10 Comments that we received from the 11 consultation sessions that we held last year pointed to 12 the adverse impacts of the changing climate on 13 subsistence practices. And I know that these climate 14 impacts affect all subsistence users. During our consultations many of the comments highlighted the need 15 16 partnerships to expand tribal and improve the 17 incorporation of indigenous knowledge into our 18 subsistence management practices. We believe that 19 elevating the Office of Subsistence Management to be 20 located within the Office of the Assistant Secretary 21 which is also part of the Office of the Secretary will 22 help ensure that this program gets a high level of 23 visibility here in the policy team at the Department of 24 Interior and it will improve access to the resources it 25 needs to carry out its mission.

27 If this proposal is adopted OSM will 28 continue to provide support to the Federal Subsistence 29 Management Program for the benefit of all rural users 30 consistent with title VIII of ANILCA. We believe that 31 this is going to strengthen the program and that all 32 users will benefit from the additional opportunities 33 here in our office to leverage indigenous knowledge and 34 enhance our partnerships in collaboration with tribes. 35 Under this proposal in the President's budget all of 36 OSM's functions and funding would move from the Fish 37 and Wildlife Service to the Office of the Assistant 38 Secretary. And all OSM Staff would retain their 39 positions and their responsibilities unless they 40 voluntarily choose to remain with the Fish and Wildlife 41 Service. So I want to repeat that for emphasis. Under 42 this proposal all OSM Staff would keep their jobs along 43 with their responsibilities unless they chose to stay 44 within the Fish and Wildlife Service. 45

46 The proposal and the budget also asks 47 for an additional \$2.5 million for OSM and it would add 48 \$1.5 million to the FRMP Program and a million dollars 49 to begin a Wildlife Resource Monitoring Program similar 50

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0219 1 to the Fisheries Resource Monitoring Program. The proposal as we've crafted it would not qo into affect 2 unless it's approved by Congress in this year's 3 4 appropriations. We have submitted it to Congress and we're going to continue working with them over the next 5 few months as they consider the President's budget 6 7 request. 8 9 So I will stop there, Chair and members 10 of the Council, and see if you all have any questions 11 that I can answer today. 12 13 ACTING CHAIR SKINNER: All right. 14 Do we have questions or comments from the Thank you. 15 Council. 16 17 Pat, go ahead. 18 19 MR. HOLMES: Yes, Sir. I just -- this 20 is the first presentation that I understand that this 21 happened and I understand your logic and the logic from 22 the people up in the AYK and northern Alaska, but at 23 least my experience in -- down here in the Aleutians, 24 Alaska Peninsula or Kodiak, Prince William Sound, 25 southeast, there are as many or more non-tribal people 26 involved. And so even though you say that things won't change, you're making this based on the request from 27 28 those entities in other parts of the State. And I was 29 wondering if you've taken a look and -- on actually how 30 many people are tribal and how many people aren't as 31 far as subsistence goes. I've worked a long time with 32 the local tribes, NVA and Sun'aq and for many years I was the pro bono biologist for Sun'aq and helped out 33 34 with things for Afognak, but, you know, what you're 35 being presented I could see that some folks that aren't 36 tribal could be worried. 37 38 So solve my worries. 39 40 MR. NEWLAND: Sure. Sure. Thanks. 41 Thanks, Pat, I appreciate that comment and that 42 question. So, you know, generally speaking an 43 overwhelming majority of the subsistence users in 44 Alaska are Alaska Native, but we also know that ANILCA speaks to subsistence use in the context of rural 45 46 Alaskans. And here within my office in Indian Affairs 47 we do operate a number of programs that serve both 48 tribal members and non-Natives. So just one example in 49 the lower 48 is the BIA operates a number of irrigation 50

0220 1 projects that primarily serve non-Native farmers who have lands within reservations. And, you know, there's 2 3 some things we're accustomed to doing. The fact of the 4 matter is -- so I'm not -- I don't want to misspeak, it's not my expectation that nothing will change as a 5 result of this move. We think over the long term this 6 7 move will better align OSM's functions with the Department of the Interior's trust obligation to Alaska 8 9 Natives. But I also want to assure you that the 10 responsibility of OSM to carryout its functions under 11 title VIII will not change so long as title VIII 12 remains the law. And ANILCA says what it says and this 13 move doesn't change that. And so it -- the move is not 14 aimed at that piece of ANILCA, it's more aimed at 15 better aligning our work with OSM with the Department's 16 trust obligation to tribes and Alaska Natives. 17 18 I hope that responds to your concerns, 19 but I appreciate you raising them. 20 21 ACTING CHAIR SKINNER: Thanks. 22 23 MADAME CHAIR TRUMBLE: Madame Chair, 24 this is Della. 25 26 ACTING CHAIR SKINNER: Go ahead, Della. 27 28 MADAME CHAIR TRUMBLE: I guess I like 29 -- I didn't really see any documentation (indiscernible 30 - distortion) was told. I'm curious on how you expect 31 us to work when you're given that the RACs are made up 32 of various user groups that represent the sports, And so that -- they work 33 commercial, subsistence. 34 together to recognize each other's ability to work 35 together and coming to decisions in regard to all this. 36 So I'm just -- I'm a little confused on how you expect 37 us to work if what -- given the way the RACs are set 38 up? 39 40 Thank you for that MR. NEWLAND: 41 comment. Again the day to day functions of what OSM 42 does to administer the parts of title VIII, those will 43 remain the same because title VIII is the law. And 44 that will include OSM's work with the RACs. What this move is really aimed at is again aligning OSM's long 45 46 term policy objectives, better aligning it, with our 47 trust responsibilities, also meeting our requirements 48 under ANILCA and then raising the profile of OSM here 49 at the Department of the Interior, you know, in our 50

0221 1 expectation and hope that or belief that this will also protect the funding and better resource OSM going into 2 3 the future. But in terms of the RACs and the 4 relationship with OSM, you know, that work will 5 continue. 6 7 ACTING CHAIR SKINNER: Thanks. So can 8 you flesh out a little bit.... 9 10 MADAME CHAIR TRUMBLE: Madame Chair. 11 12 ACTING CHAIR SKINNER:wore when 13 you say what will change is aligning OSM's long term 14 policy objectives with the trust responsibility, can 15 you give some examples of that or describe what the vision is, what that would look like in the future 16 because if that's what's changing I think it would 17 18 really be helpful to the public and to the Councils to 19 understand what the system is changing into. 20 21 Thanks. 22 23 MR. NEWLAND: Sure. Just generally 24 speaking the United States has what we call a trust 25 obligation to Indian people and Alaska Natives. And 26 that trust obligation includes a number of legal and 27 policy and moral commitments that the country has made 28 and one of them is to protect the way of life and the 29 tribal existence of tribal people. And so over the 30 long term what we aim to do is to make sure that the 31 Subsistence Management Program here at the Department 32 of the Interior is better accounting for the existence 33 of the tribal way of life of Alaska Native people while 34 also maintaining its role under ANILCA. And so it --35 you know, it's -- my comments off the top were aimed at addressing that, but wanting to make sure that we 36 37 acknowledge that a overwhelming majority of subsistence 38 users are Alaska Native -- Alaska Natives and they 39 depend on subsistence resources to maintain their tribal existence and way of life. And so over the long 40 41 term, again I'm not trying to be circular or vague with 42 or evasive, that's really the overall goal with this 43 move. 44 45 In terms of details, there's going to 46 be a number of conversations that we have with Congress 47 and with folks in Alaska as Congress considers the 48 President's budget, about the details and if Congress 49 approves this then we will have to begin the process of 50

0222 1 actually moving OSM within the organization. But the people you all work with at OSM, their offices, where 2 3 they're at and the day to day functions will remain 4 largely the same as what you know now. 5 6 ACTING CHAIR SKINNER: All right. 7 Sorry, I have a couple more questions. 8 9 MR. NEWLAND: Uh-huh. 10 11 ACTING CHAIR SKINNER: So when the 12 Federal Subsistence Program was originally established 13 there was an expectation or a hope that eventually the 14 State of Alaska would take over management so there 15 wouldn't actually be this separate Federal subsistence management, it would -- it would be under the State. I 16 17 am not sure right now if there is still that hope and 18 expectation, but assuming that there is how do you see 19 the shift of moving OSM from Fish and Wildlife under 20 Indian Affairs, it -- it seems like that step is moving 21 away from a hope that the State would eventually I 22 guess take over management of the program. But what 23 are -- what are your thoughts on that? 24 25 MR. NEWLAND: Well, I can't speak to 26 that particular viewpoint, Ma'am, about, you know, 27 whether that was the original intent. What we have 28 here is ANILCA itself and the Department's 29 responsibilities. And so as long as we have them here 30 at the Department of the Interior they have to align 31 with our trust responsibility as well. 32 33 So that's -- that -- that's what I'll 34 say in response to your question. 35 36 ACTING CHAIR SKINNER: Okay. Thanks. 37 And then can you share which tribal groups -- which 38 Alaska tribal groups you consulted with, is that 39 something that you can share? 40 41 MR. NEWLAND: So I don't have the list 42 up in front of me at the moment though what I can say 43 in these government is that I participated to 44 government consultations early on in the President's Administration, they were Statewide. 45 And we had I 46 believe three and then we had a number of listening 47 sessions as well with subsistence users and they were 48 very well attended. I don't want to give you a number 49 and misspeak, but they were Statewide. 50

1 ACTING CHAIR SKINNER: Okay. And then my last question and there may be others, I assume or I 2 3 quess you can confirm this. If OSM moves under Indian 4 Affairs would the Indian hiring preference apply? 5 6 MR. NEWLAND: That's a great question. 7 So within the Office of the Assistant Secretary is not -- is not the same as the Bureau of Indian Affairs. I 8 oversee the Bureau of Indian Affairs, but it's its own 9 10 entity. Within our office as a general rule the Indian 11 Preference Policy does not apply except when people are 12 engaged in direct service of tribes. So most of the 13 folks in my office are advisors to me or I guess in a 14 manner of speaking and advisors to the Assistant 15 Secretary. So the short answer to your question is that for all but I think one or two positions at OSM 16 17 the Indian Preference Policy would not apply. 18 19 ACTING CHAIR SKINNER: Okay. Thank 20 you. That washelpful. Are thereotherquestionsor comments. 21 22 Chris Price, go ahead. 23 24 MR. PRICE: Thanks, Bryan. Thanks for 25 meeting with us today. Question about OSM. You know, 26 did it -- did it end up in Fish and Wildlife for --27 just by chance or how did we -- how did it start at 28 Fish and Wildlife and does that -- you know, it seems 29 like you're kind of suggesting an administrative move 30 that's mostly to, you know, enforce -- you know, 31 protect the trust responsibilities you have with 32 tribes. But just curious why Fish and Wildlife was the 33 original location of OSM? 34 35 MR. NEWLAND: Yes, that's a good 36 question and I -- I'm probably not the best person to 37 answer that question because I don't -- I don't know 38 all the nuances or ins and outs of that history. So I 39 don't want to disrespect you or anybody else, by just, you know, giving a wrong answer. But one of the things 40 41 I do want to say though, Sir, just in response to that 42 is, you know, I've mentioned the words trust 43 responsibility probably a hundred times already in this 44 short call. That is -- I would describe that as a plus one or an addition to OSM priorities and obligations 45 46 So it's not sacrificing anything in under ANILCA. 47 favor of the trust responsibility, it's better meeting 48 our trust responsibility while doing the work we're 49 already required to do. 50

0224 1 ACTING CHAIR SKINNER: Sam, go ahead. 2 3 MR. ROHRER: Through 4 the Chair. Thanks, Mr. Newland, for the presentation. This is Sam Rohrer here. So I guess I have a couple 5 questions. As you mentioned -- you have mentioned the 6 7 term trust obligations several times on this call. I'm certainly well aware of the Federal government's trust 8 9 relationship or obligations to lower 48 tribes. It's a 10 little bit different in Alaska -- it's a lot different 11 in Alaska. There's land in the trust issues which kind 12 of falls in line with what you're talking about, but I 13 guess -- I guess could you expand on what you view as 14 the Federal government's trust obligations in Alaska or 15 can you point us to, you know, the documentation of 16 this issue? 17 18 Thanks. 19 20 That's a great question MR. NEWLAND: 21 and a weighty question. So just the -- when I refer to the Federal government's trust responsibilities there 22 23 are several layers to it. The Federal government has 24 trust responsibilities to all tribes and the Federal 25 government has trust responsibility to each tribe and 26 then the Federal government has a trust responsibility 27 to each American Indian and Alaska Native person. And 28 so there are three layers to that and that does reach 29 Alaska and it's based on a number of things, in some 30 cases treaties, in some cases specific statutes and in 31 some cases just the nature of the relationship between 32 the United States and tribes and tribal governments. 33 So on the ground when you're talking about what does 34 trust responsibility mean. the Each tribe is 35 different, each tribe is subject to maybe its own 36 treaty or its own statutes and the same -- you know, so 37 each tribe is different and Alaska is different from 38 the lower 48. But the trust responsibility reaches all 39 tribes and all Alaska Native people the same as it does 40 in the general sense as it does all American Indians. 41 And there are laws that affects that. ANCSA is a law 42 that affects that, ANILCA is a law that affects that. 43 The Alaska Indian Reorganization Act is another law 44 And so, you know, how specific we that affects that. get depends on each tribe and each statute. 45 46 I do want to take just a moment and go 47 48 back to the previous gentleman's question about the 49 consultations and who participated. That information 50

0225 1 is available on our BIA website at BIA.gov. You can tribal consultations and 2 look up there were consultations on the Federal Subsistence Policy and 3 4 we've got a summary report of those consultations as well as when and where they occurred. So I want to 5 make sure we're being transparent on that. 6 And we're 7 going to pass that website on to Sue Detwiler's team so she can share with you all, pass those links on. 8 9 10 ACTING CHAIR SKINNER: Yeah, that would 11 be helpful. Are there other questions or comments. 12 13 Pat, go ahead. 14 15 MR. HOLMES: Yeah, I think in answering 16 Chris' question I've been in Alaska since Statehood and 17 the whole discussion and arguments on rural preference 18 and that not being achieved by the State because of one 19 or two votes in the Legislature not letting it go to a 20 ballot Statewide when 75 percent of the people wanted 21 to have it. So that's why we ended up having the whole program developed. But as I recall, I might be 22 23 correct, somebody might want to refresh me, but I 24 believe it was done to Fish and Wildlife Service 25 because they are the major agency responsible for land 26 ownership of the Federal government in Alaska. And I 27 would like -- you gave me some statements on numbers of 28 people involved in subsistence. I would like to see that data and how you compare it against data of 29 30 subsistence users who are not tribal members. Some of 31 our tribal members here in Kodiak are having some 32 pretty deal issues with on let's say sea otter harvest 33 on blood continuum and because there might be one 34 person that's part of their ethnic background is Native 35 and part of it isn't and they're married to a non-Native and so therefore their kids cannot participate 36 37 specific things assigned in the for subsistence utilization of sea otters. And so I really would like 38 39 to see both sides -- the data on both sides and you've quoted that so could you please supply that to us, Sir. 40 41 42 Thank you. 43 44 MR. NEWLAND: Thank you for that. And that's -- you know, what you describe there is a 45 situation that's not unique to Alaska. It is the --46 47 that's something we see across Indian country when you're talking about the relationships and tribal 48 49 status of folks. And in terms of data I will see the 50

0226 1 data we have that we can share with you, you know, we want to make sure we're being candid and transparent. 2 3 4 ACTING CHAIR SKINNER: All right. 5 Thank you. Are there further questions or comments. 6 7 (No comments) 8 9 ACTING CHAIR SKINNER: All right. And 10 I just want to check. Della or Rick, I want to make 11 sure if you have questions or comments I give you an 12 opportunity. 13 14 MADAME CHAIR TRUMBLE: This is..... 15 16 MR. KOSO: No, I'm fine on that. 17 Thanks. 18 19 ACTING CHAIR SKINNER: Okay. 20 21 MADAME CHAIR TRUMBLE: This is Della. 22 I do have one question. I guess if you're looking at 23 going through this process do you have a time frame? 24 25 MR. NEWLAND: That's a -- that's a 26 great question. So the way that we've structured this 27 proposal is to seek Congress' approval through the 28 So the time frame would start with budget process. 29 Congress approving this proposal and then we would 30 begin the transfer process from there. So there's --31 there are a lot of details that -- there are a lot of 32 questions we can't answer until we get to that point. 33 And the details about how an office or an agency gets 34 moved from one organized -- part of the organization to 35 You know, they get -- they get filled in the next. the process. So it would 36 through start with 37 Congressional approval and then any conditions they put 38 on that and we would -- we would go from there. But 39 this would -- as we wrap up here one of the things I do 40 want to emphasize is that this is the beginning of this 41 conversation, it's not the end. And I anticipate that 42 we will have many more conversations through my office, 43 through Sue Detwiler and her team at OSM about more of the details. And I wanted to make sure I took my time 44 as part of the administration to speak with you all and 45 46 just layout the top lying parts of this proposal and 47 the goals behind it and try to answer the questions 48 that we can today. 49

0227 1 ACTING CHAIR SKINNER: Pat, go ahead. 2 3 One brief question. MR. HOLMES: You 4 quoted that there were numerous public meetings on this issue. I don't recall seeing anything in our local 5 media here in Kodiak on them. Was that information or 6 7 meetings only held with tribal folks and could you please advise when those notices went out to the 8 different groups in Alaska and when the meetings were 9 10 held and where? I'd really appreciate that so I can 11 talk to some of the folks here in town that are my 12 Native friends and ask them, you know, what their 13 thoughts were and if the attended. 14 15 Thank you. 16 17 MR. NEWLAND: Sure. Thanks, Pat. And 18 I apologize, I'm going to have to run after this, but 19 I'll answer your question. The meetings that I 20 today were tribal referenced consultations and 21 listening sessions for subsistence users. So we've got 22 all of that information on our website and again we'll 23 get those links and reports to Sue for distribution to 24 you all so you can see them. 25 26 MR. HOLMES: If you could have one of 27 your Staff identify those things in particular because I'm pushing 80 and I'm not very computer adept and some 28 29 of our other members aren't and it would be nice to 30 know, you know, exactly what those points were because 31 just handing me something and I don't even have an 32 iPhone and a lot of other old-timers here in town, 33 Natives and non-Natives are the same way. So it would 34 be nice if you could have one of your folks put a 35 little -- go to that site, but identify the specific 36 things that answer the questions that we have raised, 37 that would be greatly appreciated. 38 39 Thank you, sir. 40 MR. NEWLAND: 41 Thanks, Pat. And again 42 we'll try to get the materials that we've got on our 43 website to you and I recognize that a lot of folks in 44 Alaska don't have ready access to, you BI's website or 45 any websites for that matter. So I will -- we'll do 46 our best to get the information you're asking for to 47 you. 48 49 ACTING CHAIR SKINNER: All right. 50

0228 1 Thank you. 2 3 MADAME CHAIR TRUMBLE: Madame Chair, 4 this is Della. I just have one more fast comment. 5 6 ACTING CHAIR SKINNER: Go ahead, Della. 7 8 MADAME CHAIR TRUMBLE: And base -basically it's in regard to when we make decisions for 9 10 subsistence and using caribou as an example, it's the 11 people that benefit from it are the residents of the 12 region or the, you know, various communities and it's 13 not -- you're not all Native people. There -- it's --14 you know, there's people that live within that region 15 as a resident. So I'm kind of curious, I definitely 16 would like to see more information. 17 MR. NEWLAND: 18 Uh-huh. Thank you. 19 We'll be having more conversations as we go forward, 20 including our conversations we're going to have with Congress. So I just -- I want to make sure you all 21 22 that we're aiming to be candid and transparent which is 23 why I'm here on this call with you today. And, you 24 know, we're going to try to answer all the questions 25 that we have answers to and because we feel strongly 26 that this is the right path and we want to explain 27 ourselves and we're the -- we're part of the government 28 and we're accountable to you. So we'll do our best to 29 answer your questions and continue this conversation. 30 31 And I'm -- I am terribly sorry, I've 32 got -- I've run over on my time, I've got another 33 meeting. I know Sue will probably be speaking with you 34 much more frequently than me, but I want to express my 35 gratitude to you all for allowing me this time today. 36 37 ACTING CHAIR SKINNER: Yeah. Thank you 38 for joining us and sharing the information. 39 40 Thank you. MR. NEWLAND: Take care, 41 everyone. 42 43 ACTING CHAIR SKINNER: Bye-bye. Are 44 there other -- any comments or Council discussion. 45 46 Coral, go ahead. 47 48 MS. CHERNOFF: Yeah, I guess I just 49 have -- maybe Orville could respond, like did we 50

0229 1 receive the notice, the Subsistence Board, of tribal consultation on this? 2 3 4 MR. LIND: I don't pretend to know 5 everything, but I'm going to tell them what I know. 6 7 (Laughter) 8 9 MR. LIND: Madame Chair, Council 10 members. So there was an email from external affairs 11 again from our office, but it was really а 12 (indiscernible - distortion) extended email out to 13 information all ARDs and back me up, Lisa, that this 14 was going to happen, that they were going to do tribal 15 consultations from Washington folks to the Alaskan tribes. And it has happened and I have joined a couple 16 17 of them. And it's -- for me it's something that's 18 going to be a while yet I believe and it is as Chris 19 said, it's more focused I believe on the continuation 20 of the tribal trust responsibility stuff. And I think 21 we don't need to get too excited about it right now, 22 but one thing I do like hearing repeatedly is that OSM 23 shall -- Staff shall remain intact. And that's how we 24 work the best with our folks. 25 26 And that's all I have. 27 ACTING CHAIR SKINNER: Yeah. So just 28 29 to follow-up on that, I understand why the RACs 30 wouldn't be invited to tribal consultation because 31 we're not tribes, we're RACs. However there is specific reference to public listening sessions for 32 33 subsistence users. And I am concerned that we weren't 34 notified and invited to participate in those listening 35 sessions for subsistence users. And it does seem problematic that ANILCA requires continued subsistence 36 37 access for both Native and non-Native subsistence users, but the limited opportunity to participate in 38 39 these listening sessions wasn't even made available to 40 the RACs let alone other non-Native people who aren't 41 affiliated with the RACs. So that does seem -- I mean, 42 I am concerned with that and that does seem problematic 43 because if this is how this process is kicking off my 44 concern is it's just going to get kind of worse and 45 worse and worse as things go. 46 47 MR. LIND: So I would just add..... 48 49 MS. DETWILER Madame Chair. 50

1 MR. LIND:Madame Chair, is that this really is in early stages yet and I think we all 2 3 really didn't comprehend I guess the largest or the logistics, everything that involves this new focus, 4 this new venture. And all I can say is there's more to 5 come and with your request I certainly can assist in 6 7 getting that information out. 8 9 ACTING CHAIR SKINNER: Yeah, and I 10 would just say it's not that early since this change 11 has been incorporated into the President's budget. 12 That is quite a ways down the road, I mean, it's made 13 it quite a ways down the road already. And this -- my 14 concerns aren't directed at you, they're directed more 15 at these things that are happening in D.C. that are far, far away from here and they're not -- at least I 16 17 don't see, they don't seem to be incorporating feedback from the RACs which I think are a key part of this 18 19 process. 20 21 So I see Coral and Sam. I think Della 22 might have been -- and then Pat. Okay. So I'm -- I 23 saw Pat's hand first so I'm going to go Pat, Coral, Sam 24 and Della if she was trying to get in. 25 26 MR. HOLMES: Yeah, Orville, thanks for 27 your trying to make -- help us understand. And I think that any white dude would rather be a Native. That's 28 29 probably me even though we're -- might be cousins. 30 31 But I guess the question Della asked 32 and Becky's giving out is was there a consultation with 33 the existing Federal Subsistence Board or are they kind 34 of left out because this is a administrative function, 35 an exploration from the BIA? 36 37 MR. LIND: Thank you for that. Through 38 the Chair. There was no information at the last 39 Federal Subsistence Board on this as far as I can 40 remember. 41 42 ACTING CHAIR SKINNER: Go ahead, Pat. 43 44 MS. DETWILER: Madame Chair, this is 45 Sue Detwiler here and I'm really sorry to jump in, but 46 I just wanted to let you know that I am on the phone. 47 And for anybody who doesn't know me I'm the Assistant 48 Regional Director for the Office of Subsistence 49 Management. And again I apologize for jumping in, it's 50

0231 1 probably incorrect protocol, but I just wanted to let you know I was on the phone and I do have a comment 2 3 whenever it would be helpful. 4 5 ACTING CHAIR SKINNER: Okay. Thanks, 6 Sue. I'm going to run through the comments from 7 Council and then I will -- you'll go after Della. 8 9 So, Pat, did you have a follow-up or 10 were you set. 11 12 (No comments) 13 14 ACTING CHAIR SKINNER: Okay. Coral. 15 16 MS. CHERNOFF: Yes, thank you. So I 17 guess I heard the comment that somebody thought that 18 this wasn't really critical at this point and I assume 19 that's why we didn't get notice. We have received --20 I've received lots of notices in the past for tribal 21 consultations. So I guess I would just request in the 22 future that maybe the Office of Subsistence Management 23 maybe not decide what is important for us to get and 24 what is not important. And then if we just maybe get 25 notice of tribal consultation, I would appreciate that. 26 27 Thank you. 28 29 ACTING CHAIR SKINNER: Thanks. Sam. 30 31 MR. ROHRER: Yeah, thanks. I have a 32 couple comments. I guess the first thing I would say 33 is using the terms candid and transparent after the 34 proposal's made and after the budget request is in is a 35 little ironic. It's -- this proposal's a lot of things, but it apparently isn't candid and apparently 36 37 isn't transparent or the process. So that's a little 38 frustrating. And, Rebecca, as you pointed out it is 39 certainly well along in the process, it's in the 40 President's budget. 41 42 I guess my -- I have a couple concerns, 43 but for now my two biggest concerns are I -- as it sits right now OSM -- the head of OSM is in Alaska. I worry 44 moving 45 about moving management, moving control, 46 supervision farther away from Alaska, into D.C., that's 47 just scary, that hard dealing -- it's hard for Alaskans 48 to deal with bureaucracies back in D.C. and obviously 49 the heads of all these organizations are back there or 50

0232 1 agencies are back there, I get that. But there is quite a bit of local in Anchorage management, the 2 3 Regional Directors are there. And so this concerns me 4 on how that would be set up, where would the head of OSM be stationed out of, who would they be answering 5 6 to. So that's scary to me. 7 8 And then I guess the other question 9 would be -- I'm not -- I'm not familiar with all the 10 programs that BIA administers, but how many wildlife 11 management pro -- I mean, do they have wildlife management -- other wildlife management programs, is 12 this going to be the only group of biologists working 13 14 for BIA like that. The anthropology end of it I get 15 that, I'm sure they have plenty of experience in that, but do they really have experience managing animals. 16 17 That scares me. 18 19 So that's all for now. 20 21 ACTING CHAIR SKINNER: Yeah, and I 22 would just clarify the clarification that Mr. Newland 23 made that it's not under BIA, it's the..... 24 25 MR. ROHRER: Indian Affairs. 26 27 ACTING CHAIR SKINNER:Indian 28 So his office is separate from BIA so Affairs, yeah. 29 it wouldn't even be within BIA. 30 31 MR. ROHRER: And that prob -- and that 32 probably makes my concerns even more concerning, yes. 33 34 ACTING CHAIR SKINNER: All right. 35 Della, were you trying to jump in. 36 37 MADAME CHAIR TRUMBLE: Yeah, thank you, 38 Madame Chair. I agree with all the comments made and 39 the very fact that, you know, that comment not to be concerned, but this is in the President's budget. I 40 41 mean, that -- that was my question and when you were 42 doing this how soon is it going to happen. 43 44 The other thing is when this whole OSM 45 started with the ability to recognize subsistence in our communities and that's where it was put with the --46 47 with Fish and Wildlife. And I just -- I'm trying to 48 figure out in my mind how in the world this is going to 49 work if it changes. I realize we work with NOAA and 50

0233 1 Migratory Birds and all these other groups which is great, we're able to do that, but I don't -- I don't 2 3 understand or when you look at tribal there's --4 there's a lot of factors into that. I mean, are you going to be a RAC and you're just basically dealing 5 with fish and wildlife or, I mean, that whole -- you're 6 under a tribal offset, that's a whole different arena 7 in itself. I -- I'm fore confused than anything else 8 9 on how this is actually going to work. 10 11 Thank you. 12 13 ACTING CHAIR SKINNER: All right. 14 Thanks, Della. And..... 15 16 MR. KOSO: Madame Chair. 17 18 ACTING CHAIR SKINNER: Who is this. 19 20 MR. KOSO: Madame Chair, it's Rick. 21 22 ACTING CHAIR SKINNER: Oh, sorry. 23 Okay. I'm going to take Rick and then I'll go to Sue. 24 I just want to get the Council comments first. 25 26 Thanks. 27 28 MR. KOSO: Yeah, Madame -- you know, 29 I've listened -- I've been listening to this, you know, 30 like everybody else has, you know, and it's kind of a 31 shocker to hear what he had to say. And it was so 32 secretive, you know, seems like we were not aware of any of it. But, you know, I think we're just sitting 33 34 here beating a dead horse with all the questions. We 35 have until we find out a lot more when we have our --36 or they have our next meeting, let us know what's going 37 on. You know, it's such a mess in Washington right now 38 they -- I don't think they could pass anything. So, 39 you know, I don't see this happening anytime soon, you know, we're probably looking in three, four years and 40 41 we may have a brand new President, a brand new Senator, 42 a brand new Congress by then so things could change 43 overnight. So I think we need to sit back and try and 44 see what transpires in the next meeting and hopefully we'll get some clarification from them. 45 46 47 So that's all I have on that. 48 49 All right. ACTING CHAIR SKINNER: 50

1 Thanks. Sue, if you want to go ahead. 2

3 MS. DETWILER: Yes, thank you very 4 much, Madame Chair. And my name for the record is Sue 5 Detwiler, I'm the Assistant Regional Director for the Office of Subsistence Management. And I did call in 6 7 and did listen through the entirety of Bryan's presentation and then the follow-up questions, Q&A, 8 9 and, you know, general discussion. And one thing I 10 wanted to point out is that this proposal to move OSM 11 is a proposal from the Department, it's in the 12 President's budget. The proposal was made at the Department level, OSM was not part of the discussions 13 14 in that proposal and along those same lines the 15 Department when Bryan was referring to the 16 that were held last year and the consultations listening sessions those -- OSM also was not engaged in 17 18 those consultations either. Again they were 19 consultations between the Department and the tribes. 20 The Department was the one who made the -- communicated 21 with the tribes, made the arrangements with the tribes, 22 held the consultations along with the U.S. Department 23 of Agriculture and NOAA Fisheries on -- at those 24 consultations. 25

26 And so we -- OSM, you know, being 27 several levels down from the Department we did not have 28 any kind of engagement in setting up those 29 consultations or reaching out to the tribes or 30 advertising or any of the public outreach for those 31 consultations. And, you know, we didn't have any say who was outreached to or any of that. However now 32 33 we're at the point where the proposal or the proposal 34 is in the President's budget, it's been released from 35 the Department, given to the President and as Bryan said, you know, it's going to be discussions between 36 37 the Department and Congress about how far Congress is 38 going to take this and whether they'll approve this in 39 the budget for next year.

41 So OSM now is being -- is more engaged, 42 we know what the proposal is now and we will do our 43 best to make sure that the RAC has the information that 44 we get from the Department. And again it's the Department that is working with Congress and has their 45 46 ideas of how they want to -- how they want this move to 47 be rolled out. But what I -- what I will make sure 48 that we do in OSM is number 1, we're -- you know, we're 49 going to continue business as usual as we always have 50

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1 until something changes and that change would happen, you know, if Congress approved this move. But until 2 3 that time we're going to continue our business as usual 4 and we also will make sure that the Councils get -- and 5 the Council members get the information that is now being made available online with the President's budget 6 7 and, you know, this proposal and any upcoming meetings that the Department may choose to have. So I just --8 oh, and the other -- so that's the President's budget 9 10 as a whole and how OSM fits into it. 11 12 And I also just wanted to 13 comment someone asked the question about how OSM became 14 housed in Fish and Wildlife Service at the beginning of 15 the program. And I -- I was -- I did start out my Federal career with it at -- when -- right after the 16 17 McDowell Decision was made and authority was 18 transferred to the Federal agencies to implement title 19 VIII. And the decision was made to put OSM into Fish 20 and Wildlife Service because of the alignment of Fish 21 and Wildlife Service's fish and wildlife mission with the alignment of the -- of title VIII purpose to 22 23 provide a subsistence priority for the taking of fish 24 So OSM is in Fish and Wildlife Service and wildlife. 25 because of the commonality of our response -- mutual 26 interest in fish and wildlife management. So I wanted 27 to add that. 28 29 And so I thank you very much and I will 30 stay on for as long as you have this -- you're 31 discussing this agenda item and be happy to number 1, 32 listen to hear what your concerns are, but number 2, 33 you know, if there's anything I can help with I -- you 34 know, I'll do my best. 35 36 And also I would just say I don't have 37 again it's the Department -- you know, the answers, 38 it's a Department issue and they're the ones who are 39 kind of working out the -- you know, the details. So I don't have -- you know, I can't be -- I'm not the 40 41 decision-maker and I'm not a -- you know, the person 42 with all the answers. But I will stay here for as long 43 as you need me on here. 44 45 Thank you very much, Madame Chair. 46 47 ACTING CHAIR SKINNER: Yeah, thanks, 48 Sue. And I just wanted to clarify from my perspective 49 any -- I'm not sure if I'm exhibiting any frustration, 50

1 but any feelings I'm having about this are not directed toward OSM because that's not where I perceive the 2 3 problem. I perceive the problem occurring at the 4 higher level in that decisions were made to take this 5 in a certain direction, decisions were made to consult with some of the people impacted, but not all of the 6 7 people and while it was described that nothing -- well, not that nothing is going to change, but that perhaps, 8 you know, the day to day of OSM is not going to change, 9 10 these are significant changes and there was no effort 11 to reach out to the existing people who are involved in 12 the Federal Subsistence Program. So somebody decided 13 which people were the most important and continued on 14 with those conversations and if that's the direction 15 this continues to go it seems like that's a little bit 16 problematic from my perspective because you're starting 17 from a place right now, you're going to a new place and 18 it looks like a bumpy road. 19 20 And then are there additional -- Della 21 drop off, she had an appointment at noon. did have to 22 Are there additional comments or discussion from the 23 Council. 24 25 Chris Price, go ahead. 26

27 MR. PRICE: And thanks, Staff, you guys 28 printed this out for us yesterday, all this ANILCA 29 stuff. And it seems pretty clear in here that, you 30 know, all the State Fish and Game Advisory Committees, 31 local Advisory Committees, are still included in the 32 Regional Advisory Councils and carrying out the 33 functions set forth, required by the Secretary. So 34 this law doesn't change, it still, you know, provide 35 for those subsistence users that are included under the 36 law. But it does feel kind of jumpy the way this is 37 and it's just a little -- unfortunately going 38 government works like this sometimes, it could be a 39 political thing, it could be a number of things, but it's -- because what's probably -- what I'm thinking is 40 41 the role of the tribes has been under appreciated for a 42 long time and then government realizes that and they 43 have to somehow play catch up at the same time. Hopefully it shouldn't change what we do in any way 44 because the protection of the actual individuals is one 45 46 thing and tribes is really separate because it doesn't 47 really mention tribes at all in this kind of language 48 in ANILCA. So just an observation and I'd be curious 49 how this progresses. 50

0237 1 Thank you. 2 3 ACTING CHAIR SKINNER: Sam, go ahead. 4 5 Thanks. Yeah, I kind of MR. ROHRER: 6 sense that it sounds a little bit like OSM is kind of 7 -- a little bit on the same level of frustration maybe to some degree that we have on this. But I think we 8 9 probably found something else to include in our annual 10 report. 11 12 (Laughter) 13 14 It's a new section to MR. ROHRER: 15 write. 16 17 (Laughter) 18 19 MR. ROHRER: Thanks. 20 21 ACTING CHAIR SKINNER: All right. So I heard Sam volunteering over lunch to draft a paragraph 22 23 about that. 24 25 Coral, go ahead. 26 27 MS. CHERNOFF: Yeah, thank you. I for 28 one in a little bit excited about this move. I think 29 in working with AMBCC I think it can -- we found that a 30 lot of times it's a struggle when really the mission of 31 U.S. Fish and Wildlife Service and Fish and Game seem 32 to be on the management of lands and wildlife whereas 33 subsistence is kind of management of making sure that 34 people's rights to be able to obtain food is something 35 totally different. So I for one, I know -- well, just 36 from working with the AMBCC so yeah, I do see the 37 So I'm a -- I'm -- I guess I'm a struggles there. 38 little astounded at finding this out after, you know, 39 meetings started last year, January, 2022. So I'm a little upset about that, that, you know, we are finding 40 41 out about this suddenly, but it has been going on for a 42 bit, there has been meetings, but I'm a little excited 43 about the idea of the move. 44 45 Thank you. 46 ACTING CHAIR SKINNER: All right. Are 47 48 there any other comments. 49 50

0238 1 (No comments) 2 3 ACTING CHAIR SKINNER: Okay. it is 4 11:57 so we can break for lunch and come back and start the Partners in Migratory Birds or we can go ahead and 5 come back and start the Partners in Migratory Birds or 6 7 we can go ahead and take Kate Martin's presentation which is the Atlas of Sea Duck Key Habitat Sites. She 8 9 does need to get on a plane at 2:40. I think even if 10 she went first after lunch she would definitely be done 11 by 2:40, but what -- would the Council prefer to break 12 now and then start the sea duck or the migratory bird 13 stuff all together after lunch. 14 15 Go ahead, Coral. 16 17 MS. CHERNOFF: Is her plane at 2:40 or she has to check in at 2:40. And I guess I'm for 18 19 having her before lunch. Just I don't.... 20 21 MR. HOLMES: I'll second that. 22 23 MS. CHERNOFF:I'd hate for her to 24 miss her plane. 25 26 ACTING CHAIR SKINNER: Okay. We will 27 go ahead.... 28 29 MR. HOLMES: (Indiscernible 30 simultaneous speech)..... 31 32 ACTING CHAIR SKINNER:we'll go ahead and take 14iv(4), Atlas of Sea Duck Key Habitat 33 34 Sites identified in the Kodiak-Aleutian Sea Duck Joint 35 Kate Martin, Migratory Bird Management, Venture. 36 Alaska Region, Fish and Wildlife Service. 37 38 MS. MARTIN: Thank you, Madame Chair 39 and members of the Council for accommodating my time constraint today. I may have changed my flight if I 40 41 knew that I was following that previous topic. 42 43 (Laughter) 44 45 MS. MARTIN: But I hope to be able to 46 provide you with a lighter topic now. So for the 47 record my name is Kate Martin, I'm the U.S. Coordinator 48 for the Sea Duck Joint Venture and I'm an employee of 49 the U.S. Fish and Wildlife Service's Migratory Bird 50

0239 1 Management Program. And today I'm going to be talking you about a project that we have recently 2 with published the first edition of called the Atlas of Sea 3 4 Duck Key Habitat Sites in North America. It was 5 developed by the folks here listed on the right side of 6 the slide and I'm presenting their work. 7 8 And the next slide. 9 10 When I mention sea ducks what I am 11 referring to are waterfowl species that spend most of their time in the marine environment. And there's 15 12 13 sea duck species in North America all of which can be 14 found in parts of Alaska and a lot of which can be found here around Kodiak and without -- and throughout 15 16 this region. 17 18 Next slide. 19 20 The importance of sea ducks clearly are 21 important for subsistence harvest in Alaska and in is some 22 other parts of North America. There 23 recreational harvest that we're aware of and there are some threats that we're concerned about regarding sea 24 25 ducks including climate change and ecosystems shifts, 26 disease, contaminants, collisions with vessels and 27 disturbance during critical life periods such as when 28 they're molting their flight feathers. 29 30 Now in general waterfowl populations 31 including geese and swans are increasing throughout the 32 continents and are doing fairly well, however sea ducks 33 are not as far as we know. This is a graphic that's 34 produced by the North American Bird Conservation 35 Initiative through their State of the Birds Project. And it shows as you see on the top the increase in 36 37 geese and swans over the continent and this is kind of 38 a general grouping of those species whereas you can see 39 for sea ducks they may be declining as much as 30 percent from 1970 to 2020. 40 And so not only are we 41 concerned about their populations in general, but we're 42 also lacking a lot of information about them because 43 they're -- they inhabit these very remote habitats that 44 are hard to access for surveys. 45 46 So just to give you a brief overview 47 the Sea Duck Joint Venture was established in 1999 to 48 address that lack of information on these populations. 49 And it's an international partnership -- oh, I'm sorry. 50

0240 1 Madame Chair, there's a question. 2 3 ACTING CHAIR SKINNER: Go ahead. 4 5 MS. CHERNOFF: I just had a question 6 for information for anyone -- everyone. What do you --7 what species do you consider sea ducks or what makes 8 them sea ducks? 9 10 MS. MARTIN: These are the 15 species 11 that we consider sea ducks, right, so scoters, the four eider species, long-tailed duck, harlequin, goldeneye, 12 13 what am I missing, mergansers and buffleheads, yep. 14 15 So as I said the joint venture was 16 formed around 1999 and it's this collaboration and partnership between the Canadian Wildlife Service, Fish 17 18 and Wildlife Service and other agencies and nonprofit 19 organizations. 20 21 Next slide. 22 23 We promote the conservation of sea 24 ducks through -- basically through funding research and 25 monitoring programs throughout the continents, knowing 26 that there is a lack of that information for managers 27 to make good decisions about population management. 28 And we also work towards increasing awareness of sea 29 ducks and engaging other organizations and agencies in 30 their conservation. 31 32 Next slide. 33 34 So our partners asked us several years 35 ago to identify areas that are most important for sea 36 ducks so that information could then be used for marine 37 for oil spill spatial planning, response and 38 preparedness and other conservation action. And so 39 what we did -- I'm referring to we as my predecessors 40 and my collaborators, used the survey data that we did 41 have from population surveys and information from birds 42 that had transmitters on them and their habitat use to 43 identify sites that were most important. And we used 44 those criteria that were based on monitoring data that we had. In many cases that survey data could be fairly 45 46 old and so we also incorporated some expert opinion. 47 However we see this as a incremental process in which 48 we used what we had, but now we are looking for 49 additional information and perhaps even different --50

0241 1 using different criteria to establish other key sites that we might have been missing. 2 3 4 The next slide. 5 6 So at least for now I'm going to just 7 present a couple of the or three -- four of the sites that are within your region or near your region so you 8 9 know what has been identified here. So the first thing 10 Kodiak Archipelago. And essentially -- the next slide. 11 Thanks. Yeah. Essentially the nearshore habitats all 12 around Kodiak Archipelago are essential for sea ducks 13 wintering and molting. Approximately or over 200,000 14 sea ducks of 14 species winter here. Namely you'll see 15 a lot of long-tailed ducks, scoters, goldeneye, occasionally a king eider, harlequin ducks as well. It 16 17 provides good molting and breeding habitat as well. 18 And in some cases especially for steller's eiders it 19 could be a very good site to look at climate change 20 because it's sort of the edge of their range. 21 22 Next sites. So the key site -- next 23 And again that's a shallow one is Izembek Lagoon. 24 lagoon, eelgrass beds that result in high productivity 25 and use by beds. It's a very important molting and 26 wintering site for steller's eiders. They also have 27 other species present there. 28 29 Next site. Nelson Lagoon was also 30 identified and similar to Izembek it's a shallow bay 31 that's protected by barrier islands and is used 32 throughout or for several species for wintering, for 33 staging during migration and for molting. It's a 34 primary -- sorry, a primary molting area for steller's 35 eiders and there's some key areas within Nelson Lagoon that are important because they're protected such as 36 37 the area near Walrus Island. 38 39 Next. And then this site is a little 40 bit outside of this Kodiak/Aleutians region I believe 41 as defined by the RAC's jurisdiction, but Seal Island 42 is also very important and very nearby the region. 43 Same kind of situation where several species use it for 44 wintering and for molting for steller's eiders. 45 46 So I'm here today really to share this 47 atlas with you in its first version, but we want to --48 we want to continue to have discussions about whether 49 we're missing any important areas or whether we need to 50

0242 consider different types of criteria other than survey 1 data that we have. And we want to try to identify ways 2 to conserve these really important sites so if there 3 are opportunities, we're looking for those. 4 And we 5 also want to incorporate indigenous knowledge and perspectives into this in ways that are possible. So I 6 7 did bring a printed atlas, I'll leave that here if anyone wants to look at it, but you can also find the 8 entire thing on our website and peruse that and go 9 10 through the different sites that were identified. 11 12 Next slide. 13 14 So I mentioned incorporating indigenous 15 knowledge and perspective. And I'm learning that this region and probably other regions like southeast 16 Alaska, that also may include local non-Native folks 17 18 that have lived in this region for a while as well that 19 may have some local knowledge that they would like to 20 share that would be important to identifying different 21 areas that are important to sea ducks. So really I'm 22 just opening this up to if anyone has knowledge they 23 would like to share with us, if they know of priorities 24 that they have that are related to sea ducks that they'd like to see addressed, that we should talk 25 26 about, there are interests for multiple partners 27 including the partners on the sea duck joint venture 28 and possible funding for those sorts of projects. 29 30 So next slide. 31 32 You can contact me. I do have to leave 33 this afternoon, but you can always give me a call or 34 shoot me an email and let me know if you have any 35 questions or comments. 36 37 Thank you. 38 39 ACTING CHAIR SKINNER: Pat, go ahead. 40 41 MR. HOLMES: Yeah, thank you so much, 42 Kate, for that presentation. I know when I first came 43 to Kodiak in '63 almost all these ducks were many, many 44 orders or magnitude more apparent particularly and then even more in early '70s when I went to work for Fish 45 46 and Game because back then we were having a whole lot 47 more northwest winds and on this side of the Island, 48 heck down here in Pearson Cove or right in the boat 49 harbor, the numbers of ducks in the wintertime were 50

0243 1 orders of magnitude larger. There is a data base that if you contact Richard Mackintosh, I'll send you his 2 email, he's been the Chairman of the Audubon Society 3 4 and their winter bird count and if I recall right the Audubon group got going about '9 -- late '74 or 1975. 5 So that might give you several decades of at least spot 6 7 things around the on the Kodiak road system. And I think looking at that you'll see some literally orders 8 And I'll try and prod my 9 of magnitude of change. 10 buddy, Eddie Olpine, he's forever a Alutiiq guy that 11 has moved to town, but he's one of the old-timers that 12 was really a avid sea duck hunter when he was a kid 13 until he got to my age and doesn't do it much anymore. 14 But I'll poke around and see if I could see if he'd 15 want to chat with you on the phone or something just as far as general observations. And it's just unfortunate 16 17 that Roger Malutin passed away this year because he's 18 again another person every generation from Afognak. 19 And but that might be something to bring up to the 20 Native Village of Afognak, JJ, I can't remember her last name, is the Chair. 21 Well, actually both the 22 Chairmen -- Chair ladies, Sun'aq, JJ Orloff I think is 23 the -- correct me if I'm..... 24 25 MS. CHERNOFF: JJ Marsh and JJ Orloff 26 is the.... 27 28 MR. HOLMES: Marsh. Marsh and Orloff 29 are the two ladies that run the two tribal offices. 30 And so they might be able to get that question out to 31 some of the old-timers on some general observations 32 over time. But I think this was just really, really 33 swell. I guess everybody's gee, where are they, you 34 know. I just saw, you know, about oh, a few goldeneyes 35 and a harlequin, one harlequin, first one of the year, 36 you know, but they used to be in front of my house 37 literally four or 5,000 ducks for a good part of the 38 winter. And now if you see 10, you know, so it's 39 changed. 40 41 So thank you very much. 42 43 MS. MARTIN: Thank you. Thank you for 44 the contact information too. I appreciate that. 45 46 ACTING CHAIR SKINNER: Coral. 47 48 MS. CHERNOFF: So part funny story, 49 part comment. I went to a Flyway Committee last year 50

1 and I talked about the Native uses of birds in handicraft. And I found a bird skin blanket in the 2 museum there like that day I was shown it. So I 3 4 brought it to the meeting, put up a -- put it up on the screen and the room is probably full of 30 to 40 bird 5 biologists, bird people, bird and I said oh, yeah, you 6 7 probably all know what this bird is. And there was crickets in the room. It was a common eider blanket, 8 it was common eider, common eider, common eider, common 9 10 eider. And so nobody knew it. So I just went -- I was 11 shocked and I think it just illustrates that don't 12 underestimate that the things that we may know to 13 share. I also shared about a bunch of pintails we saw 14 last year because they're concerned about pintail 15 populations all over -- down in the lower 48. And so the kind of information that we share is important to 16 17 share and don't every underestimate that, what you 18 might know. 19 20 ACTING CHAIR SKINNER: All right. Are 21 there further comments. 22 23 (No comments) 24 25 ACTING CHAIR SKINNER: All right. 26 Thank you. 27 28 MS. MARTIN: Thank you. 29 ACTING CHAIR SKINNER: Okay. So if I 30 31 can do the math correctly today we'll do another --32 well, let me ask for lunch was an hour and 15 too short because I noticed -- I know I came back pretty much 33 34 right at 1:15, right behind Pat and Chris. Do we need 35 an hour and a half or is an hour and 15 good. 36 37 (No comments) 38 39 ACTING CHAIR SKINNER: Okay. Let's take an hour and 15 and come back at 1:30. 40 41 42 Thanks. 43 44 (Off record) 45 46 (On record) 47 48 ACTING CHAIR SKINNER: Okay. Ιf 49 everyone can make their way back we'll start the 50

meeting here in a minute. (Pause) ACTING CHAIR SKINNER: All right. We're going to go ahead and reconvene the meeting. And Sam Rohrer has a -- had a commitment at 1:15, but he was going to head back soon after. So he's not here right now, but he will be back shortly. Let's go ahead -- Lisa, if you don't mind taking roll and make sure we have a quorum. MS. HUTCHINSON-SCARBROUGH: Thank you, Madame Chair, members of the Council. Patrick Holmes. MR. HOLMES: Here. MS. HUTCHINSON-SCARBROUGH: Richard Koso. (No comments) MS. HUTCHINSON-SCARBROUGH: Sam will be back here in a little bit. Chris Price. MR. PRICE: Here. MS. HUTCHINSON-SCARBROUGH: Coral Chernoff. MS. CHERNOFF: Here. MS. HUTCHINSON-SCARBROUGH: Rebecca Skinner. ACTING CHAIR SKINNER: Here. MS. HUTCHINSON-SCARBROUGH: Della Trumble. MADAME CHAIR TRUMBLE: Here. MS. HUTCHINSON-SCARBROUGH: And, Richard, did you get back on yet.

0246 1 (No comments) 2 3 MS. HUTCHINSON-SCARBROUGH: Okay. We 4 have five present and we do have a quorum. 5 6 Thank you. 7 8 ACTING CHAIR SKINNER: All right. 9 Thank you. Okay. So moving -- continuing to move down 10 our agenda, 14, Roman numeral iv, number 1, is brant 11 and emperor goose population surveys and management 12 plan revision process. Julian Fischer, Migratory Bird Management, Alaska Region, Fish and Wildlife Service. 13 14 15 And do we have Julian online. 16 17 MR. FISCHER: Good afternoon. Can you 18 hear me? 19 20 ACTING CHAIR SKINNER: Yeah, you're 21 coming in loud and clear. 22 23 MR. FISCHER: Oh, great. Okay. 24 25 MS. HUTCHINSON-SCARBROUGH: Julian, can 26 you wait just a minute, we're going to turn on your 27 Powerpoint. 28 29 Thank you. 30 31 We'll let you know when we're ready. 32 33 (Pause) 34 35 MS. HUTCHINSON-SCARBROUGH: Okay. We 36 got you up and running. Thank you. 37 38 MR. FISCHER: All right. Great. Good 39 afternoon, Madame Chair and members of the Council. My name's Julian Fischer and I work for the U.S. Fish and 40 41 Wildlife Service Migratory Bird Program based in 42 Anchorage, Alaska. Thanks for the invitation to 43 present today. Our office focuses on all waterfowl, 44 that is the ducks, geese and swans, but today I'll just 45 be touching on two of these species, Pacific brant and 46 emperor geese. The presentation appears in 47 supplemental Tab 7. 48 49 So if you're on that first slide can 50

0247 1 you please go to the next slide, please. 2 3 So our office conducts aerial surveys 4 throughout the State and we do this to determine the 5 population status of waterfowl. And the work occurs in 6 summer, fall and winter. The map on the left shows the 7 areas of the State where we work each year. 8 9 Next slide, please. 10 11 So first up I'm going to touch on 12 Pacific brant. So the term Pacific brant here refers 13 to both black brant that breed in Alaska as well as 14 western high Arctic brant also referred to as gray 15 belly brant. Those breed up in the western Arctic portion of Canada. And after the breeding season all 16 17 these brant migrate down into Izembek Lagoon where 18 they're attracted to that abundant eelgrass batch at 19 that site. In late fall many of those brants depart 20 for other coastal sites within the Pacific flyway where 21 eelgrass is found between Alaska and Mexico. 22 23 Next slide, please. 24 25 So the summer distribution of Pacific 26 brant is changing. Over the last 20 years fewer brant 27 are now nesting on the Yukon Delta while more breeding 28 birds are now found on the North Slope of Alaska as 29 shown in the figures on the left. The upper one shows 30 the number of nests on the Yukon Delta over the last 20 31 or so years. The bottom shows the number of indicated 32 breeding pairs increasing on the North Slope. So many 33 factors might be affecting that change, but we believe 34 habitat is a big one. The preferred foraging foods for 35 goslings in the north is quite abundant, but it's declining on the YK Delta. And goslings that are 36 37 hatched on the North Slope seem to grow faster and survive at higher rates than those from the sub-Arctic 38 39 regions. So a greater proportion of North Slope goslings will survive each year and if they do they'll 40 41 be returning to their northern hatching areas where as 42 further will be -- further south not as many goslings 43 will be returning. So over the long term we might be 44 seeing a continuing shift northward. 45 46 Next slide. 47 48 So we see the distribution for brant 49 shifting during winter as well. As I mentioned earlier 50

1 virtually all brant pass through Izembek Lagoon in fall. And in fact a proportion of these geese that are 2 3 staying at Izembek through the winter is actually 4 increasing. So the figure on the left shows the number of brant wintering in Mexico shown in red and they've 5 been declining whereas the numbers at Izembek shown in 6 7 blue have increased through time. Roughly half of all brant now are wintering at Izembek Lagoon. 8 Izembek 9 Lagoon rarely freezes completely anymore or for long 10 periods of time so many of these geese are choosing to 11 simply stay put where those eelgrass beds are intact 12 and plentiful. 13 14 Next slide. 15 16 Just as a slide check I want to make 17 sure there's a family group of brant showing on the 18 right side of that slide. 19 20 ACTING CHAIR SKINNER: Yeah, there are. 21 22 MR. FISCHER: Okay. Great. So the 23 Pacific Flyway Management Plan identifies population size thresholds that guide whether fall, winter harvest 24 25 guidelines should be liberal, moderate or restrictive. 26 The population size is measured with a three year 27 running average of mid winter counts throughout the 28 winter range. So since the 1950s the survey indicates 29 the population has fluctuated roughly between 100,000 30 and 170,000 geese. The count just this last winter and 31 the winter of 2023 was relatively low and it pulled the 32 three year average down into the moderate harvest 33 guideline. And so that will trigger a restriction of 34 bag limits and season length in California this year. 35 The other States where brant occur in fall and winter 36 were already holding their harvest within the moderate 37 harvest strategy so no change is expected in Alaska, 38 Washington or Oregon at this time. 39 40 Next slide. 41 42 So while brant management has been --43 has used the winter survey for decades the survey is 44 expensive, it's widespread across three countries, it's subject to potential bias if survey observers change. 45 46 But one alternative that's been considered is to 47 estimate the population at one place and at one time, 48 that place being Izembek where virtually all the brant 49 occur in October. Now aerial surveys have been 50

0249 1 conducted in fall at Izembek since the 1970s, but these counts are quite difficult because the flocks are large 2 and the brant are mixed in with other geese. And all 3 4 the geese are capable of flight. 5 6 Next slide. 7 8 So nonetheless these counts between Izembek in fall and mid winter coordinated survey are 9 10 quite comparable. So knowing that we wanted to measure 11 the accuracy of our low level aerial survey counts at 12 Izembek in the fall. 13 14 Next slide. 15 16 This should be a aerial photo of Izembek Lagoon with a circle around it identifying it. 17 18 So to do that test we work closely with USGS to 19 establish an experimental photographic survey in 20 Izembek Lagoon. 21 Next slide. 22 23 24 To do that we established straight-line 25 transects equally spaced covering the entire lagoon. 26 27 Next slide. 28 29 So unlike the low level aerial survey 30 that is conducted at 150 feet the photographic survey 31 was conducted at 1,500 feet and it was designed to get 32 a representative sample of density that could then be 33 extrapolated to the entire lagoon. 34 35 Next slide. 36 37 It should say Aviatrix on the left. The transects are actually comprised of points along 38 39 We use a program called Aviatrix that the line. 40 automatically triggers cameras within the aircraft when 41 it passes over each of these points. 42 43 Next slide. 44 45 So to do this a pilot simply follows the flight line and a camera operator is 46 along 47 monitoring the progress from the back seat of the 48 aircraft. Two cameras are used and they're triggered 49 every few seconds and so this results in roughly 10,000 50

1 photographs for each replicate. Okay. So this is an example of one of the resulting photographs. 2 From 3 1,500 feet it simply appears like some small dots with 4 a very gray background. 5 6 Next slide. 7 8 But if we zoom in on one portion of 9 this photograph, here we're going to zoom in on that 10 yellow box. 11 12 Next slide. 13 14 We can see nine geese clearly. There's 15 four brant in the upper portion of the photo and five cackling geese in the lower area. 16 So importantly we 17 worked with computer programmers to develop an 18 automatic identification and counting method based on 19 the pattern of white and black packs of geese. And 20 this enabled the computer to do the counting for us. 21 22 So the results of this work are 23 displayed here and they demonstrate the difference in 24 the population estimates from the low level surveys 25 which are shown in the -- with the purple circles and 26 the wide confidence intervals. (Indiscernible 27 distortion) thousand. 28 29 First is the photographic estimates 30 which are those green dots during the most recent three 31 So these photographic estimates indicate that years. 32 nearly twice the number of brant are there than we were 33 estimating from the low level flight. 34 35 The next slide should say next steps in 36 aerial photographic survey development. So our results 37 were recently published in the Journal Wildlife Society 38 Bulletin and the key messages were that the new method 39 yielded an unbiased estimate of population size, caused less disturbance to birds and it increased the safety 40 41 for the aerial survey crews. So we're now working with 42 programmers at Google to improve the identification and 43 counting algorithm and we will use that new model to 44 analyze the fall, 2022 estimates. So ultimately we 45 believe that photography is a better way to monitor the 46 total population of brant versus the winter survey. 47 48 Next slide. 49 50

1 Okay. Now I'm going to shift gears and 2 provide a brief update on the status of emperor geese, how they're managed during the spring/summer hunt and 3 4 during the fall/winter hunt. 5 6 Next slide. 7 8 So emperor geese remain in Alaska overwinter and they're distributed along the Aleutian 9 10 chain, the Alaska Peninsula and as far north as Kodiak. 11 In spring they stage along the northside of the Alaska 12 Peninsula and then move into the Yukon Delta where they 13 breed. 14 15 Next slide. 16 17 So there's an emperor goose -- emperor 18 goose harvest is guided by two different management 19 plans, Pacific Flyway Management Plan guides the 20 fall/winter harvest and the Alaska Migratory Bird Co-21 Management Council, AMBCC, Management Plan guides the 22 spring/summer harvest. Both of these plans have action 23 thresholds that are tied to the -- to an aerial 24 breeding pair survey we conduct annually in late May on 25 the Yukon Kuskokwim Delta where these geese breed. 26 27 Next slide. 28 29 So this slide should show some green, 30 yellow and red, these are current harvest -- this is 31 the current harvest strategy. So the harvest 32 strategies are shown here, these are what appear in the 33 current plans. So the left column is the population 34 thresholds, the middle column shows the corresponding 35 regulations for the spring and summer hunt and the right column is the corresponding regulations for the 36 37 fall/winter hunt. Green indicates a relatively high 38 population size and a liberal harvest, yellow indicates 39 a need for caution and a more conservative harvest and 40 red indicates a closure of harvest Statewide. 41 42 Next slide. 43 44 Okay. So where are we in this. The 45 population figure on the right is based on the aerial 46 survey conducted on the Yukon Kuskokwim Delta breeding 47 grounds. And from this survey we saw numbers of emperors increasing starting in the mid 1980s after 48 49 hunting was closed Statewide. Recovery was slow, but 50

0252 1 in 2016 the population surpassed the threshold required to open that hunt based on the management plan that was 2 3 in place at that time. In that same year, 2016, the plan was -- the plans were developed that set the 4 5 thresholds that I described in that previous slide. And the first legal harvest of emperor geese in 30 6 7 years was opened. After that our population counts went down for four years and in response there was an 8 9 increase of outreach efforts and there was a closure to 10 egg harvest that was enacted. Luckily last summer in 11 2022 the population estimate was up again and the hunt 12 remains open today. Actually it's open Sunday, that's 13 when the spring/summer harvest opens. 14 15 Next slide. 16 17 So while the population exceeded 28,000 18 last summer the AMBCC partners voted to retain some 19 conservation measures including the egg harvest closure 20 the 2023 spring/summer hunt and a 500 bird for 21 Statewide quota for the fall/winter hunt. 22 23 Next slide. 24 25 Okay. This is titled spring/summer 26 emperor goose hunt regulations. The spring/summer 27 migratory bird harvest season opens on Sunday, April 28 2nd. The dates for the hunt in Kodiak and in the three 29 subregions of the Aleutian/Pribilof region are shown 30 here. Not shown on this slide are the data for the 31 Bristol Bay region, I apologize, part of which falls 32 within the boundaries of the Kodiak/Aleutian RAC. So 33 the regulations are posted online at the site indicated 34 in the left figure and if that's not visible I'll 35 provide that website to Lisa and she can share it with 36 you all. Emperor geese are closed to harvest year 37 round within the Kodiak Island road area. The boundary 38 of that area is shown on the map on the right. And 39 I'll just say that all the regulations are summarized 40 both in paper form and on the website and the 41 regulation booklets have been distributed to a number 42 of sites around the State including Kodiak. 43 44 Next slide, please. 45 The fall/winter hunt. 46 Okay. So for 47 the fall/winter hunt there's a Statewide quota of 500 48 birds and that's allocated among different regions. 49 Roughly 85 percent of the fall/winter harvest is 50

0253 1 actually allocated within the Kodiak/Aleutian RAC region. Once the guota for a given area is reached 2 3 during the season then the hunt is closed by emergency 4 order. 5 6 Next slide. 7 8 Okay. So this is the reported goose 9 harvest during the fall and winter. The upper table 10 shows the reported harvest of emperors in fall and 11 winter by year and region. And I apologize this table 12 does not show the harvest within the portion of the 13 Alaska Peninsula that falls within the Kodiak/Aleutian 14 RAC boundary because the data does not come out in that 15 -- with that fine a scale. In general though Statewide the reported harvest in fall and winter has averaged 16 17 around 130 emperors per year. 18 19 Next slide. 20 21 Okay. The AMBCC and the Pacific Flyway 22 are in the process of reviewing and revising the 23 management plan. So within the AMBCC we have a 24 committee formed specifically for that purpose that 25 includes the Native caucus members from throughout the 26 range of the emperor goose including Coral Chernoff 27 from Kodiak, Peter Devine and Karen Putnakoff from the 28 Aleutian/Pribilof region, Gayla Hoseth from Bristol 29 Bay, Jennifer Hooper from the Yukon Delta, Lois Harris 30 from the Northwest Arctic and Brandon Omosik from the 31 Bering Straits region. And then the Staff from Alaska 32 Department of Fish and Game and from the U.S. Fish and 33 Wildlife Service also serve on that committee. 34 35 Next slide please. 36 37 So the plan revision has four major steps and first it's to first develop the objectives 38 39 that we want to accomplish from the plan; next step is 40 to define different management alternatives that can be 41 employed that would accomplish those objectives; third 42 step is to evaluate those and use mathematical models 43 and traditional ecological knowledge to predict what 44 the effects will be for each alternative; and then 45 finally we'll select the best alternative after 46 considering the trade-offs. So the process began in 47 2022 and we plan to be completed by 2024. 48 49 Next slide. 50

0254 1 So that concludes my report. I covered a lot of material here in a short amount of time so, 2 3 Madame Chair, if there's time for questions or comments 4 I'm certainly available. If time is short and you need to move on then Lisa Hutchinson can provide my contact 5 information. I'd be happy to talk to you or Council 6 7 members about these or other topics. 8 9 Thanks very much. 10 11 ACTING CHAIR SKINNER: Thanks. We'll 12 go ahead and do some questions. I don't know if I'm 13 misreading this, but on the slide that at the top it 14 says reported fall/winter emperor goose harvest 2017 to 15 2023. Is that just the fall -- is there a separate 16 harvest report for spring or does this represent all of 17 the harvest of emperor geese or is there a different 18 harvest reporting for like what I would call the spring 19 hunt or is that included in winter? 20 21 MR. FISCHER: Thank you, Madame Chair. 22 There is a separate report that covers the 23 spring/summer hunt. This table that you're looking at here, this is simply the reported fall/winter hunt from 24 25 the permit hunt for emperor geese for Kodiak and for 26 the Aleutian/Pribilof regions. Liliana Naves is --27 attend this meeting and I'd have to look at what she's going to be presenting on. Not that topic, but I'm 28 29 sure she could answer some questions about the emperor 30 harvest in spring/summer as well. 31 32 ACTING CHAIR SKINNER: Okay. And I see 33 that Coral has her hand up. 34 35 Go ahead, Coral. 36 37 MS. CHERNOFF: Yeah, on this -- thank you for that presentation, Julian. On the same slide, 38 39 the reported fall/winter emperor goose harvest, there's 40 a column here that says Statewide resident total. Was 41 there no successful nonresident hunts or is that -- am 42 I just -- is that included in that Statewide resident 43 total? 44 45 MR. FISCHER: Hi, Coral, thanks for the 46 question. Let me see if I can pull that up. That is 47 not on there. Let me -- hold one second. Okay. Т 48 have those numbers, I apologize they were not on there. 49 They're not broken down by region, but I'm looking at 50

0255 the nonresident harvest -- there was no nonresident 1 harvest in the first year. The second two years --2 second and third year there was 25. Third -- fourth 3 4 year was 18, fifth year was 19 and this year it's 20. 5 6 MS. CHERNOFF: Thank you very much. 7 And I just had a comment about the spring hunt. In general there are no harvesting report requirements 8 9 for those spring hunts? 10 11 MR. FISCHER: That is correct. Under 12 the current management plan there is not a permit 13 required. 14 15 ACTING CHAIR SKINNER: All right. Are 16 there other questions. 17 18 MADAME CHAIR TRUMBLE: This is Della. 19 I have -- I have a number of questions. 20 21 ACTING CHAIR SKINNER: Yeah, go ahead, 22 Della. 23 24 MADAME CHAIR TRUMBLE: I guess going to 25 the emperor -- well, since we're on the emperor and 26 then I want to go to the brant after. On the emperor 27 that you don't have the numbers and the Alaska 28 Peninsula and I couldn't hear why, what the reasoning 29 was. Can you explain that? 30 31 MR. FISCHER: Sure. Yeah. Okay. So 32 the AMBCC is managed through a number of different regions. The region boundaries do not coincide with 33 34 the RAC boundaries. So there's a -- so the RAC -- the 35 RAC that you're -- that we're all meeting here today on includes Kodiak, the Aleutians and then the western 36 37 portion of the Alaska Peninsula. The way the reporting is done for emperor harvests for the Alaska Peninsula, 38 39 it's all merged into the region called Bristol Bay. So 40 there's not -- hunters are not required to report 41 whether they're in say Nelson Lagoon versus Togiak. So 42 all those numbers are merged together. So that -- for 43 that reason I can't really -- I can't provide the information on that's specific to just the RAC boundary 44 on the western part of the Alaska Peninsula. We do 45 46 have estimates..... 47 48 MADAME CHAIR TRUMBLE: Okay. 49 50

1 MR. FISCHER:specifically though 2 for the Izembek State Game Refuge. 3 4 MADAME CHAIR TRUMBLE: And if -- and 5 what are -- would those numbers be for Izembek? I'm 6 just kind of curious. 7 8 MR. FISCHER: Okay. At Izembek 9 specifically starting in the first season it would be 10 12, then five, then nine, then four, then 15, then two. 11 So that's an average of about eight birds per year. 12 13 MADAME CHAIR TRUMBLE: The reason I ask 14 I think when -- once it's opened we -- there was an 15 increase it seemed of hunters going in there just to --16 specifically harvest one emperor goose. So I'm just 17 kind of curious. And it would be nice to kind of see 18 that breakdown, I know it's included in Bristol Bay. 19 20 The other thing that I question in 21 regard to the emperors, you -- from looking at numbers 22 of the population index of less than 28,000. At one 23 point in time I thought the goal had been a threshold 24 of 80,000 and that it was counted that there were more 25 than what was actually being counted therefore the 26 season was open. What exactly is the threshold that 27 you're trying to meet? 28 29 MR. FISCHER: Yeah. No, that is an 30 absolutely fantastic question. And your -- your memory 31 is spot on. So the difference here is that the -- when 32 the new management plan was written in 2016 the entire 33 -- the survey was changed to be specific to one portion 34 of the emperor goose range on the Yukon Delta. Before 35 there had been a fall staging -- I'm sorry, a spring 36 staging survey that had been done starting in 1981. 37 And we had been conducting that survey for years. 38 During that time we were able to count all the birds 39 that are present so that would include adult breeding age birds, it would include juveniles that had just 40 41 been hatched the prior year as well as..... 42 43 (Teleconference interference 44 participants not muted). 45 46 ACTING CHAIR SKINNER: Hi. Can everyone who's not Julian make sure to mute your 47 48 phones, please. 49 50

0257 1 Thanks. 2 3 MR. FISCHER: Thank you. So, Ms. 4 Trumble, the -- we have been counting all adults, young 5 and juvenile birds along the Alaska Peninsula. There 6 was concerns voiced by the Alaska Migratory Bird 7 Council members that that survey was not the best approach to use and a desire for a more statistical 8 designed survey that had transects and measurable 9 10 variances be used. And so we switched to the Yukon 11 Delta coastal zone survey. And so on that survey 12 really what we're counting is breeding adults. There's 13 probably young birds that are outside of the survey 14 area at the time that that survey is conducted. But we 15 did a long analysis of both the spring survey and the 16 breeding pair survey as well as a nesting survey and 17 found that the three were highly correlated together. So they were essentially equally mapping the trajectory 18 19 of that population. And so after a thorough review we 20 simply shifted to the breeding pair survey. The numbers are lower so it should be consistent -- it 21 22 should be considered as an index and so it's not all 23 the birds, but they represent the entire population. 24 25 So that was a long winded answer to 26 your question and I don't know if I answered it, but 27 I'd be happy to talk about it more if you have more 28 questions on it. 29 30 MADAME CHAIR TRUMBLE: No, it's 31 perfect. Thank you. I appreciate it. Going to the 32 brant, basically on your areas that you just showed your transects areas and maybe you're showing the 33 34 Izembek Refuge, this -- the -- your staging area for 35 the survey was and the Izembek, but it doesn't include 36 Kinzarof Lagoon or what we found and have looked is 37 there are quite a number of places outside of Izembek and Kinzarof that we are finding brants basically 38 39 overwintering in guite a number. And those numbers 40 aren't included in this survey; is that correct? 41 42 MR. FISCHER: That's correct. And 43 there's two -- there's two things that would explain First, this survey was designed 44 that. as an experiment, it was primarily done to develop the 45 46 technique, to determine what camera equipment was 47 needed, what software was needed and what -- and how 48 basically to develop the algorithm that can identify 49 and automatically count brant. So it was focused 50

0258 1 solely on Izembek Lagoon where we had the highest concentration of birds. 2 3 4 The second part addressed the birds 5 that are outside of that area. You mentioned that 6 they're in Kinzarof and (indiscernible - distortion) 7 and other locations in winter. This is the -- this survey that we're developing for photography 8 is actually a fall survey and the intent is to continue to 9 10 count brant in those other areas as well. But there's 11 far fewer that we've seen in fall in those outlying 12 areas compared to winter where there's certainly more 13 birds that occur in those areas. So the intent though 14 moving forward would be to have the photographic survey 15 in fall, but to include all those areas that you mentioned. But I would -- I'd be really interested to 16 17 hear your perspective on where brant are located in the 18 October time period if they're in additional areas in 19 any numbers that would be worth us looking into more. 20 21 MADAME CHAIR TRUMBLE: Yeah, I can get the word out to the guys around -- out and about 22 23 hunting or different things and see if they can share 24 that information or take pictures if they're out and 25 get those to me and I'll get them to you. 26 27 The other thing I think is -- one of 28 the main reasons I wanted to have this report I think 29 number 1 was learning, you know, was the flu, avian 30 flu, whether there was any impact on these birds in the 31 population. 32 33 Number 2, I really appreciate this 34 (Indiscernible - distortion) being in this -report. 35 in it I'll go take it (indiscernible - distortion) honest about why -- one of the reasons why is, you 36 37 know, as one of the area's in the YK that are against 38 us basically with this road and thinking that it'll 39 damage the birds, but the birds are in the lagoons and 40 mainly at Izembek Lagoon to be specific. But to utilize information that's incorrect I always just --41 42 we have a hard time when people use information that is 43 wrong. I -- to take it a step further I wouldn't mind 44 this presentation being shared with the various regions so they have a concept of how the counting is done, 45 46 facts that the nesting is going on more now toward the 47 Arctic or the -- up -- farther north than the YK and 48 that's really good information. I think it's good 49 information for all of us to have a better 50

0259 1 understanding of what's happening. And I don't know what the -- who it's (indiscernible - distortion) to, 2 but it definitely -- and, I mean, it wouldn't hurt to 3 4 have a report given at the Statewide meeting so 5 basically we're a little more educated on what's going 6 on especially with the areas that are affected by 7 the.... 8 9 Again I'd like to say I very much 10 appreciate this report and I thank you. 11 12 MR. FISCHER: Thank you for that 13 comment and I'm happy to present this information. So 14 I just want to mention that within the Alaska Migratory 15 Bird Co-Management Council we're organized into regions Each of those regions has a 16 throughout the State. 17 migratory bird regional group, including Kodiak, 18 including the Aleutians. Each has their own migratory 19 bird group that meets. And we often come and present 20 information both at those regional meetings as well as 21 the Statewide AMBCC meetings. So I present the status 22 of waterfowl presentations frequently, sometimes more 23 focused on a particular species or a new technique to 24 try to keep folks appraised of what we're learning. 25 There's also the State Fish and Game comes and presents 26 any research that they're conducting and what they're 27 learning. USGS does the same and many others. So one 28 of the purposes of the AMBCC is to do exactly what 29 you're described. And then occasionally we come to 30 these RAC meetings as well which is generally not 31 something I think that the RAC does, but is of 32 So I certainly appreciate the invite to interest. 33 present this today. 34 35 MADAME CHAIR TRUMBLE: I think just for 36 my history of being involved with this for 25 plus --37 25 years basically that this RAC has always requested information for the sea ducks and the brant and the 38 39 emperor geese. We watch the emperor geese and I'm -- I know Rick Koso's online, we've watched that count every 40 41 single year, you know, and wondering if it was 42 accurate. But it -- I think my point behind it, this 43 Council has always had an interest and a lot of it has 44 to do with the subsistence that's involved with from Kodiak to the Aleutians. So that's why I'm saying if 45 46 it -- you know, I realize this -- dealing with 47 Migratory Bird Councils, but I think some of the RACs 48 that are involved here, it doesn't hurt for that 49 information I think to get out there to the RACs also. 50

0260 1 2 3 But again much appreciated. 4 5 ACTING CHAIR SKINNER: And, Julian, Т 6 had a quick question. With the brant I think -- well, 7 you said that the nesting is tending to move from the YK Delta up to the North Slope and you said it's 8 probably because of habitat, but I didn't catch what is 9 10 changing with the habitat that is shifting those 11 nesting areas. So can you speak to that a little bit. 12 13 MR. FISCHER: Yeah, I'll give that a 14 So brant are -- they specialize on sedges, shot. 15 coastal sedges and specifically they --their preferred 16 food is (indiscernible - distortion) and it's a -- it's 17 a very small sedge, it grows rapidly, but it's most 18 nutritious when it's at a very low -- a very small 19 height. If it's left ungrazed it changes form into a 20 much higher, less digestible sedge. On the North Slope the -- there's a ton of these stuff. Subspath fields 21 22 are just -- they're numerous, they're expansive and 23 what's interesting about what's going on on the North 24 Slope is when they're ungrazed by geese they still stay 25 in the low form. On the Yukon Delta it requires geese 26 to keep the -- keep that same type of sedge in its most nutritious form which is continuously grazed. 27 And without geese it starts getting out competed by other 28 29 forms of sedges and grasses. And so we think there's 30 less forage now on the Yukon Delta than there used to 31 be and there's more on the North Slope than brant can 32 take advantage of. There's just -- there's plenty. 33 34 And so -- and I want to -- I want to 35 emphasize too that we don't think that individual brant 36 are move -- are making a decision to move from the 37 Yukon Delta to the North Slope, it's more a long term change where North Slope brant are just doing really 38 39 well and so their population is growing. And the Yukon 40 Delta is either staying stable or slowly declining. The figure that I showed was of brant within the large 41 42 historical colonies. We know there's been some 43 expansion of smaller colonies on the Yukon Delta, but 44 we think it's enough to compensate for the losses in 45 the big colonies. So in general I think the Yukon 46 Delta brant population's going down and the North Slope 47 looks like it's probably increasing. 48 49 But again this year's count was really 50

0261 low. Whether that was a result of just poor breeding 1 conditions, I think Alison Williams is going to talk 2 about some signals of that this year when she talks 3 4 about age ratios. But there could have been some 5 impact from avian influenza although we didn't witness 6 huge die-offs we did see some dead birds, but not 7 massive die-offs. 8 9 But anyway so I just wanted to mention 10 that regarding the difference between the North Slope 11 and the Yukon Delta. 12 13 ACTING CHAIR SKINNER: Yeah, thanks. 14 Are there any further questions. 15 16 (No comments) 17 18 ACTING CHAIR SKINNER: Okay. It looks 19 like there's no more questions so thank you and we'll 20 go ahead and move on to our next presentation. 21 22 MR. FISCHER: Thank you for your time. 23 24 ACTING CHAIR SKINNER: All right. Our 25 next presentation is overview of Izembek National 26 Wildlife Refuge brant age ratio survey. And this will 27 be Alison Williams, Izembek National Wildlife Refuge. 28 MS. WILLIAMS: 29 Good afternoon, Madame 30 Chair and members of the Council. Thank you for allowing me to talk to you again today and speak 31 32 briefly about some of the work with waterfowl that we do at Izembek and specifically the brant age ratio 33 34 survey. I apologize, my -- I didn't get my slides into 35 supplemental material so I will be sure to describe we're seeing in the room so that folks online can get 36 37 all the information they need as well. For the record 38 my name is Alison Williams and I am the Wildlife 39 Biologist at Izembek National Wildlife Refuge. 40 41 Next slide. 42 43 So just to kind of outline what I'm 44 going to be talking about today I'm just going to start with just a brief touch on waterfowl use of the Refuge. 45 46 And then I will go into special emphasis on brant since 47 they are a key resource and the age ratio assessment 48 that we do on the Refuge. And at that point I'll be 49 able to take any questions that you have afterwards. 50

0262 1 Go ahead. So several of you had the 2 opportunity to visit Izembek at our last RAC meeting and that was the highlight of the meeting for us and so 3 4 we're really grateful for that. Izembek is a wet or a 5 marine and wetland habitat that's really important for waterfowl throughout the year. Based on past surveys 6 7 we do know that some birds nest locally at Izembek and specifically and most commonly we get mallards, black 8 9 scoter and greater scaup nesting on the Refuge. 10 11 We also are home to a really unique 12 population of tundra swans, that's essentially non-13 migratory and spends the winter and summer around 14 Izembek and the surrounding area. And so we do annual 15 population surveys for these tundra swans to understand 16 what's going on with their populations. They are a 17 small population that sees some fluctuation year to 18 year and over the long term appears to have -- be going 19 under a slight decline just due to periodic birds --20 periodically birds leaving that population. In our 2022 survey we did see 120 swans on the Refuge which 21 was down from 2021 count which was 169 swans. 22 23 24 However Izembek is most renowned for 25 it's large numbers of waterfowl that use the Refuge as 26 staging habitat and wintering habitat. So as Julian 27 mentioned basically the entire Pacific flvwav 28 population does use the refuge as staging habitat. This is -- Julian talked about how they're estimating 29 30 these numbers, but it may be even above the 150,000 31 birds that we even often sight. They are coming to the 32 Refuge for the eelgrass which is a seagrass in the 33 lagoon that's a really important food and nutrition 34 resource for their migration. And in the fall these 35 birds start to arrive in about August and anywhere from 36 Alaska, Canada and Russia and they tend to stay for 37 about eight weeks in the lagoon. By late October, 38 early November a majority of the population will depart 39 to wintering grounds along the Pacific coast and down 40 into Mexico, but as Julian mentioned before we're 41 seeing an increasing number of brant that stay year 42 round. 43 44 So Julian also mentioned a number of 45 the surveys that have been used to assess the 46 population status of brant throughout their range. And 47 so I won't go into detail on those, but I do just want to mention the three that are done here at Izembek. 48 49 Julian covered the winter brant survey and the fall

population survey that they do at the migratory bird 1 management, but the one I'm really going to be focusing 2 3 on is the fall productivity survey that the Refuge is 4 heavily involved with and we also refer to this survey 5 as the brant age ratio survey. And so I may use those 6 terms interchangeably throughout this presentation. 7 8 So the productivity on brant at the 9 Refuge has been collected since 1963. It was an effort 10 that was initiated by the first Refuge Manager after a 11 storm tide on the Yukon Kuskokwim Delta caused a lot of 12 And so they wanted to initiate a study nest failure. 13 that could be done to assess the productivity of the 14 entire population. And Izembek really offers a key 15 opportunity to do so because it's really the only place at which the entire population gathers in a small area 16 17 at the same time. 18 19 So the survey conducts -- collects data 20 on the number of juvenile or first year birds and adult 21 birds that are present at Izembek. Most of the first

year mortality that brant experience happens between hatching on their breeding grounds and the migration to Izembek. So this survey is effectively an index of recruitment which is just to say the number of birds that are joining the population each year. And this is the only measure of annual productivity that's taken on the entire population.

30 So there's a few key things I want to 31 mention about our field methods. The timing of the 32 survey is really important to consider because the timing of the arrival on brant -- of brant at Izembek 33 34 depends on the breeding location and the breeding 35 status of the birds. Those birds that are nonbreeding 36 tend to arrive at Izembek first in the fall, followed 37 by family groups of birds that are breeding in more 38 southern areas like the YK Delta and then finally 39 followed by those Arctic groups. And so we have to be careful to make sure we're timing the survey to ensure 40 41 that it's not done too early when the majority of the 42 birds present are those nonbreeding birds or that we're 43 doing it to late after those nonbreeding birds have 44 already departed otherwise we may get estimates of juvenile birds too high or too low. And so with some 45 46 of the previous work that's been done we've found that 47 those first few weeks of October are the ideal time to 48 do the survey because that's when we get some overlap 49 between these different timing of migrations. 50

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1 So to conduct the survey we have Staff travel to various sites within the lagoon by boat and 2 3 by foot to find brant flocks. We try to travel as 4 close as we can to these flocks without disturbing them 5 and so generally we have to get within about 400 meters 6 of the flock. And we try to get kind of a high vantage 7 point with good lighting behind us so that we can really see the details on these birds. Previous work 8 9 also indicates that the family groups and the juveniles 10 do not distribute evenly across the lagoon area so we 11 make sure that we visit as many different sites 12 throughout the lagoon as we can.

14 And if you can advance. And so in the 15 room what we're seeing right now is a map of the Izembek Lagoon area. And each little lagoon area has a 16 17 different point. And these points are basically illustrating the difference in the mean point estimate 18 19 of age ratios over this long term of this study. And 20 so these are just point estimates, there's variability 21 in this year to year, but just to give you an idea 22 there's parts of the lagoon where we tend to see higher 23 proportions of juveniles such as that central part of 24 the lagoon, Grant Point and that southwestern portion 25 of the lagoon, Norma Bay. Some of those may be as high 26 as 36 percent on average. We do see some years where 27 they're higher, some years where they're lower. And 28 then there's other parts of the lagoon such as Kinzarof Lagoon and Applegate Cove or the more north central 29 30 part of the lagoon where we see a lower proportion of 31 juveniles. And the long term average there is about 18 32 percent, but again some years higher or lower. And so 33 this just illustrates the importance of trying to 34 survey as much of the lagoon as we can and access not 35 just from shore, but also from boats so that we can 36 really get a representative sample of what is on the 37 We also know that sometimes brant will landscape. 38 distribute across the lagoon based on their breeding 39 area and so it's just another great reason to make sure 40 we are sampling as much of the area as we can.

41

42 We can go ahead. So just to give you 43 an idea of what we're looking for when we're doing this 44 survey, we are looking for adults versus juveniles and the differences between these birds can be visually 45 46 determined by their plumage characteristics. So in the 47 room we're seeing a photo of a group of birds and we're 48 seeing the label or an adult versus a juvenile. So a 49 juvenile bird will have white edging on their wing 50

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1 coverts which are those smaller feathers on the tops of their wings and it creates these white lines across 2 3 their back that almost look like Vs or chevrons. The 4 adults have -- do not have those white edges and they also have a white necklace and kind of barring, 5 6 vertical barring, along their sides. So in 7 Septemberish the juveniles start to get the white necklace so we're really trying to focus in on that 8 9 white edging of the wing coverts to be able to tell 10 them apart. And so for those in the room we can see a 11 photo of a flock of birds and we can see a few adults 12 on the left-hand side and then some juveniles on the 13 right-hand side. So that can just give you an 14 understanding of how close we need to be to these birds 15 and how we are able to conduct the survey. 16

17 So the data then after we collect it 18 gets shared with USGS and they run the data through a 19 model to account for some uncertainty in the methods 20 and the counts that we get. And this just produces a 21 more reliable estimate of the true age ratios that are 22 in the population. As noted earlier the age ratio can 23 differ a lot by area of the lagoon and so into these 24 models we put where this count was taken to kind of 25 account for that variety. Some other variables that we 26 might also include the flock size, the day of the 27 season the survey was taken and the title sage the survey was at since we know those can affect the 28 29 proportions that we get in our counts. And so all of 30 that goes together to produce an estimate that we feel 31 is statistically reliable each year. 32

33 And so looking at the long term trend 34 of all years our productivity ratio is slowly declining 35 percent each year. at about .6 And this is 36 particularly apparent in the first years of the study 37 up through about 2015. We see a lot of variety year to 38 year, but that steady decline is more apparent. In the 39 -- since 2015 the estimates do -- the trend and the estimates does appear to be more stable. We do see a 40 41 lot of variety year to year, but it has been more 42 stable in recent years. And a lot of this variety just 43 is due to conditions on the breeding grounds and any 44 events that might happen there with environmental 45 conditions or predation or even disease. So the long 46 term average ratio is about 24 percent juvenile in the 47 population. 48

Our 2022 survey showed an estimated

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1 ratio of 15 percent juveniles which is lower that the long term average, but it's not significantly or it did 2 not significantly influence that long term decline of 3 4 .6 percent. This decline is likely related to the 5 decline of nesting birds and just overall birds on the Yukon Kuskokwim Delta and this year's decrease may also 6 7 be related to avian influenza. We did have some anecdotal reports of sick birds and some reproductive 8 9 failureonthe YKDeltaand sothat mayhavealso contributed. 10 11 And so all of these data and graphics 12 are published annually on a USGS site for managers or 13 any other curious minds to explore. The site is just 14 titled the annual age estimates of brant. I guess I 15 don't remember the exact title, I don't have it in front of me, but that is accessible for anyone to look 16 17 at. 18 19 So brant went or I'm sorry, Julian went 20 into the Pacific Flyway Management Plan for Brant. And 21 so he shared a lot of details there and I won't reiterate that too much. But it -- currently the 22 23 population estimate for management purposes is used --24 is created using that winter brant survey. And so 25 these age ratio estimates that we're obtaining right 26 now aren't currently the index used for management. 27 However with these ratio estimates in combination with the fall population survey can be a really valuable 28 29 for assessing the population health tool and 30 understanding how brant populations are going to change 31 in the future. And so we continue -- we plan to continue these counts indefinitely just to get some continuing data on these trends and understand better 32 33 34 what's going on with our brant. 35 36 this point this concludes At my 37 presentation and I'd be happy to take any questions. 38 ACTING CHAIR SKINNER: Are there any 39 40 questions or comments. 41 42 Pat, go ahead. 43 44 MR. HOLMES: Yeah, that's a swell 45 presentation, I think we really appreciate it, that's 46 And I recall when we had our Cold Bay really good. 47 meeting one of your Staff out there made the most 48 delicious dish of brant that I've ever had. And anyway 49 so hopefully we'll be doing Cold Bay again, but 50

0267 1 appreciate your hard work and sitting through all these hours of blah, blah, blah, blah to put two bits worth 2 3 in. It's really good. 4 5 Thank you. 6 7 ACTING CHAIR SKINNER: Della, we're you 8 trying to jump in. 9 10 MR. KOSO: Yeah, it's Rick. 11 12 MADAME CHAIR TRUMBLE: This is Della. 13 Oh, go ahead, Rick. 14 15 MR. KOSO: Oh, no, it's okay. I didn't mean to jump on you there. Well, anyway I just had a 16 17 quick question for you on a very -- very good report. 18 So just wondering on your -- the way you issue permits 19 for guides to hunt at Izembek, do you have a special 20 deal that they're -- they have to pass or do you just 21 limit so many, how do you do that and how do you keep track of their clientele? 22 23 24 MS. WILLIAMS: Yeah, thank you. 25 Through the Chair. Currently waterfowl guiding on the 26 Refuge is a noncompetitive process so anyone can apply 27 to guide on the Refuge. And there aren't restrictions 28 on numbers of clients they can guide or number of days 29 they can guide. When they do get a permit from the 30 Refuge they are required to report their client use 31 days which are essentially the number of days they had 32 client or the number of days they had clients on the Refuge or using the Refuge. I believe our Refuge 33 34 Manager, Maria Fosado's online and she could expand or 35 add anything to my answer if she feels it's necessary. 36 37 MR. KOSO: Thank you. 38 39 MS. FOSADO: Yes, Madame Chair, members of the Council. I am here, but I would like to pause 40 41 and see if that answered the question or if I needed to 42 further go into detail. 43 44 MR. KOSO: No, that answered my 45 question. Thank you. 46 47 ACTING CHAIR SKINNER: All right. Go 48 ahead, Della. 49 50

0268 1 MADAME CHAIR TRUMBLE: Thank you, 2 Madame Chair. I guess I'm just kind of did I miss something, but I don't -- Ididn't have a copy of this--3 4 the report. Is it possible I can get somebody to 5 email that to me? 6 7 MS. HUTCHINSON-SCARBROUGH: Yes, Della, 8 I will make sure everybody gets a copy. 9 10 Thank you. It's okay we share it? 11 12 (No comments) 13 14 MS. HUTCHINSON-SCARBROUGH: Okay. 15 Thanks. 16 17 MADAME CHAIR TRUMBLE: Thank you. 18 19 ACTING CHAIR SKINNER: All right. Are 20 there any further questions or comments. 21 22 (No comments) 23 24 ACTING CHAIR SKINNER: Okay. Thank you 25 very much. We will move on to our next presentation. 26 And that is half of Alaska's common murres killed in 27 heatwave, Heather Renner, Alaska Maritime Wildlife 28 Refuge. 29 30 MS. RENNER: Hello, can you hear me 31 okay? 32 33 ACTING CHAIR SKINNER: We can. Thank 34 you. 35 36 MS. RENNER: Great. And have you got 37 my presentation up? 38 39 MS. HUTCHINSON-SCARBROUGH: Yes, we 40 have it up. Thank you, Heather. 41 42 MS. RENNER: Okay. Super. Thank you, 43 Thank you members of the Council. Madame Chair. My name is Heather Renner, I'm the Supervisory Biologist 44 at the Alaska Maritime National Wildlife Refuge, I'm in 45 46 Homer. Thank you for giving me a few minutes of your 47 time today. 48 49 My talk is about a disaster of epic 50

1 proportions. I know you've heard about the bird dieoff associated with the 2015/2016 marine heatwave in 2 Alaska. Jeff Williams mentioned it briefly in his 3 4 earlier report from the Refuge, but the earlier estimates were based on carcass counts and today I'm 5 going to give you a colonies based perspective. So in 6 7 most die-offs we haven't detected affects on the 8 breeding colonies. 9 10 Starting -- oh, next slide, please. 11 12 Starting in January, 2016 the public 13 started finding dead common murres all over the beaches 14 in Alaska. It was a really big story at the time, it 15 was picked up by national and international news sources. I guess one silver lining was that it might 16 17 be for the first time that the general public actually 18 knew what a murre was. 19 20 Next slide, please. 21 22 So in total about 62,000 carcasses were 23 found from California to the Bering Sea. Those were 24 from beach bird surveys and from reports to the public. 25 There was a big interagency effort to get out to survey 26 beaches and learn what was going on, but we know that 27 when seabirds die only a tiny fraction of the dead birds actually show up on the shore. 28 So when PLOS 29 published a paper in 2020 that calculated a jaw 30 dropping mortality estimate of half a million to a 31 million common murres and it got a lot of press at the 32 time because that was really a truly unprecedented 33 event. 34 35 Next slide. 36 37 But estimating mortality from carcass counts has got lots of problems. Counts of breeding 38 39 colonies are really the best way to estimate population 40 trends. During the breeding season the murres are tied 41 to their egg or their chick and they're concentrated in 42 big numbers and they have consistent attendance and so 43 that's when our traditional counting happens. 44 45 Next slide. 46 47 Common murres breed across the entire 48 coast of Alaska, the biggest colonies are in the Gulf of Alaska and the southern Bering Sea. They share lots 49 50

1 of colonies with thick-billed murres although the thick-billed murres are more concentrated near waters. 2 3 For example the Aleutian Islands has very few common 4 murres, but mostly thick-billed murres. At Alaska 5 Maritime Refuge we have a network of monitoring colonies around the State where every year we send 6 7 crews out to keep track of seabirds. And Jeff Williams earlier showed some of those results in his earlier 8 9 report. 10 11 Next slide. 12 13 In 2015 it was obvious that something 14 This is a cliff on east Amatuli Island was going on. 15 in the Barrens, one of our long term monitoring sites. Specifically it's packed densely with cooing common 16 murres, but in the summer of 2015 at a time when birds 17 18 normally wouldn't have fled the nesting ledges were 19 empty. Here and at many colonies in the region rafts 20 of nonbreeding birds were sitting in the water near the 21 colonies. We've never seen this before in 40 years of 22 monitoring. 23 24 Next slide. 25 26 So we couldn't count the birds. So 27 let's look at Chowiet Island in the Semidi group, the biggest concentration of murres in the Gulf of Alaska. 28 29 After decades of mildly fluctuating counts and a 30 general increase in 2015 there were no birds on the 31 colony. A few birds showed up on the cliffs early in 32 the summer, but they didn't attempt to breed. And we 33 found this pattern at colonies throughout the Gulf with 34 just really widespread breeding failure. So we were 35 reluctant to use counts on the colonies since that's 36 how many birds had been truly lost. 37 38 Next slide. 39 40 But since 2017 the murres have been 41 attending the coast regularly and we've had near normal 42 breeding success. So we took this opportunity to 43 calculate estimates of loss. Because counts vary from year to year we average them in five year blocks so the 44 average count from the five year period prior to 2015 45 46 we compared those to the average from the last five 47 years. Here's an example from the biggest murre colony 48 in the Bering Sea at St. George Island. We didn't have 49 counts every year, we only averaged them within the 50

0271 1 five year block. So at St. George 77 percent of the common murres visit here after 2015. We compiled 18 2 different datasets from different colonies like this 3 4 around the State. 5 6 Next slide. 7 8 And it turns out every colony in the 9 Bering Sea had a similar dramatic loss ranging from 70 10 to 84 percent. We put them on top of each other and we 11 scale the proportion of the maximum count at the colony 12 so that we could evaluate change in the same way 13 regardless of size. 78 percent of the 1.66 million 14 common murres in the region are missing. 15 16 Next slide. 17 18 In the Gulf of Alaska there's a mean 19 loss of 54 percent. The graph is a little bit noisier 20 due to some gaps in the few colonies that weren't counted every year, but the loss calculations were 21 22 completely consistent in the region. 23 24 Next slide. 25 26 So you should have a map for the -- for 27 The map shows the total loss during the this slide. 28 heatwave at all 18 monitored colonies. The circles are 29 still proportionally to their colony size before the 30 heatwave and you can see that in the Gulf of Alaska and 31 east Bering Sea it's a remarkably consistent picture of 32 massive loss. The Bering Sea took an especially hard 33 I do want to point out the tiny colony St. hit. 34 Lazaria in southeast Alaska, but definitely it has just 35 about 2,500 common murres and it showed a small gain during the time period. This puts some geographic 36 37 boundaries on the colonies affected by the die-off. 38 39 Next slide. 40 41 So how many murres did we lose. I'm 42 to walk you through our super going simple calculations. In the Gulf of Alaska we previously had 43 44 1.35 million common murres, 54 percent of those are missing. In the east Bering Sea we previously had 1.66 45 46 million common murres, 78 percent of those are missing. 47 So just in those two ecoregions that total 2 million 48 common murres missing from colony counts. 49 50

0272 1 Next slide, please. 2 3 But colony counts by themselves don't 4 account for all the bird that must be at sea. Since 5 murres don't build nests we can't count breeding pairs like we do for some species. We count some birds that 6 7 are loafing or not breeding and at the same time, you know, that each nest has birds that are not on the 8 9 colony at any given time. So there's been a lot of 10 effort that's gone in to kind of quantify what that 11 proportion is, it's called a K correct factor and we know that varies every year and on every colony, but a commonly accepted figure seems to be -- use a 12 13 14 correction factor of about 1.7 or 1.67 to adjust colony 15 counts to actual birds. 16 17 Next slide. 18 19 So when we adjusted that with the 20 commonly used correction factor we estimated that 3.2 21 million breeding common murres died. This is a 22 substantial proportion of regional populations at every 23 spatial scale, from the Alaska population to the U.S. 24 Pacific Continental Shelf and it's about 38 percent of 25 the North American continent. 26 27 Next slide. 28 29 For some context on seabird die-off 30 this is a recent Arctic report card that Robb Taylor 31 And it went back into the seabird die-offs published. 32 in Alaska. This is the figure on the left. The large 33 bubble is the 2015/'16 die-off, but the size was based 34 on the published estimates, not our new calculation. I 35 took the liberty of adding the Exxon Valdez oil spill 36 in red just for some text. The estimated mortality 37 there was about 75,000 birds. And the figure on the 38 right we looked a little broader across the other 39 taxonomic groups a recent paper summarized trends in 40 mass mortality events of all wildlife. The Y axis on a 41 log scale and I have added our event with a red star. 42 But the take home message was that for birds or 43 amphibians, reptiles, mammals, there's been no die-offs 44 anywhere approaching this size ever reported for any 45 group other than fish. 46 47 Next slide. 48 49 To our knowledge this was the biggest 50

0273 1 bird die-off ever recorded. 2 3 Next slide. 4 5 So the first question most people ask me is what thick-billed murres. 6 In Alaska common 7 murres share their breeding ledges with thick-billed murres and they look so similar that often in the 8 counts they're not distinguished to species and they 9 10 seem to have many similar habitat. 11 12 Next slide. 13 14 So after the heatwave ended we had a 15 very different story for this species. Let's look at St. George, the biggest thick-billed murre colony in 16 17 the world. While in 2016 that one bad year they failed 18 to raise chicks we didn't detect any evidence that 19 thick-billed adults died in (indiscernible 20 distortion). 21 Next slide. 22 23 24 And we had the same story at Chowiet in 25 the Gulf of Alaska and all the colonies where we 26 studied them together, had these massive losses of 27 common murres and at the same time no detectable losses 28 of thick-billed murres. 29 30 Next slide. 31 32 These birds seem so similar so why the different responses. And I'm just going to briefly 33 34 discuss a couple areas where they have differences that 35 we think might have created those different responses. 36 And those are their wintering foraging areas, maybe 37 they weren't available to be exposed to the same 38 environmental conditions during the wintertime when the 39 peak of this die-off happened and diet. We presume 40 they have some slightly different diet habit which is 41 don't have time to go into in great detail today. 42 43 Next slide. 44 45 The marine heatwave didn't affect all 46 the species equally, there were winners and there's not 47 -- I'm sorry, there were losers and if there weren't 48 winners there were at least survivors. The responses 49 also varied as you know among how many groundfish in 50

1 the Gulf such as walleye pollock and Pacific cod. We would have expected both of those fish to have similar 2 3 responses to the warm temperature, but their 4 differences in life history influence how their 5 So Pacific cod responses showed up. crashed 6 precipitously and haven't recovered whereas the 7 relatively more pelagic and lower trophic zooplankton eating that walleye pollock was apparently enough to 8 maintain growth during the apparent abundance 9 of 10 zooplankton during the heatwave. The Pacific cod crash 11 is bad news for fishermen, but might have provided a 12 glimmer of hope for murres by reducing competition for 13 forage fish. These different responses give us insight 14 into what adaptions might be successful in a warming 15 world. 16 17 Next slide. 18 19 I'm going to wrap up here. In 20 conclusion we witnessed the biggest bird die-off ever comprising at least 3.2 million breeding birds, about 21 22 half of Alaska's common murres. This was the first 23 time we've been able to observe the effects of die-off 24 events in (indiscernible - distortion) breeding colonies presumably because mortality usually has been 25 in young or nonbreeding birds. This single species 26 27 event shows us that common murres were not able to 28 adapt to changing forage conditions while other species 29 were. 30 31 Next slide, please. 32 33 And the results were disastrous. 34 35 That wraps up my presentation. I'd 36 like to thank you for your time and if you've got time 37 I'm happy to stay on and take any questions. 38 39 Thank you. 40 41 ACTING CHAIR SKINNER: All right. 42 Thanks. Are there any questions. 43 44 (No comments) 45 46 ACTING CHAIR SKINNER: Okay. I'm not 47 seeing or hearing any so thank you very much. 48 49 MS. RENNER: Thank you. 50

1 MADAME CHAIR TRUMBLE: Maybe just a 2 comment, Becky. Just thank you for the report. 3 4 MS. RENNER: Absolutely. 5 6 ACTING CHAIR SKINNER: Was that it, 7 Della. 8 9 MADAME CHAIR TRUMBLE: Yeah, that's it. 10 11 ACTING CHAIR SKINNER: Okay. Thank 12 you. 13 14 ACTING CHAIR SKINNER: All right. 15 We're going to go ahead move on to our next presentation which is the Alaska seabird update, Robert 16 17 Kaler, Migratory Bird Management, Alaska Region, Fish 18 Wildlife Service. and And it looks like the 19 presentation is being projected in the room. And it's 20 also noted as being in supplemental Tab 9. 21 22 MR. KALER: Good afternoon. How do you 23 hear me, am I on a cell phone in a bowl in the middle 24 of all of you. 25 26 (Laughter) 27 28 ACTING CHAIR SKINNER: Well, you're in 29 a cell phone sitting on top of a paper coffee cup, 30 but.... 31 32 (Laughter) 33 34 ACTING CHAIR SKINNER:you're 35 coming in good. So go ahead. 36 37 MR. KALER: Excellent. Well, thank 38 you, Madame Chair, and thank you, Council members. 39 Much appreciate your time and attention. I will go through this fairly quickly. Heather Renner set the --40 41 some of what I'll be discussing, but I'll go through 42 that very quickly, but thank you all for your time. 43 44 Hopefully the slide that you are seeing 45 right now, that is my opening slide. So I'm Robb 46 Kaler, but I'm with U.S. Fish and Wildlife Service 47 Migratory Bird Management. I'm а seabird 48 Researcher/Manager, but I also then try to back it out 49 to all marine birds, not just seabirds, but marine 50

0276 1 birds in general. Liz Labunski is my counterpart, I'm based on the Dena'ina lands here near the airport in 2 3 Anchorage. But what I want to emphasize on this slide 4 in particular is that there's a lot of partners, Gay Sheffield for example, she's UAF/Alaska Sea Grant, 5 she's based in Nome; Brandon Ahmasuk, he's Kawerak, 6 7 he's also based in Nome; Stacia Backensto, National Park Service, she's leaving Fairbanks; and then Julia 8 9 Parrish, Tim Jones and Jackie Lindsey, they're based at 10 the University of Washington, but they've been a really 11 huge partner in tracking some of the seabird die-offs 12 that I'll touch on briefly; and then of course Heather 13 Renner and then the folks that she supervises based in 14 Homer at the Alaska Maritime National Wildlife Refuge; 15 and then we also have our USGS partners, Barb Bodenstein and Bob Dusek, they're in Madison and 16 17 they've done a lot of the kind of -- helping us 18 determine causes of death; and then I just also want to 19 emphasize when it comes to harmful algal blooms which I 20 think is kind of a growing concern we've relied heavily 21 on Caroline Van Hemert and Matt Smith and they're based in Anchorage on Dena'ina lands at the USGS Alaska 22 23 Science Center. 24 Next slide, please. 25 26 And so as I've just said a lot of this 27 information, I'm really just kind of if you will а I rely on a lot of partners to provide 28 poster boy. 29 information with me that I can then provide to 30 partners. But of course quyana to all of you and, you know, the -- our tribal partners, some of -- some of 31 32 the data that we collect here within the Migratory Bird 33 Program are based at sea and some of them are based on 34 land. But I just wanted to say quyana to all of you 35 and then of course our funding partners, the banner across the bottom of this slide here. Again I just 36 37 want to emphasize this is a lot of partnering and thank 38 you to everybody. 39 40 Next slide please. 41 42 So I think you -- so you -- for those 43 that are on the phone and may not see this, this is 44 kind of a -- it's what we call a bubble chart and what it's trying to emphasize is that in the previous 40 45 46 years with recording seabird die-offs or mass mortality 47 events of seabird die-offs the previous 40 years starting in 1970 in the past decade, the last 10 years, 48 49 we've had just about as many birds. And then of course 50

1 what Heather just shared, you know, does not include that and I think she had this image up too. 2 But what 3 we're trying to emphasize is that in the last 10 years 4 we've had a lot more die-offs of marine birds and And with that there have been 5 seabirds specifically. rapid changes in the marine ecosystem. And I'm happy 6 7 to follow-up on that, but I'm going to move very quickly because I think Heather touched on this and 8 9 then she actually added in that the Exxon Valdez oil 10 spill in 1989 as an additional example.

11 12

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Next slide, please.

14 So this figure is a combination of maps 15 and this is based on information that we get from communities, tribes, our State and Federal partners and 16 17 the data here go -- the upper left corner is 2017, the 18 lower right figure, that's 2022. The size of the 19 circle and what -- the point of this slide is really to 20 show that -- and this is working with our Coast 21 Observation and Seabird Survey Team partners as well as 22 our communities, tribes and State and Federal partners 23 kind of trying to track the magnitude, how many birds 24 die, the duration, when do we first get reports, when 25 do we last get reports and then which species are being 26 affected or impacted. And so this figure right here, a 27 lot of information and maybe the print is slightly 28 small, but the size of the circle indicates the number 29 of birds that were reported and as Heather mentioned 30 the -- by the time that a bird carcass washes up on a 31 beach and is reported and I get a report here in 32 Anchorage, there's -- it's only a fraction, right, the 33 minimum of what actually were probably impacted or died 34 And so at the risk of being depressing I that year. 35 just want to emphasize that these are minimum numbers, 36 so the size of those circles in reality are probably 37 much larger, but you see that some of the species are 38 murres that Heather was talking about, kittiwakes, 39 those are also ledge nesters, but also other species such as the ones that feed on plankton, you know, kind 40 41 of the zooplankton. So it's a broad range of species 42 that are being impacted during these last few years. 43 And you'll see that a lot of these die-offs have been 44 up in the Bering Strait region, but in some years, for example, 2019, you see that a lot of birds were in the 45 46 Bristol Bay. And what Heather was touching on or 47 mentioned was the 2015/2016 marine heatwave and that 48 was in the Gulf of Alaska. So we haven't had a lot of 49 reports from the Gulf of Alaska, but in 2021 you will 50

1 see Middleton Island which is in the Gulf of Alaska there was -- there was a disease event and that was 2 avian botulism. And generally avian botulism has not 3 4 been recorded, I mean, that was the first year 5 historically ever that avian botulism was reported from Alaska and that's generally because avian botulism --6 7 the botulism virus requires a little bit warmer And that's something that -- again when 8 temperatures. 9 these birds are compromised because they're not 10 sighting enough food in the marine ecosystem, we want 11 to remain vigilant about recording and as well as 12 testing. So I know there's a lot of discussion about 13 highly pathogenic avian influenza or bird flu and what 14 we want to do is just help get those -- get those 15 carcasses through the proper channels and make sure they're tested so that we can track. So when a bird is 16 17 compromised physically because they're unable to find 18 food they may now be more susceptible to disease, avian 19 botulism, avian cholera or HPAI. And I want to 20 emphasize that highly pathogenic avian influenza, we 21 call it highly pathogenic because it's highly 22 pathogenic or highly transitable to poultry. And so 23 that's not so much to humans, but we want to remain 24 vigilant about that as well. But it's because of susceptible to poultry and that's of course an industry 25 26 in the lower 48 and then I'm sure some of you might 27 have back yard poultry, you know, chickens that you're 28 raising. 29 30 So next slide, please. 31

32 So this is -- this table -- the table goes to 2017 to 2021. And the main thing here $\mbox{--}$ so 33 34 this is working with the USGS National Wildlife Heath 35 Center, the USGS Alaska Science Center and then as well 36 as other partners. But what I want to -- what I intend 37 to emphasize here is that working with local partners to get carcasses, fresh carcasses, into Anchorage and 38 39 then I submit those or in the past I've been able to submit those to our USGS National Wildlife Health 40 Center at Madison, Wisconsin. And that's where they do 41 42 a gross necropsy, examine the bird and really determine 43 a cause of death. And so this table is summarizing that -- these results. If you look at the top row in 44 this -- the past few years the total reported, that's 45 46 the number that we're seeing or that we're hearing 47 about, that's across the top. The number that we're 48 actually able to have examined and of course that's 49 relying heavily on partners in the remote communities, 50

1 you guys, to get carcasses submitted to Madison. But what I want to emphasize is that total on that far 2 3 right column, emaciation is the leading cause of death. 4 There were cases where cause of death was undetermined, that was about seven, and then other causes of death, 5 that was 18 if you see, if you're following along here. 6 7 There is an indication of low pathogenic avian influenza, we had four cases of that and by low I'll 8 emphasize that that's low in terms of pathogenic 9 transfer to humans -- I'm sorry, transfer to poultry. 10 11 And in general avian influenza, again we want to remain 12 vigilant, but it's not -- it's not highly transmissible 13 to humans, but we want to remain -- remain vigilant. 14

15 And then saxitoxin. So saxitoxin, 16 that's one of the harmful algal blooms. We refer to 17 those generally as HABs, H-A-Bs, and that's where there 18 have been associations of harmful algal blooms in some 19 of the carcasses examined, but I'll emphasize that that 20 was not determined to be the cause of death. But our partners at the USGS Alaska Science Center are doing 21 22 research on that, what dose of saxitoxin for example, 23 what dose, what level needs to be consumed by a bird to 24 cause it to essentially die, the cause of death. But 25 right now there has been some saxitoxin detected, but 26 that has not been the cause of death. So the summary 27 of this slide here is that the leading cause of death 28 in seabirds that we've examined is emaciation.

Next slide, please.

32 And as I maybe -- I think maybe Jeff 33 Williams earlier today he presented this slide, but I'm 34 relying heavily on all of our partners and in 35 particular this slide is -- this is kind of my upbeat side where I can say work done by Alaska Maritime 36 37 National Wildlife Refuge indicates that 2022 was а They are 38 better year than the previous years. 39 monitoring eight sites, this is long term datasets, but 40 it's just uplifting to see all those -- the happy faces 41 on the eggs, but you'll also see that this is laid out 42 on the left side primarily the fish eaters like redfaced cormorants or glaucous-winged gulls and then over 43 44 to the right side which is primary your -- the plankton 45 or the zooplankton consumers, parakeet auklets and 46 least auklets. So this is kind of where I try to be 47 uplifting and thanks to Alaska Maritime for providing 48 this report card annually since I think about 2016 or 49 17.

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_	Next slide, please.
$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\9\\20\\21\\22\\3\\24\\25\\26\\27\\28\\29\end{array} $	Next slide, please. And I did not I did not see Brian Brettschneider's presentation. This is from Rick Toman, I follow I follow Rick's updates, but this is a presentation that he did for the Bering Strait Science, Gay Sheffield out of Nome, UAF/Alaska Sea Grant, she hosts that. I encourage everybody to I learn so much every Thursday night, in fact there's on tonight on harmful algal blooms. But this is showing, this is what's right now ocean temperatures for the winter of 2022/2023, so this is December through February. And you'll see these are anomalies, these are departures from what's normal and that normal is based on 1991 to 2020, that's the baseline. And so what Rick Toman was showing here, and this again was his presentation from last week, is showing that the Bering Strait is relatively cool, which that's a positive, maybe the cold pool and the, you know, ice you know, sea ice is better than it has been the last four or five years, but you do see that the warmer temperatures or the warmer colors, I mean, indicated that there is warmer water in the Bering and in particular you see that in the Bristol Bay. And so these are degrees fahrenheit, often you'll see these in celsius which I don't convert celsius and fahrenheit very well at all, but so this this makes a so it's not yeah, I don't want to be I don't want to anyway I this is not positive information here
30	that I'm that I'm sharing
31 32 33	(Laughter)
34 35 36 37	MR. KALER:ocean temperatures appear to be a bit warmer compared to the long term baseline.
38 39	Next slide, please.
40 41 42 43 44 45 46 47 48 49 50	So this is, you know, Alaska Migratory Bird Co-Management Council, they did stand up a Seabird Subcommittee that started in the fall of 2021. I've listed names here, I know Coral's on the call, perhaps Gayla is too. Anyway if you're interested in hearing about updates of seabirds please reach out to me, you can find my information either online, but my closing slide will have my information as well. And I think what I want to emphasize, the 2022, and this is based on information that we've gotten from our various AMBCC

0281 1 partners. So 2022, this was last year, Sledge Island which is west of Nome, appeared that seabird numbers 2 3 were relatively poor and that was based on observed 4 from Brandon Ahmasuk. Bluff which is to the east of 5 Nome, numbers of seabirds were actually good so that 6 St. Paul and St. George, this is was positive. 7 information from Alaska Maritime from Heather Renner, sounded like seabirds were actually fairly normal. St. 8 9 Lawrence Island, the auklets, those auklets are feeding 10 on plankton, those numbers were poor. Cape Lisburne, 11 that's very far north, north of Nome on the Seward Peninsula. Alaska Maritime and I'm, you know, not 12 13 trying to steal Alaska Maritime's thunder, but they are 14 using time lapse cameras and I think those were knock 15 over or stymied due to bears. So hopefully in this a little bit better 16 coming field season, 2023, 17 information. There was concern about hatchery salmon 18 as they call it, you know that. That photo on the 19 upper right, that was a report from late September. 20 Shishmaref which is on Sarichef Island, that was following typhoon Merbok or extyphoon Merbok and so 21 22 that's an unprecedented and unusual photo there. So 23 these are the reports that we really appreciate 24 everybody providing. 25 26 And so I will go -- next slide, please. 27 28 So I'll wrap up very quickly. Concerns 29 for seabirds. So we know that there's increased vessel 30 traffic, this is mostly in the Bering Strait region, 31 but large scale commercial fishing, that lack of a cold 32 pool following the lack of sea ice extent in the Bering 33 Strait region, a lot more fishing further north. We're 34 always considered about (indiscernible - distortion) 35 ship wrecks, oil spills, plastics and contaminants, and 36 then of course invasive species and then diseases as I 37 mentioned when birds are compromised due to lack of 38 food in the environment and then of course climate 39 change and loss of sea ice. 40 And my final slide. Thank you for your 41 42 time, I know you guys are working hard. Please don't 43 hesitate to reach out to me if you have any questions, 44 I'm happy to answer questions if there's time now. 45 46 But quyana to all of you for all the 47 great work that you do. 48 49 ACTING CHAIR SKINNER: All right. Are

0282 1 there any questions. 2 3 Go ahead, Pat. 4 5 MR. HOLMES: Yeah. Great report, lot 6 I had a couple questions. of information. On your 7 regional information concerns I had a brief statement about concerning hatchery salmon. And I was just 8 wondering what that was, if, you know, your birds are 9 10 feeding on fish, if those releases are positive or 11 negative one would think? Anyway that's the first 12 question. 13 14 MR. KALER: Yes. That -- through the 15 Chair, Madame Chair. Thank you, Pat. Appreciate that 16 question. That was something that was raised at last 17 fall's Alaska Migratory Bird Co-Management Council 18 question and specifically from somebody up in Gullivan. 19 I think the point that I'd like to make clear is that 20 in Alaska with hatchery salmon and pink salmon in 21 particular, it's referred to salmon ranching in the sense that -- and this is from what I've understood 22 23 from Prince William Sound Aquaculture Corporation in 24 particular, some of the presentations I've seen, that 25 the salmon compared to the lower 48 that when they 26 release the salmon in Alaska they have -- they're 27 And so the concern or the question that I've older. 28 received and that's what I'm -- what I'm trying to 29 address is that there's concern that they're consuming 30 more resources because they're older and bigger. And I 31 think we all know -- I mean, there's kind of a top down 32 like kind of the top consumers versus a bottom up, you 33 know, the bottom consumers. And that marine birds and 34 marine mammals are kind of pinched in the middle 35 competing for those resources. And so it's something 36 to -- I'm not trying to disparage hatchery salmon or 37 even pretend that I know what I'm talking about, but 38 it's something that I think we need to be thinking about through resource management. Well, above my pay 39 grade, but something that I think about in terms of how 40 41 we manage the resource and what might be impacting our 42 seabirds and our marine mammals. 43 44 MR. HOLMES: Thanks. I believe that 45 pink salmon when they're released they're fry, probably 46 less than half a finger length, and I believe that they 47 primarily feed on plankton. When I've seen some 48 releases in Kodiak you end up getting all kinds of 49 seagulls and -- coming to eat so it's probably 50

0283 1 something to check on, but mixed message. 2 3 The other question I have is on large 4 scale commercial fishing. And I just would make an observation of back when we had a shrimp trawl fishery 5 here in Kodiak the -- one of the major rookeries down 6 7 near Twoheaded Island on the southeast side of Kodiak had tremendous colonies of birds. And then once the 8 fishery stopped, they had a crash in their population 9 10 for a couple of years. And I was just kind of guessing 11 and from my own observations on doing surveys there, 12 trawl surveys, that, you know, those birds during their 13 spring rearing were taking advantage of all of the 14 small things that were washing out of the nets, shrimp 15 or whatever other small fish. But once that happened and then things restabilized years later after the, you 16 17 know, fisheries changed off and the birds readapted, 18 but that could be a two way thing as well. 19 20 Thank you. 21 22 ACTING CHAIR SKINNER: All right. Are 23 there any further questions. 24 25 MR. KALER: Yeah, through the..... 26 27 ACTING CHAIR SKINNER: All right. And I'm sorry did you have a follow-up clarification based 28 29 on Pat's comment. 30 31 MR. KALER: No, I was just thanking Pat 32 through the Chair, Madame Chair. Thank you for that comment, Pat, and I appreciate everybody's sharing of 33 34 information. 35 36 Thank you all for your time. 37 38 Much appreciated. 39 40 ACTING CHAIR SKINNER: All right. I'm 41 not seeing or hearing further questions. So thank you 42 and we'll go ahead and move on to our next agenda item. 43 And that will be update on the Kodiak Summer Marine Bird and Marine Mammal surveys, 2011 to 2022 and 44 Aleutian and Arctic tern monitoring and research, Robin 45 46 Corcoran, Kodiak National Wildlife Refuge. And just to 47 clarify we don't have any presentation we need to be 48 looking at. 49 50

0284 1 MS. CORCORAN: Yeah, I apologize. Τ wasn't able to get the presentation done in time to 2 3 provide it for the meeting notes and I just handed it 4 off. It's hot off the presses, I just finished. 5 6 ACTING CHAIR SKINNER: Okay. And you 7 sound really quiet. If you can push the microphone 8 closer to yourself that would be great. 9 10 MS. CORCORAN: Can you hear me now? 11 12 REPORTER: No. Switch to the other 13 one. 14 15 MS. CORCORAN: How about now? Oh, 16 yeah, I can hear. Yeah. Thank you very much for 17 giving me this opportunity to present on the monitoring 18 that the Kodiak National Wildlife Refuge does in 19 relation to marine birds here in the Kodiak 20 Archipelago. My name is Robin Corcoran, I'm the Bird 21 Biologist with the U.S. Fish and Wildlife Service, 22 Kodiak National Wildlife Refuge. And I want to 23 acknowledge my co-contributors on this presentation. 24 They are Jill Tangerris and Katie Stoner, but with the 25 Department of Fisheries, Wildlife and Conservation 26 Sciences at Oregon State University. 27 28 Next slide. 29 30 And I wanted to say that the work that 31 I'm about to present was conducted in the traditional 32 homeland of the Alutiiq Sugpiaq people and I want to thank the Natives of the Kodiak region for the 33 34 opportunity to work in this area. 35 36 Next slide. 37 38 So today I'm going to talk about 39 monitoring -- the major monitoring program that we conduct related to birds in the Kodiak Archipelago and 40 41 that is the Kodiak Archipelago Nearshore Marine Bird 42 and Mammal surveys. This is done during the breeding 43 season. And then I'm also going to touch on research 44 that we do in regards to Aleutian terns and puffins. 45 46 Next slide. 47 48 So just to give you some background, 49 this Nearshore Marine Bird and Mammal survey was based 50

1 on surveys that were already conducted in our region primarily by the Park Service at Kenai Fjords and 2 Katmai National Parks and we contribute all of this 3 4 data to larger datasets that are monitoring birds at the regional and State level so all of this data is 5 6 contributed to both Gulf Watch Alaska Program and the 7 North Pacific Pelagic Seabird data base. 8 9 Next slide. 10 11 Just to give you some background on the 12 survey this is the first ever Kodiak -- complete Kodiak Archipelago wide survey, but we can't survey the entire 13 14 archipelago in a single season so we divide it into 15 three regions so it takes us three years to complete a 16 We start in east Kodiak and then we survey survey. 17 Afognak and then we survey west Kodiak to complete it. And this shows you the distribution of the transects. 18 19 The transects are five kilometers long, they're 20 systematic from a random start point, they cover about 21 20 percent of the nearshore zone and then about 5 to 10 22 percent of the offshore zone. So we survey the 23 intertidal out to about five kilometers. 24 25 Next slide. 26 27 We survey both in June and August. In 28 June populations are pretty stable of breeding birds so 29 we're using those estimates to estimate total 30 population size and to detect trends. And then in 31 August numbers tend to be more variable, but we can get 32 information on peak populations and also some 33 information on productivity. 34 35 Next slide. 36 37 We've summarized the data for the first two rounds of the survey so the first round was 2011 to 38 39 2013, second round was 2014 to 2016, those reports are 40 available as a download online. And I've provided the We're still working on the final report and 41 links. 42 these reports summarize data for 19 different bird 43 species and two marine mammal species. I believe the 44 Committee was provided with the sea otter data and I think there's a handout available if you're interested. 45 46 And that includes the more recent survey data as well. 47 48 49 Next slide. 50

0286 So I'm just going to cover a few 1 species that I think are important to subsistence users 2 here in the Kodiak Archipelago. And I'm going to start 3 4 with harlequin duck. These are our population estimates in June in green on the left and in blue for 5 August on the right. Asterisk means a significant 6 7 difference between that time period and the previous And so you can see June population 8 time period. estimates for harlequins ranged from about 5,400 up to 9 10 almost 9,000 and then in August we have quite a few 11 more, about 10,000 up to about 18,000. We did see a 12 significant decline between the second survey period which ended in 2016 and the third time period which 13 14 ended in 2020 for both June and August for harlequins. 15 16 Next slide. 17 18 For black-leg kittiwakes again we have 19 a lot of black-leg kittiwakes, this is the most 20 abundant species we survey. Our population estimates 21 in June varied from 87,000 up to about 106 and then in 22 August the variation was from about 115 up to 209,000. 23 We had significant increases in kittiwakes between the 24 first survey period and the second, however in August 25 we saw declines between both the first and second time 26 period and the continued declines between the second 27 and third. 28 29 Next slide. 30 31 For glaucous-winged gulls, this is our 32 major large gull that breeds in the Kodiak Archipelago. 33 Our June population estimates were between 29,000 and 34 41,000 and then our August population estimates varied 35 from 26,000 up to over 71,000, but we did see significant declines both in June and August between 36 37 the first and second and the second and third time 38 periods for this species and pretty serious declines in 39 August unfortunately. 40 41 Next slide. 42 43 And now I'm going to switch gears and 44 talk about Aleutian tern monitoring that we've been The reason we're interested in 45 doing for some years. 46 Aleutian terns is that in 2015 there was a Statewide 47 species assessment done for the species and it 48 documented a 92 percent decline since the 1960s. It's 49 one of the rarer species in the world as far as terns

0287 1 go and you can see a map of the current worldwide colony distribution on the right here, you can see it's 2 just in Alaska and Russia. And the bird is challenging 3 4 to study and just hasn't been well studied. 5 6 Next slide. 7 8 So our region's pretty important to the 9 Aleutian tern, about 25 percent of the colonies 10 analyzed in the species assessment in 2015 were from 11 Kodiak and in the 1970s you can see we had some very 12 large colonies particularly in Alatak and Sitkalidak. 13 Amee and Sheep Island near Old Harbor in the Sitkalidak 14 region, those colonies had between three and 4,000 tern 15 -- Aleutian terns nesting and then Alatak had populations around a thousand. 16 Colonies along the 17 Kodiak road system, Aleutian terns numbers about 600. 18 19 Next slide. 20 21 More recently we were able to do a boat 22 based survey. We visited all of the known Aleutian 23 tern colonies in the archipelago in 2020, we also 24 searched for new colonies. We were able to confirm breeding at seven of the sites and we estimated the 25 26 total population in the archipelago at only 450 27 Aleutian terns. The highlight was that a lot of those 28 terns were in one single colony, a new colony that we had not seen before and we have not seen since on 29 Aiaktalik Island near Geese Channel at the southwest 30 31 end of the -- of Kodiak Island. The other highlight 32 for us was that we saw relatively high nest success, we 33 had fledglings at five colonies. And we plan to repeat 34 this survey in summer, 2023. 35 36 Next slide. 37 38 We were also able to support a graduate 39 student, a master of science student at Oregon State 40 University, Jill Tangerris and she completed her master 41 thesis collecting information on chick diet and nest 42 survival of Aleutian terns here in Kodiak and she 43 collected data for four years, 2017 to 2020. For chick diet she saw a lot of variability, but in most years 44 the chicks are being fed either -- a combination of 45 46 Pacific sandlets and hexagrammidae. 47 48 Next slide. 49 50

0288 1 She unfortunately documented very, very little on survival. You can see here this is from 2017 2 to 2019 and it's split up by colony and time in the 3 But the take home message is that in 4 nesting season. no year did she see nest survival rates or hatching 5 rates about 60 percent. And just for a comparison, 6 7 terns are -- usually experience pretty high nest survival and she has provided information for two 8 closely related species, bridled and gray black terms 9 10 where nest survival is well over 70 percent up to 90 11 percent. And then black tern is a species that is 12 ecologically similar to Aleutians and its nesting behavior and they also experience much higher nest 13 14 survival. So this is a serious concern. 15 16 And then next slide. 17 18 She also did a lot of this work using 19 nest cameras and was able to identify the leading cause 20 of nest failure which was predation. And most of that was by red fox, but we also had a flooding, 21 some 22 livestock predation and trampling and then also some 23 colony abandonment. 24 25 Next slide. 26 27 And so more recently we've started to 28 conduct research on both species of puffin that nest in 29 the archipelago. And this is being led by a ph.d 30 student, Katie Stoner, at Oregon State University. And 31 she just started this project last year. We're 32 interested in tufted puffins because they've declined by over 90 percent in the southern portion of their 33 34 range so California, Oregon and Washington and they're 35 continuing to decline at a rate of about 8 percent a year there. We're less certain about their trajectories in the Gulf of Alaska, but there's some 36 37 indication that they've declined by about 45 percent in 38 39 the last 30 years in our region. Horn puffins we've included in the study simply because we don't know very 40 41 much about them and they are in no way monitored 42 regularly anywhere in their range. And in the Gulf of 43 Alaska we have about 80 percent of the global 44 population of horned puffins. 45 46 So next slide. 47 48 So what Katie's looking at is she using 49 existing data in addition to the transect based surveys 50

1 here on Kodiak we have a lot of legacy data and have continued to do what we call seabird colony censuses. 2 3 So this is where we just go out and count all the birds 4 associating with a colony. So she's analyzed this data 5 recently and found both species have declined within 6 the Kodiak Archipelago. For tufted puffins that 7 decline has been between 3 and 9 percent annually and 8 then for horned puffins it's about 3 to 7 percent. 9 10 Next slide. 11 12 And one thing she's really interested 13 in is combining the datasets so she's just starting 14 this process, but this shows you the density from the 15 transect based surveys that I described earlier and 16 that's in the blue and she's mapped it against the 17 colony census data which are the yellow -- the graded 18 yellow dots. And she's finding a good relationship, 19 but again she's going to use some new modeling methods. 20 The hope is that she can use this information to develop basically a better monitoring system for both 21 22 species that can be used across their range. 23 24 Next slide. 25 26 And then in addition to the analysis of 27 survey data she's also looking at their nonbreeding ecology so she's putting tags on them called 28 geolocators that fit on a leg band. 29 And these will 30 stay on them all winter and she'll recapture the bird 31 and get the data the next -- the following year. And 32 they will track the movements, the distribution of the 33 birds in the winter. And she also through collecting 34 feather and fecal samples will be able to look at 35 winter diet and stress hormones and to see how that 36 might be impacting the following breeding season. So 37 last year she was able to tag 35 tufted puffins and 11 38 puffins and she plans two more years of horned 39 deployments. 40 41 And so -- next slide. 42 43 And so just in summary the Nearshore 44 Marine Bird and Mammal surveys that we conduct here and we've been conducting on an almost near annual basis 45 46 since 2011, they're giving us our first archipelago 47 wide population estimates for a suite of species. We 48 hope to continue these surveys so that we can contract 49 trends in populations and then we're also conducting 50

0290 1 research and monitoring birds of conservation concern. We're hoping to improve monitoring methods for these 2 species and hopefully identify factors that might be 3 4 contributing to declines. 5 6 Next slide. 7 8 And so I have an army of people to 9 thank, everyone who's contributed to this survey and if 10 there's time I will take questions. 11 12 ACTING CHAIR SKINNER: All right. 13 Thank you. And can this presentation be made available 14 to us? 15 16 MS. CORCORAN: Oh, yes. Yes. 17 18 ACTING CHAIR SKINNER: Okay. 19 20 MS. CORCORAN: Thank you. 21 22 ACTING CHAIR SKINNER: Are there 23 questions, comments. 24 25 MR. HOLMES: It would..... 26 27 ACTING CHAIR SKINNER: Pat, go ahead. 28 29 MR. HOLMES:it would be nice for 30 us noncomputer jocks if you could give your figures to 31 our coordinator so that she could pass them out to us. 32 33 MS. CORCORAN: Oh, sure. 34 35 MR. HOLMES: And that -- that would 36 help a lot. And on your marine mammals you summarize I 37 assume sea otters, what's the trends there. I know five years ago we had a hundred or more move into 38 39 Women's Bay and there's no more king crab. And over the last 15 years I think I haven't caught any 40 41 dungeness since we've had the build-up here in Chiniak 42 although the numbers are way down now, but what's close 43 to town, maybe some of the villages, what's happening 44 with the otters, are they moving to some other place to 45 eat? 46 MS. CORCORAN: So I think the sea otter 47 48 is -- the sea otter data is available in a handout. 49 50

0291 1 MR. HOLMES: Okay. 2 3 MS. CORCORAN: You -- you can.... 4 5 ACTING CHAIR SKINNER: And can you make 6 sure we have that because we didn't get the handout. 7 8 MS. CORCORAN: Oh, okay. Okay. I 9 will. 10 11 UNIDENTIFIED VOICE: (Indiscernible -12 away from microphone) presented yesterday. 13 14 ACTING CHAIR SKINNER: We -- there was 15 a little table, but isn't there a separate handout with like a bigger -- didn't you have a picture of it on one 16 17 of your slides? 18 19 MS. CORCORAN: Oh. 20 21 HUTCHINSON-SCARBROUGH: MS. Paul 22 actually has it (indiscernible simultaneous 23 speech).... 24 25 ACTING CHAIR SKINNER: All right. 26 Thank you. 27 28 MS. CORCORAN: Yeah, sorry. 29 30 ACTING CHAIR SKINNER: Go ahead, Coral. 31 32 MS. CHERNOFF: Thank you for your report. And I did appreciate that -- I don't know if 33 34 you put together that table for sea otter that we got 35 yesterday, but I really appreciated that over multiple 36 years and dividing Kodiak up into areas which is great 37 information. 38 39 The puffin tracking, how often do they 40 track, are they like collars that will track throughout 41 the day or every day or every couple of days they'll 42 pinpoint or what are those trackers that are on there? 43 44 MS. CORCORAN: It's a -- it's a really 45 small device, so it doesn't transmit at all. But 46 puffins, you don't want to put something on their body 47 so we had to stay with a very small device that would 48 fit on a leg band. So it's just a data logger that 49 measures -- it measures light levels. And from those 50

1 light levels it can infer location. And I -- it's -to use Robb's expression it's above my pay grade, I 2 don't know how it does it. But you have to recapture 3 4 the bird and get the data logger back. And luckily the tufted puffins are -- both species of puffin are pretty 5 site faithful so we'll be able to recapture them. It's 6 7 not highly accurate, I think it's about 150 meter accuracy. So but it's good enough for general winter 8 9 distribution. 10 11 ACTING CHAIR SKINNER: All right. Any 12 additional questions. 13 14 (No comments) 15 16 ACTING CHAIR SKINNER: Okay. Seeing 17 and hearing none, thank you. 18 19 MS. CORCORAN: Thank you very much. 20 21 ACTING CHAIR SKINNER: And we will move 22 on to our next presentation which is under 14d, Alaska 23 Department of Fish and Game little i, will be the 2020 24 Kodiak -- Aleutian/Kodiak Bird and Egg Harvest survey. 25 Liliana Naves, Division of Subsistence, Alaska 26 Department of Fish and Game. And there's a note that 27 the -- there's materials in supplemental Tab 10. 28 29 MS. NAVES: Madame Chair. 30 31 (Teleconference interference 32 participants not muted). 33 34 MS. NAVES: So yes, the materials are 35 in supplemental Tab 10, Number 10, and there is no So Lisa Scarbrough had arranged it to 36 presentation. 37 project the materials that are in the meeting materials 38 anyway. 39 40 I work with the So Division of 41 Subsistence of Fish and Game in Anchorage for about 15 42 years. I also serve as the Coordinator for the Harvest 43 Assessment Program of the Alaska Migratory Bird Co-44 And that include the annual bird Management Council. harvest survey that was done in different regions of 45 46 Alaska between 2004 and 2019 was the last year they assess -- we do that survey. 47 So that program in the 48 last few years shrunk a lot. 49 50

1 So the project that I'm going to talk today is about the bird harvest survey that was done on 2 3 the Aleutian and the Kodiak Archipelago to go over bird 4 harvest and egg harvest in 2020 -- the year 2020. So 5 since the '20 -- emperor goose harvest was reopen in 2017 after a 30 year closure. 6 And the bird numbers 7 available for a sustainable harvest are still limited. So since then there has been lots of research that has 8 9 been done to help provide information needed for 10 harvest management. And the -- starting in 2019 the 11 Division of Subsistence obtained a grant to work on 12 four different projects related to emperor goose 13 harvest management and this is one of those four 14 projects.

16 So the objective of this survey was to 17 complement the harvest data specifically for these two 18 regions, the Aleutian/Pribilof Islands and the Kodiak 19 Archipelago which are regions that traditionally have 20 had (indiscernible - distortion) harvest surveys for 21 birds over the years. So we work with local research 22 assistant on each community, we also work with the 23 local tribal council to get community consent and then 24 we did the surveys in nine communities in the Kodiak 25 Archipelago and the Aleutian/Pribilof Islands and the 26 individual communities are listed there in the 27 materials that you have. We also use the data for 28 three additional communities that were available for 29 other surveys conducted by the Division of Subsistence. 30 So we generated data at the community level for all 31 birds including emperor goose. The idea was to (indiscernible - distortion) picture of bird harvest. And we also generated harvest at the region level that 32 33 34 are the tables that are in the materials provided at 35 this meeting. 36

37 So in the last several months I have been working with individual tribal councils with the 38 39 full review of the harvest estimate for the community level and that process is now largely completed. 40 We 41 provided the draft report with all the tables at 42 community and the regional level for multiple partners 43 at the region and the local levels and to the agencies. So what you are seeing here today is just the -- some 44 main results at the region level. And I would like to 45 46 thank you so very much for all the tribal councils and 47 the local research assistants that participated in the 48 surveys. They are listed on Page 2 in the session --49 in the legends, it's lots of people in the organization 50

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0294 1 so I won't name all them individually, but am very 2 thankful for each and all of them. 3

4 So on table Number 1 on Page 2 we have 5 the information of the communities in the -- in these 6 two regions, their populations and number of household 7 and whether they're included in the survey and the sampling proportion for each of those communities. 8 Moving among the survey results are Page 3 are 9 10 estimated harvest of birds and eggs for the 11 Aleutian/Pribilof Islands region. So we started on the left, we have the reported numbers, the raw numbers. 12 13 Those raw number extrapolate to account for all 14 households, communities in the region, they're the 15 measure of the accuracy of the estimate and the harvest 16 is broken down by spring/summer and fall/winter. In the last column there on the right side is the estimate 17 18 of the egg harvest. So for the whole Aleutian --19 Kodiak/Aleutian area, the total estimated harvest in 20 2020 was about 2,900 birds. The seasonal distribution was 32 percent in the spring and summer and 67 percent 21 22 in fall/winter. Looking at the very bottom of the 23 table and so the egg harvest was about a 1,300 eggs and 24 the total of 52 emperor goose were reported as 25 harvested leading to estimate extrapolated number of 26 210 geese estimated as harvested for the whole region. 27 So this accounts for harvest in spring/summer and 28 fall/winter.

30 And the -- I can go the same overview 31 also for the Table 3 on Page 4 of the material that has 32 the harvest estimate for the Kodiak Archipelago region. 33 Again starting with the raw recorded numbers on the 34 left side of the table and the estimated extrapolated 35 numbers, the breakdown by season and the egg harvest. 36 So for the Kodiak region the total bird harvest in 2020 37 was estimated at about 14,300 birds. The seasonal 38 distribution of the harvest was 28 percent in the 39 spring/summer and 72 percent in fall/winter. The total 40 egg harvest was about 3,700 eggs and for the Kodiak 41 region the total number of emperor goose reported as 42 harvested was 26. That led to a harvest estimate or an 43 extrapolated number of 244 geese. 44

29

So this is data for that one individual year. Harvest estimates can vary a lot between years for different reasons. If it's available we prefer to look at the set of years, but this is one year data that we did a survey. Of course there are 50 (indiscernible - distortion) on the survey, it's very difficult to do this kind of survey, both to estimate the number of birds harvested, but also the population surveys have similar challenges so we look at those with a -- yeah, this is one estimating point in how I'm -- we understand that, but this may not be perfect.

8 So when doing this kind of study the 9 idea we start at the community level, but wanted to 10 have a better understanding of the big picture 11 perspective. So emperor goose occurs only around the 12 Bering Sea and it's harvest across all seasons of the 13 year in different regions. So harvest management looks 14 at all different seasons in all different regions. So 15 the idea was to put this data for the two regions together with other data for the other segments of the 16 17 So we combine this data with the data from harvest. 18 the -- we put it together to get a general picture for 19 the three years -- first three years of the harvest since the harvest reopen in 2017 because this includes 20 21 the three years of data that are available for some 22 regions from the harvest so the Alaska Migratory Bird Co-Management Council and they did supply this data 23 24 with all the numbers from those other parts. 25

26 So since I provided materials for this 27 meeting I put together a pie chart that has the 28 breakdown of harvest byseason and by region. And the --29 I will just say oral and the -- so we have an idea of 30 the big picture perspective. So it will speak slowly 31 and then looking at the graph that I have here, but you 32 guys don't have this graph, I apologize for this, but 33 this just came out (indiscernible - distortion). So in 34 the -- after -- based on the data that's available for 35 after the hunt reopen, the estimated year long harvest 36 of emperor goose is about 6,300 birds per year. This 37 includes spring/summer and fall/winter season. So About three-fourths of this harvest, 75 38 6,300 birds. 39 percent, happens in the spring and summer and 25 40 one-fourth of the harvest happens percent, in 41 fall/winter. So most of the harvest that happens in 42 the Aleutian/Kodiak regions happen in fall/winter 43 because this is when the birds are available in your 44 region. A little bit in spring too, but most of the 45 harvest in your region happens in the fall/winter. 46 So looking at the spring and summer 47

47 and summer 48 harvest only, so this is about 4,700 birds in the 49 spring and summer. So the YK Delta accounts for about 50

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1 72 percent of this harvest. (Indiscernible distortion) 23 percent. The Aleutian and Kodiak each 2 is 0.3 percent and Bristol Bay is 4 percent. Then 3 4 moving to fall/winter harvest is about 1,600 birds per year. So Bering Strait region accounts for about 41 5 percent of this total, YK Delta 22 percent, Kodiak 15 6 7 percent, Aleutian 12 percent and these are the numbers that came from the survey that I showed the results 8 today with this group. 9 And then Bristol Bay is 12 10 percent of the fall/winter harvest, (indiscernible -11 distortion) Alaska residents 5 percent and the nonresident 2 percent. So this is for a, you know, 12 overview of the harvest and how this study it's with 13 14 the big picture perspective. 15 16 So that's what I have to share with the 17 group today and I thank you very much for the 18 opportunity to join the meeting and to discuss this 19 with a different audience. 20 21 So thank you very much. 22 23 ACTING CHAIR SKINNER: Great. Thank 24 you. Are there any questions. 25 26 (No comments) 27 28 ACTING CHAIR SKINNER: Okay. I'm not 29 seeing or hearing any questions so thank you very much. 30 31 MS. NAVES: Thank you. 32 33 ACTING CHAIR SKINNER: Okay. We're 34 going to go ahead and take a short break. If we can 35 come back at 3:45. And when we reconvene we will be to the Buskin River sockeye salmon stock 36 update on 37 assessment. 38 39 (Off record) 40 41 (On record) 42 43 ACTING CHAIR SKINNER: Della and Rick, 44 do I have you guys online. 45 46 MADAME CHAIR TRUMBLE: I'm here. 47 48 ACTING CHAIR SKINNER: Okay. Thank 49 you. Okay. We're going to go ahead and continue with 50

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1 our agenda. We have the update on Buskin River sockeye
2 salmon stock assessment. It'll be Kelly Krueger and
3 Mark Witteveen with the Division of Sport Fish, Alaska
4 Department of Fish and Game. And it's Page 87 of the
5 meeting book.
6

7 MS. KRUEGER: Good afternoon. Can you 8 hear me? Closer. Okay.

10 Good afternoon. Thank you, Madame 11 Chair and members of the Council. My name is Kelly 12 Krueger and Mark Witteveen is here with me and we are 13 Sport Fish Biologists with the Alaska Department of 14 Fish and Game. This is a brief overview of the 2022 15 Buskin River salmon stock assessments and the primary objectives for this study are to census the sockeye 16 17 salmon escapement, estimate age composition from the 18 escapement and harvest and summarize sex and length 19 data. And as Rebecca said this is on Page 87 of the 20 meeting book and a copy of this presentation is on Page 21 93 of the meeting book.

Next slide.

25 This is a graph of the Buskin River 26 escapement from 2013 to 2022. The escapement is in 27 blue and we have our lower and upper objective goals 28 with the black dash line. The recent five year average 29 is the red line. So in 2022 our Buskin River weir was 30 operational on May 16th and it was removed on August 31 3rd. The lower Buskin weir was installed on August 2nd 32 and removed on September 27th. The 2022 Buskin River weir count for sockeye salmon was 8,121 so it just 33 34 exceeded our upper goal range which is five to 8,000 35 fish and it was above the recent five year average of 6,775 fish. We counted 7,546 sockeye salmon through 36 37 the upper weir and the rest came through the lower 38 weir. And you see this graph only shows Buskin River 39 escapements. In a previous OSM funding cycle we 40 monitored the Lake Louise tributary weir and we did not 41 include this in our budget cycle as we previously 42 discussed. But we did go down there, most of the fish 43 passed Lake Louise on really high water events and so 44 we did see some fish, but not very many. Typically we'd see less than a hundred fish there, two years ago 45 46 we had over a thousand fish escape which was the 47 highest it's ever been, but we did go down there and 48 just several fish were observed.

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0298 1 Next slide, please. 2 3 This is the 2022 Buskin River sockeye 4 salmon run timing. Again in blue is the 2022 daily 5 counts. On the left side axis, Y axis, is the number of salmon counted per day and on the other Y axis on 6 7 the right side is the percent of escapements. The run started fairly slow, you can see from the graphs we had 8 9 to close subsistence, sport and commercial fishing by 10 emergency order for a period of about three weeks in 11 June and the peak day for escapement was June 28th with 12 744 sockeye salmon counted. 13 14 Next slide. 15 16 For our new Buskin OSM projects the 17 main change in this grant was that we added a scale 18 measure component and we're going to be looking at 19 freshwater and saltwater annuli growth and compare this 20 to climate indices and also look at freshwater 21 productivity. This will help us refine our forecasting 22 and see how many fish are spending two years versus 23 three years in the ocean. So we've mentioned this at 24 previous RAC meetings, we did just get the approval to 25 purchase the equipment, it was kind of delayed, but 26 we're waiting to receive our -- both the microscope and 27 the software equipment that we will be using for this 28 new objective. And so hopefully we'll get this settled 29 -- set up later this year and then we'll start looking 30 at scales this winter. And over the course of our 31 project we're going to look at 20 years of scale data 32 by the end of the project. 33 34 Next slide. 35 36 This is a graph showing the age 37 composition and run size of Buskin River sockeye salmon 38 from 2009 to 2022, The years are on the X axis, the 39 proportion is on the left side Y axis and the total run 40 is on the right side Y axis. The 2022 Buskin River 41 sockeye salmon escapement was primarily composed of age 42 2.2 fish which is shown in red, followed by age 1.3 43 fish shown in green and age 2.3 fish shown in purple. 44 The age 1.2 fish are shown in blue. Overall the average sizes of fish was smaller than the most recent 45 46 five year average. This year the -- or last year 47 female average was 485 millimeters in 2022 versus 495 48 which was the five year average for males. Last year 49 they were averaging 459 millimeters versus 512 as a 50

1 five year average. And based on our strong age 2.2 component of the '22 run -- 2022 run we're cautiously 2 optimistic about a stronger run of ocean -- three ocean 3 4 fish than observed in recent years and an above average 5 2023 run. So that's what we're hoping for this year. We don't have finalized numbers for subsistence or 6 7 sport harvest yet so that's the best of a forecast that 8 we can give for this year. 9 10 Next slide. 11 12 Our intern program. Every year we 13 employ two top qualified students from the Kodiak area 14 to participate in working on our Buskin project from 15 June to August and interns gain knowledge of the 16 involved in fisheries management principals and 17 research and they obtain a lot of great field 18 experience along the way. And since 2020 or since 19 2003, 22 of 33 interns have returned to work for Fish 20 and Game at some point which we're really proud of that 21 number, it's a pretty high percentage including the 22 Area Manager and several other people who still work 23 are involved in fisheries management. And we just --24 our closing -- our job closed and we are currently 25 doing interviews and will have those two interns hired 26 within the next couple weeks. 27 28 And with that I will take questions. 29 30 ACTING CHAIR SKINNER: Great. Are 31 there any comments or questions. 32 33 Go ahead, Pat. 34 35 MR. HOLMES: Well, I'd like to 36 compliment you folks, I think your moving ahead with 37 the scale analysis, I think that will answer a lot of 38 questions on what's been happening when you get shifts 39 of growth patterns, whether it's freshwater dropping 40 off or saltwater growth. And I think that even just 41 getting a few years comparison will give people a lot 42 better idea of what might be happening there. And I 43 thought your notation on the age 2.2 and -- that's right, I got it right, yeah, as being a good indication 44 that next year we might have a little bit bigger run if 45 46 we're getting the threes coming in, the 2.3. So I 47 think that's really exciting. 48 49 And it's unfortunate that the money 50

0300 1 isn't there anymore for a smolt program, but I think the scales, that'll give us -- give you a whole lot 2 3 better idea of what's happening. 4 5 And I really always compliment you on the intern program, I think that's probably one of the 6 7 best ones going on in the whole State because you're bringing young people into the profession at a really 8 9 good -- good rate. And I think that ends up involving 10 the whole community when you know your kid's out there 11 helping out Mark and Kelly on the weir, you know, 12 you're going to think oh, well, I'll talk to Senator 13 Stevens and tell him got to keep funding them. So 14 thumbs up. 15 16 Thank you. 17 18 ACTING CHAIR SKINNER: All right. Any 19 further questions or comments. 20 21 Go ahead, Coral. 22 23 MS. CHERNOFF: I just have a question 24 about this year's run since we were shut down for a bit 25 -- a little bit last year, what do this year's runs 26 look like? 27 28 MS. KRUEGER: So that's from the slide, 29 age two and age three fish are related. So since there 30 was a strong age 2.2 component last year we're 31 cautiously optimistic that this year there will be more 32 age three fish, ocean fish, that come back. So we're predicting the run to be strong. I mean, cautiously 33 34 optimistic because we don't have sport or subsistence 35 data finalized from last year, just based on the 36 escapement and based on our scales, our ASL data from 37 last year. 38 39 ACTING CHAIR SKINNER: All right. Are 40 there any further questions or comments. 41 42 MR. PYLE: Madame Chair. 43 44 Go ahead. But ACTING CHAIR SKINNER: 45 come up the mic so everyone can hear. 46 47 MR. PYLE: Bill Pyle, Kodiak Refuge. 48 49 REPORTER: Just use hers..... 50

0301 1 MR. PYLE: Okay. 2 3 REPORTER: Turn that one off though. 4 5 Bill Pyle, Kodiak Refuge. MR. PYLE: 6 Have you detected any spawning use of Boy Scout Lake 7 since the culvert replacement? 8 9 MS. KRUEGER: We have not surveyed Boy 10 Scout, we always could, I mean, we could -- we could do 11 that this summer, but we haven't any kind of habitat 12 survey since then. 13 14 ACTING CHAIR SKINNER: All right. I'm 15 not seeing or hearing further questions from the 16 Council. 17 18 Thank you very much. 19 20 MS. KRUEGER: Thank you. 21 22 ACTING CHAIR SKINNER: Okay. Our next 23 presentation will be Alaska Peninsula and Aleutian Islands salmon update. Tyler Lawson, Matthew Keyse, 24 Division of Commercial Fisheries, Alaska Department of 25 26 Fish and Game. 27 28 MR. LAWSON: Madame Chair and members 29 of the Council. For the record Tyler Lawson with the 30 Department of Fish and Game. Today I'll be giving you 31 some updates about salmon in the Alaska Peninsula and 32 Aleutian Islands area and providing details on the 33 drone surveys we have been performing in the region in 34 recent years. You can find a copy of this presentation 35 on Page 101 in your main binder. And I do have a 36 presentation or PDF somewhere, I'm not sure if we can 37 pull that up. 38 39 ACTING CHAIR SKINNER: Is the PDF the same as what's in the book. 40 41 42 MR. LAWSON: Should be, yes. 43 44 ACTING CHAIR SKINNER: Okay. You can 45 go ahead and proceed while that comes up. 46 47 MS. HUTCHINSON-SCARBROUGH: We'll see 48 if we can find it while you talk. 49 50

1 MR. LAWSON: Okay. So if you have that in front of you, that front page there, we got a 2 picture looking at the outlet in McLee's Lake, you can 3 4 see the weir's installed and the outlet about 300 feet upstream of where it'll empty into the saltwaters of 5 Reese Bay also known as Wislow Bay shown there in the 6 7 background. And that's where most subsistence fishing 8 occurs on Unalaska Island.

10 But moving on to the second slide. 11 This is providing just kind of a timeline for the drone 12 surveys that we've done in the region since 2018. So 13 started in 2018 Unalaska roadside surveys were 14 performed on Morris Cove, Summer Bay and Unalaska Lake, 15 it's also known as Iliuliuk Lake. And Fish and Game in partnership with Aleutian Aerial LLC received funding 16 17 from the Unalaska Native Fishermen's Association, 18 City of Unalaska and Unalaska Corporation, the 19 Qawalangin Tribe of Unalaska. And under this deal 20 Aleutian Aerial performs the drone surreys and they will then send that footage to Fish and Game here in 21 22 Kodiak and we will then review that footage to index 23 escapement of the salmon. In 2020 and 2021 those 24 salmon funding sources gave us some money to perform 25 some pilot drone surveys of McLee's Lake as well to 26 help us start to make some comparisons between the 27 escapement estimates from the weir and how they compare to the drone service. In 2022 and again this coming 28 29 in 2023 we have funding from the Alaska summer 30 Sustainable Salmon Fund to incorporate some mark 31 recapture tagging into the McLee's drone surveys and 32 i'll be speaking more about that in just a moment. And 33 last year drone surveys were performed on coho salmon 34 stocks around Cold Bay by Fish and Game Biologists 35 which I talked about a little bit last year at the RAC 36 meeting and I'll give you a couple updates about those 37 system here later on as well.

Go to the next slide.

41 So starting off with Unalaska Island, 42 kind of giving you some locations of where I'll be 43 talking about. So you Dutch Harbor in the center there 44 with the star, if you want to head to McLee's Lake you're going to head north and then over west, about a 45 46 45 minute skiff ride to get there to McLee's Lake. And 47 then otherwise connected on the roadside system just 48 south of Dutch Harbor you have Unalaska Lake and then 49 heading out the way you've got Summer Bay Lake and 50

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0303 1 Morris Cove Lake. So those are the systems where we've been doing the drone surveys since 2018. 2 3 4 Next slide. 5 6 All right. So getting into these drone 7 surveys, kind of the good, the not bad and the ugly. So in theory Fish and Game has felt that the drone 8 9 surveys that we perform are equal to or in some cases 10 better than the fixed wing surveys that we do for 11 monitoring smaller systems of sockeye runs. It does 12 take some more time to review the footage, but you're 13 given the option to slow down, pause, rewind, zoom in 14 and enhance the video. Furthermore we can store and 15 archive that footage and we have some quality control methods that we can implement there. And those are all 16 17 things which are generally not available when you're 18 surveying in a cessna. So it's great to have all those 19 tools available to us. 20 21 Similar to fixed wing surveys wind, 22 sun, wave and water clarity play a really big role in 23 the accuracy of these drone indices. And in our 24 experience with sockeye systems this is exacerbated by larger lakes which need a longer survey, they also get 25 26 influenced more by the (indiscernible - distortion) of 27 So for example McLee's Lake is by far the the lake. 28 largest lake in Unalaska that we survey. It has a much 29 steeper dropoff and the sockeye like to spend a good 30 portion of their time when they first enter in the 31 deeper part of the water right where it's most 32 challenging to actually try to see and count them. The 33 size of the lake also matters because the wind and wave 34 action has kind of more surface area to buildup and 35 also, I mean, it can take sometimes four to six hours 36 to survey that lake and in that time frame on the 37 Aleutians by the time you finish your survey the 38 weather can totally change, the wind can build up and 39 make things much more challenging for the later part of 40 that survey. 41 42 Generally speaking on Unalaska we've 43 been doing four surveys over the course of the salmon 44 run. And with those first -- four surveys we tend to get at least one to two great surveys with footage that 45 46 allows to make some reliable estimates. But as Т 47 alluded to before in the region it's not uncommon to go 48 long periods with less than ideal weather conditions. 49 It can also have periods of stormy weather which are

1 immediately followed by otherwise great weather windows, but the problem is that you have, you know, a 2 3 great sunny day like we see in the right there, but it 4 doesn't give us enough time for the turbidity and sediment and sometimes the alga blooms in the water to 5 kind of calm down and give us some good survey 6 7 conditions. These were all problems in 2022 as all the lakes that we surveyed had poor visibility during the 8 9 peak of the run. 10 11 On the right we see a picture of 12 McLee's Lake, we got the weir site circled in red just 13 to kind of help to orient you, orient you to sort of 14 where we're looking at with the drone. And it's 15 showcasing a fairly large alga bloom on top of all the other problems we had going on in 2022. 16 17 18 The outlet and inlet streams are also 19 surveyed when we do these drone surveys and they tend 20 to have much better visibility as they're shallower, 21 they have some current to move sediment out and they 22 also have less surface area for the wind to kick up 23 wave action. For example on the left there we have a 24 photo of the outlet of McLee's Lake at the same time 25 here and we can clearly see several thousand sockeye 26 salmon in that stream there, they're just downstream of 27 the -- where the weir is installed there. 28 29 Another important thing to point out is 30 that while these surveys do provide us hours of footage 31 to review it takes time to process, takes time to mail 32 them from Aleutian Aerial to here in Kodiak and then we 33 usually don't have time to actually sit down and review 34 all those hours of footage until sometime in the 35 wintertime. So they give us some really valuable 36 information that we otherwise wouldn't obtain 37 typically, but at this time I mention this because it's 38 just not feasible for Fish and Game to use drone 39 surveys as an in-season management tool as we just don't have the personnel available in-season in the 40 41 summertime to review that footage in a timely manner. 42 And to give you a specific example of this, again 43 McLee's Lake is where most harvest occurs on Unalaska 44 Island and we do have a sustainable escapement goal there and there's a 500 yard closure tied to that goal. 45 46 And so when that goal is reached based on what we see 47 at the weir we're able to reduce that 500 yard closure 48 all the way to the mouth which will extend and increase 49 fishing opportunity for the users there. If we didn't 50

0305 1 have the weir in place and just relied on the drone it wouldn't be possible for us to get that information in 2 3 a timely manner. It takes a much longer time for those 4 salmon to pass that outlet and get to a point in the 5 lake where we actually have a chance of seeing them. 6 And on top of that we have the problems which I just 7 mentioned here a moment ago. 8 9 Moving on to the next slide. 10 11 So just to give you a couple more 12 photos from elsewhere on Unalaska to kind of showcase 13 some of the good, the bad and the ugly. So both of 14 these pics show the same spot of Unalaska Lake and 15 there's three culvert pipes circled in that red circle to try to orient you there. And on the left we're able 16 to clearly see into salmon reds and all those little 17 18 black specs are sockeye salmon. If you had this in 19 full screen in front of you and the video's playing on 20 a computer it's beautiful and you can clearly see, identify and count those salmon. But as you can see on 21 22 the right there that very same spot this past summer, 23 that was the view we had in these areas where the 24 salmon reds are and so it really muddied the water, no 25 pun intended, to allow us to accurately enumerate those 26 salmon. 27 28 While we did have funding for our 29 surveys of McLee's Lake in 2022, our roadside lakes --30 our contractor was only able to do two surveys and 31 those were both done, spaced about six days apart. And 32 even though that was the only weather window we had, it 33 didn't give enough time for the conditions in the 34 roadside lakes to calm down and allow for good surveys 35 unfortunately. 36 37 Next slide. 38 39 So in order to try to measure the 40 reliability of our drone surveys in a more objective manner we secured AKSSF funding for a mark recapture 41 42 tagging project at McLee's. This mark recapture method 43 uses a more established ecological method to estimate 44 the number of sockeye that migrate into the watershed 45 and then we can compare them to the peak indices. Ιn 46 the photos here you can see a picture of the McLee's 47 technicians on the left injecting disk tags into 48 sockeye at the weir. And on the right are a couple of 49 examples from the McLee's drone surveys where we can 50

see that those tags have been successfully injected 1 into the salmon. So on the top right there we can see 2 3 a pink tag and on the bottom right we see a green tag 4 inserted in those sockeye. The technicians tagged about 263 sockeye salmon last summer which actually 5 exceeded our minimum goals for the tagging part of the 6 7 project. We did use three different colored tags during the kind of early, middle and late portions of 8 the run to see if there's any differences based on 9 10 entrance timing and if those sockeye would end up 11 spawning in the lake or one of the two major inlet 12 streams. However the tag colors that we were able to 13 observe were distributed fairly evenly throughout the 14 lake and the two main inlet streams. 15 16 To try to make a long story involving 17 boring algebra short we are able to use the total 18 number of all the fish tagged plus the total number of 19 all fish seen, divide that by the total number of 20 tagged fish in a survey and put those numbers into a 21 formula to give us an estimate of population size. And I'll talk about that here next. 22 23 24 So looking at the McLee's Lake sockeye 25 salmon indices from the drone surveys, weir escapement 26 and then those mark recapture estimates. So on the 27 left axis is the number of sockeye salmon, the bottom 28 axis is the dates of these surveys. Weir escapement is 29 in orange, the drone indices are in blue and the 30 estimates from the mark recapture study in 2022 are in 31 gray. And I'll kind of walk you through this one year 32 at a time. 33 34 So we're going to start things off in 35 the lower left corner for the 2020 drone surveys. In 36 that year weir escapement was approximately 5,000 37 sockeye salmon and those drone indices again in blue 38 range from 650 to 2,400. In the center of the chart 39 are data for 2021. That year weir escapement was 16,000 in orange and the drone indices range from 7,400 40 41 to 13,000. In the bottom right for 2022 weir 42 escapement was 14,000 which again is above the 43 escapement goal we have there which is 10,000 sockeye. 44 Do note that those first two surveys on July 10th and 26th, those were actually done before the weir was 45 46 pulled and so the weir escapement on those dates was 47 less than the total that we have at the end of the 48 season. So the orange bars for those first two surveys 49 are shorter. The drone indices in blue, those range 50

1 from one and, I mean, just literally one salmon to 2 4,200. And I'll note that one salmon was seen on July 3 26 jumping out of an otherwise terribly turbid lake and 4 that at -- on that date fish had yet to move into the 5 inlet streams where they are easier to see.

7 Now looking at the gray bars for the 8 mark recapture estimates. So due again to those poor 9 lake conditions and the salmon staging in deep waters earlier in the season we didn't see any tags during the 10 11 first two drone surveys so we're not able to make an 12 estimate for the first two survey dates. On the third 13 and fourth surveys we observed 28 and 22 tags 14 respectively. Input into the mark recapture formula 15 this gave us estimates of 31,000 and 47,000. Obviously 16 those numbers are much higher than the weir escapement 17 so why is that. Well, we know that the last couple of 18 years the McLee's run timing has been quite late and we 19 probably missed about one to 2,000 sockeye salmon after 20 The larger factor though is pulling the weir in 2022. 21 that -- again that poor lake visibility obscured our 22 ability to see tags and the salmon might not have 23 uniformly sorted between the stream and the lake and 24 that's an important assumption for this study because 25 again we weren't able to see many of those tags in the 26 lake, we were able to see a lot of tags in the stream. 27 So that definitely skewed things. But we're hoping here we have one more year to do this mark recapture 28 29 study so hopefully 2022 will have some more kind of 30 normal conditions and we'll see how that'll help to 31 shed some light on how these mark recapture estimates 32 compared to both weir escapement and those drone 33 indices.

35 So not including that one salmon 36 outlier I mentioned before, the drone indices at 37 McLee's over the last years have ranged from 13 to 81 38 percent of the weir estimates. We've always known that 39 aerial surveys tend to underestimate the actual 40 escapement of sockeye in a system, but this really wide 41 range for McLee's does provide some evidence that we 42 need to be a little bit careful about drawing 43 conclusions when, you know, we're only able to perform 44 one or two surveys. And also that -- those limited drone surveys are not on par with the weir when it 45 46 comes to managing in-season. I do want to reiterate 47 again though that in the past years when we have been 48 able to perform multiple surveys usually we are able to 49 get a couple of good indices to estimate the peak of 50

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0308 1 the run. 2 3 Next slide. 4 5 Looking elsewhere in the region, 2022 6 Fish and Game started to perform drone surveys on 7 several streams in Cold Bay to estimate escapement of coho salmon. In the top right here you can see some 8 9 coho salmon seen on a drone survey of Russell Creek 10 last September. The results of this survey weren't 11 analyzed at the time of the September RAC meeting, did 12 have time to review it this winter and that drone 13 survey index was actually less than the peak index 14 obtained from a fixed wing survey just prior to that 15 meeting. So there's no new data to see on this particular chart. But I do want to point out real 16 17 quick here that the point that you do see for 2022 is 18 pretty similar to the range we see in the 2000s when 19 coho surveys on the season were performed more 20 routinely. 21 22 Next slide. 23 24 Over at Trout Creek also in Cold Bay we 25 again reviewed footage after the fall RAC meeting and 26 in this case that coho index was guite a bit higher 27 than what we had reported at the RAC meeting. So just 28 to the right of the picture there is a little gray dot 29 and that's where our 2022 escapement was. You can see some -- a good picture of a bunch of coho salmon from 30 31 Trout Creek last September in that picture. So that 32 drone index was about 1,150 coho salmon and this is 33 actually really encouraging along with that Russell 34 Creek datapoint because otherwise in the region and 35 most parts of the State in 2022, coho salmon returns 36 were really poor. So at least for Cold Bay where, you 37 know, we talked about some of the issues going on there in the fall, it's encouraging to see that at least 38 39 these two systems seem to still have some healthy runs 40 of coho returning to them. 41 42 Next slide. 43 44 Swan Lake also in Cold Bay has been of 45 special interest in recent years with a shift of 46 harvest from Mortensen's Lagoon to this part of Cold 47 Bay for sockeye salmon. And in the foreground here we 48 have Cygnet Pond and it is connected to Swan Lake in 49 the background and over that -- kind of above the 50

horizon and beach, so you'll have the saltwaters of Cold Bay proper. The aerial surveys we've been trying to perform mostly on Swan Lake the past year have just not worked out. That water is just always chocolate milk and we've been able to see into it, but the last couple of years we've kind of just focused more on Cygnet Pond here.

9 And if we move on to the next slide 10 this will be an image from Cygnet Pond. And we did a 11 drone survey I believe the day before the RAC meeting 12 in September. And we were able to finally count 101 13 sockeye in Cygnet Pond and this is the first time we've 14 actually been able to confirm that there are spawning 15 sockeye in this system. So it's great that we were actually finally able to find these sockeye and count 16 17 them, definitely an improvement from zero, but we are 18 hoping to figure out a way to positively count more of 19 them in the system because a couple years ago we had a 20 harvest outside of Swan Lake of 2,000 sockeye salmon. 21 So we're going to keep on working on that and try to 22 get some sort of a weir in place there in the next few 23 years to give us a hopefully better count of the 24 sockeye salmon returning there.

26 Some other Fish and Game salmon updates 27 for the region. We're going to be finishing up our official kind of memo for the drone surveys at Unalaska 28 29 and that should actually be sent out next week. I can 30 share a couple of preliminary insights into that. So 31 as alluded to earlier we had issues in the lakes there 32 So the sockeye counts are going to with visibility. look pretty poor, but in general we're going to really 33 34 stress not making a comparison from 2022 to the 35 previous years is because of the lake condition and 36 especially in the sockeye reds where we normally see 37 fish was just not possible to count fish there.

39 Even though we have bad news as far as 40 how we were able to count the sockeye salmon there we 41 have some really great news for the pink salmon Unalaska Lake we counted 42 escapement in Unalaska. 43 35,000 pink salmon and that was the largest number of pink salmon seen there since 1996. Morris Cove is a 44 smaller system, but it had 600 pink salmon, that's the 45 46 most they've had since 1984. And Summer Bay had about 47 5,000 pink salmon. Nothing historic there, but within 48 its range of the other drone surveys that we've seen 49 there since 2018. 50

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0310 I discussed the Board of Fisheries 1 updates earlier so I'll skip over that for now and I 2 can answer anymore questions if you have any about the 3 4 Board of Fish. 5 6 I'll mention that for the annual 7 management report we made some updates to our most report and we added some sections for escapement and 8 harvest in appendices E and F. So those now show the 9 10 historical escapement numbers for all of those roadside 11 lakes on Unalaska as well as McLee's and we also added 12 what information we have for Mortensen's Lagoon and Swan Lake and such in Cold Bay and likewise for the 13 14 subsistence harvest for some of those systems. So we 15 now have all those things in a kind of an easier to access place for people to find when they want access 16 17 to those data. 18 19 Together with the Qawalangin Tribe we 20 submitted an application for another four years of FRMP 21 funding for the weir at McLee's and if awarded the Q 22 Tribe is going to assume the role of the principal 23 investigator there and they'll be taking over some of 24 the administrative and logistical responsibilities. 25 Fish and Game is going to remain a coPI on that project 26 and help install the weir, hire and train technicians 27 and otherwise provide any and all of the support 28 necessary to keep making that project a success. 29 30 We're also going to be working with the 31 Division of Sport Fish in doing some of the climate and scale analysis that they were talking about for the Buskin River so we'll be doing a similar thing for the 32 33 34 McLee's Lake sockeye salmon. 35 36 I believe Mandy mentioned earlier today 37 that the Q Tribe also submitted a NOAA proposal for 38 habitat remediation and a salmon weir for Unalaska 39 We submitted a letter of support for that. And Lake. 40 if they get that funding we're going to help them to 41 get that weir installed and make sure they have all the 42 pieces and parts for it and we've also offered to help 43 them to train technicians to staff that and do all the 44 things necessary to get that project up and running. 45 46 We are also planning to expand our 47 limnology sampling at McLee's Lake and hopefully 48

Unalaska Lake as well. We'll be deploying some hobo temperature loggers for 24/7 and hopefully 365

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0311 1 temperature monitoring in streams, lakes and possibly salmon reds there and also doing some more 2 the 3 chlorophyll A and phytoplankton sampling there 4 especially in McLee's where I pointed out that large 5 alga bloom last summer. 6 7 And lastly I'll just briefly mention 8 that we have some personnel changes in the region. Lisa Fox who was our long time Area Management 9 10 Biologist has moved over to our Research section and 11 she's going to be heading the area N chum salmon 12 genetics study which will be going on for the next few 13 years. And in her place we now have Matt Keyse and 14 Matt has been in the position that I have in Cold Bay 15 and in Sand Point as well so he has a lot of experience 16 in the region. 17 18 And finally just to say thank you to 19 all of our partners and helpers on these projects. 20 Mark Witteveen from the Sport Fish Division came out to 21 McLee's last summer and he helped to train the 22 technicians on the mark recapture protocol so we thank 23 for making the long trek out from Kodiak to do that last June. And as always we're really thankful for the 24 25 Q Tribe, Unalaska Corporation, for all of their help 26 that they always provide us. We had help from ANSEP to 27 provide interns last summer and we're hoping to have 28 another one again this coming summer. OSM Staff have 29 been great, especially Justin Koller and sitting down 30 with us and answering all of the questions about the 31 next round of FRMP funding. And I want to especially 32 thank Jenny Renee and Kanisha McGlasson Price, our technicians out at McLee's the last couple of summers 33 34 for all the hard work that they have done to help make 35 that project out there a success. 36 37 And with that I'll be happy to take any 38 questions that you have. 39 40 ACTING CHAIR SKINNER: Great. Thank 41 you. Any questions or comments from Council members. 42 43 Chris, go ahead. 44 45 MR. KOSO: Madame Chair, it's Rick. 46 47 ACTING CHAIR SKINNER: Okay. We're 48 going to go Chris and then we'll go to Rick. 49 50

0312 Go ahead, Chris. 1 2 3 MR. PRICE: Great presentation. Thank 4 you, Tyler, for all you've done for our community and 5 also having the Trooper here was fantastic yesterday. 6 And we'll hope to continue to work with the Troopers 7 too. 8 9 The ADF&G logo didn't make it on the 10 slide.... 11 12 (Laughter) 13 14but otherwise the MR. PRICE: 15 partnership was great. Thank you very much. 16 17 (Laughter) 18 19 ACTING CHAIR SKINNER: Rick, go ahead. 20 Yeah. 21 MR. KOSO: Hi, Tyler, I got a 22 question on Mortensen's Lagoon there. I couldn't find 23 the info on it there, I know you mentioned info on it. 24 Could you give me a little bit of an update on Mortensen's Lagoon of how the escapement is looking 25 26 there maybe for this next year? 27 28 MR. LAWSON: Through the Chair. Sure, Rick. Yeah, so in 2022 we actually were able to get 29 30 some -- a good survey in on Mortensen's. It's one of 31 those systems where sometimes the visibility is good 32 for surveys and oftentimes it's not especially previous 33 years, but in 2022 I think off the top of my head the 34 escapement was 3,900. And it has a lower escapement 35 goal of 3,200. So it did hit its escapement goal this 36 year. The previous three or four years off the top of 37 my head it did not hit its escapement goal, but again 38 that's confounded with really poor survey conditions 39 and us sometimes not being there late enough into the 40 season to get a survey in once the salmon have moved 41 into shallower waters and had their spawning colors 42 come into effect so we can see them really well. But at least this past summer we did have a really great 43 survey and they did seem to be there in good numbers. 44 We don't have information to do any forecast on 45 46 There is a chance hopefully Mortensen's at this time. next year that we might try to apply for some funding 47 48 to get a weir back in place there. And I'll share more 49 about that when the time comes and if we're able to 50

0313 1 pull it off. 2 3 ACTING CHAIR SKINNER: All right. Are 4 there other.... 5 6 MR. KOSO: Yeah, thank you, Tyler. 7 8 ACTING CHAIR SKINNER: All right. Are 9 there further questions or comments. 10 11 Pat, go ahead. 12 13 MR. HOLMES: Yeah, Tyler, again I'd 14 like to compliment you on your hard work and getting 15 things done in a difficult place. One thought that I don't know if I mentioned to you was from the old 16 17 geezers that used to go out there, Glenn Davenport at 18 Statehood and Arnie Shawl in the '70s and '80s and I 19 did surveys there too, but I think what you're doing is 20 a lot easier than flying a Grumman Goose down that 21 creek. 22 23 But one of their comments that they 24 always made was when they had a green, mucky summer 25 there that two, three years down the line then they had 26 a big jump in returning fish because of all that plankton in there seemed to really nuke -- give the 27 fish that were in the lake, the smolt, a really big 28 29 boost. And I bet you if you had a smolt program going 30 you'd see those things going out, you know, eight 31 inches long. So that's really cool. 32 33 And I think the local support that you get from the Qawalangin Tribe and the city, I mean, 34 35 that's just doing some really good things, working with folks so that everybody's involved trying to solve the 36 37 problems. 38 39 And I think that grant coming up for the weir on Unalaska could be -- Unalaska Iliuliuk 40 could be really, really helpful. And I would like to 41 mention -- I had mentioned this to him personally, but 42 43 I was able to locate a rehabilitation proposal for the 44 streams there near Unalaska and particularly Iliuliuk that had been lost for 25 years. I worked with a 45 46 couple people from Habitat and they came up with a walk 47 around, quick and best way to resolve things. And so 48 I'll make sure I get you that study. And actually 49 Jeanette Alas in the Fish and Game Habitat found it and 50

0314 1 she went through piles of paper and finally found a email from a successor that had -- pretty much had the 2 whole package. So I think that you've got some really 3 4 potential working with the city and the Q Tribe to 5 hopefully get some more escapement in there than a few 6 hundred fish. And so I envy you. 7 8 Thank you. 9 10 ACTING CHAIR SKINNER: Any further 11 questions or comments. 12 13 (No comments) 14 15 ACTING CHAIR SKINNER: Okay. Seeing 16 and hearing none..... 17 18 MR. LAWSON: Through the Chair. I just 19 want to mention a couple things that Pat brought up. Yeah, Pat, happy to see those documents and look through them to kind of add to our ties of the 20 21 22 historical fun stuff that we have for the region. 23 There's a lot of interesting things that have gone on 24 there over the years. I have some of the notes from 25 Arnie Shawl about those alga blooms in our notes from 26 the late '90s and 2000 that are pretty interesting. 27 28 And I also want to reiterate that yeah, 29 our partnership with the Q Tribe is great. And I 30 forgot to mention that we've been working with Mandy 31 and Rachel back here and they've been awesome to work 32 with and they're cranking grants out at a incredible 33 pace and it's been real fun to work with them and kind 34 of get them involved with the fisheries aspect of 35 things out there. So I can't say enough good things 36 about them. 37 38 MR. HOLMES: Yeah, I think that would 39 be swell. And I guess one footnote possible that might 40 be explored is that chap that works for Fish and Mike Denault, 41 Wildlife Service, he's a Stream 42 Rehabilitation person for the Refuges and who knows, 43 perhaps you might be able to get his on the grounds 44 advice because as we all know now that's part of the Maritime. And so I think there's some just wonderful 45 46 potential to solve problems that have been lagging for 47 30, 40 years. 48 49 So anyway, good luck. 50

0315 1 ACTING CHAIR SKINNER: All right. Okay. We're going to go on to the next 2 Thank you. presentation and just to give people a heads up I 3 4 expect we are going to go until at least 5:30, 5:30 or 6:00 tonight to get through the items we have. 5 6 7 So the next item is University of 8 Alaska, Alaska Sea Grant Marine Advisory Program, Alaska Mariculture Program, Melissa Good. 9 10 Is Melissa online? 11 12 MS. GOOD: I'm.... 13 14 ACTING CHAIR SKINNER: Here. Okay. 15 16 MS. GOOD: Yeah. 17 18 ACTING CHAIR SKINNER: And it looks 19 like she's handing over the presentation. And it looks 20 like we do not have these materials in either of the 21 books. So sorry for people who are on the phone. 22 23 MS. GOOD: All right. Well, thank you 24 for -- thank you for inviting me here and thanks, 25 Chris, for reaching out. I was asked to give an 26 overview of the mariculture industry in Alaska. 27 There's a lot to talk about with mariculture so this is 28 going to be a really high level overview. And I'm 29 happy to provide these slides, that way they can be 30 passed out to the folks that are online. And I 31 apologize that you can't see those. 32 33 My name is Melissa Good, I also go by 34 Missy and I'm the Mariculture Specialist for Alaska Sea 35 Grant. Thank you. So Alaska Sea Grant for those of you who don't know is a partnership between NOAA and 36 37 the State of Alaska and we're housed within the 38 University of Alaska Fairbanks. This type of 39 partnership isn't unique for the nation, there are 34 40 programs all across the nation and we focus on resource 41 development, sustainable economic development 42 throughout the great lakes, coastal regions and marine 43 environments. 44 So what is mariculture for those of you 45 46 includes the who don't know. It enhancement, 47 restoration and farming of marine organisms in a marine 48 environment. In Alaska we're a little bit unique in 49 that it is illegal to farm finfish in the State of 50

0316 1 Alaska so here that only includes shellfish and 2 seaweeds. 3 4 Next. So what is currently being 5 farmed in Alaska. So right now what we -- what we have 6 being farmed for seaweeds are some of the larger kelps, 7 sugar kelp, ribbon kelp and bull kelp and there's some 8 pictures of those in these slides. 9 10 Next. And for shellfish that includes 11 Pacific oysters, blue mussels and geoduck clams. Pacific oysters and kumamoto oysters are the only non-12 13 Native species that are allowed to be cultivated in 14 State of Alaska waters. Currently only Pacific oysters 15 are being cultivated here. 16 17 We don't have final numbers for 2022 18 from the State yet, but to get a sense of what the 19 industry looks like, it's about a \$2 million industry. 20 In 2021 there's 4 and a half million that were sold and these numbers include oysters that were sold out to 21 22 consumers and distributors and also from one farm to 23 the other. There's no brood stock for oysters in the 24 State of Alaska so all brood stock is shipped in. And 25 then there are a couple of farms that are able to take 26 very small oyster seed and grow them up to a larger 27 size which then gets sold to another farm site for 28 actual growth to marketable size. 29 30 Go back, please. There was 536,000 31 pounds of seaweed that was sold. That was mostly 32 ribbon and sugar kelp from aquatic farms that were 33 growing those specifically. There's a very small 34 amount of other seaweeds that was sold as well that was 35 naturally set seaweeds on oyster gear. There's almost 36 a small amount of shellfish as well, blue mussels. 37 38 In March of 2022 there was 81 aquatic 39 farm permits that were considered active, active doesn't mean that they actually have product onboard or 40 41 are growing anything, but are considered active by the 42 State of Alaska. There was four hatcheries, 49 of the 43 aquatic farms had inventory of their farm site. 44 45 To get a little bit of history of what 46 mariculture has looked like in the State of Alaska, the 47 cultivation industry started in the early 1990s. The 48 graph on the left-hand side has thousands of pounds, X 49 axis is years going up to 2021 and what we see is 50

1 there's been a huge fluctuation in clams, mostly geoduck clams. We're -- at the peak we saw 70,000 2 pounds of clams sold and that was in the early 2000s, 3 4 dropping off to nothing within these last five years. There are geoduck clams that are on farm sites, it 5 takes seven years for a clam to reach maturity and a 6 7 sellable size and so we have a long history within that 8 industry for those organisms. 9 10 As far as blue mussels go, blue mussels 11 are sold by the pound as well and over the last five 12 years or so there's only been a couple thousand pounds of blue mussels sold. Those are being sold out of 13 14 Kachemak Bay. 15 16 We have a graph on the right-hand side 17 and these are millions of numbers of oysters sold. We 18 do have a peak of over 12 million oysters that were 19 sold in the mid 2010s and then we see a precipitous 20 drop in the 2020/2021, this is due to covid. Sales in 21 the oyster market probably go to restaurants and with 22 the closures of restaurants farms no longer really had 23 a way to see their oysters. Because we do have farm to 24 farm sales of very small oysters to farms that can grow 25 them up to a marketable size, we do still have some 26 sales. We do expect 20222 numbers to be quite a bit 27 higher than the 2021 numbers. 28 29 Next. Right now we have up a graph of 30 the aquatic plant sales. Again this is primarily 31 ribbon and sugar kelp that's being sold. The first sales of seaweeds were in 2017 here in Kodiak and we've 32 seen expediential growth in the seaweed cultivation 33 34 industry. Right now or at 2021 there was over 500,000 35 pounds sold. We do expect the 2022 numbers to be even 36 higher than that with expectations that this industry 37 will continue to grow. 38 39 And when we think about where are these farms located, about half of the farm sites and about 40 41 half the acreage leased is in southeast Alaska, a 42 little over a third is in southcentral which includes 43 both Prince William Sound and Kachemak Bay and about 12 44 percent here in Kodiak and the Alaska Peninsula area. 45 The Alaska Department of Fish 46 Next. 47 and Game does have a publicly available map that can 48 show you where farm sites that are active and 49 hatcheries are located. For those of you in the room 50

1 you can see the black dotes with green around them, those are all considered active permit sites. You get 2 3 a permit to the Alaska Department of Fish and Game and 4 a least through the Alaska Department of Natural 5 Resources so these are really the lease sites. There's 1,200 acres of leased area in Alaska. Most farms don't 6 7 use their whole footprint of their lease sites, that's not necessarily the acreage of farms, it's the acreage 8 9 of the lease footprints. And farm sizes range from one 10 to 182 acres, 182 acres being these large kelp farms. 11 Again not necessarily taking up that whole acreage and 12 the one acreage farms are oyster farms. 13 14 What does this look like. Next. So 15 for those of you here in the room that is a spreader 16 bar system that's growing ribbon kelp, that's actually 17 out in Talsen Bay. This one's from last year, but you 18 can see it again this year if you drive out the road. 19 20 Go ahead next. And so we see these 21 small spreader bar systems that -- not really taking up 22 much ocean space to these larger systems. So the 23 picture in the upper left-hand corner we're looking at 24 a on water view of -- it kind of looks like buoy soup, 25 but this is a catenary system of sea growth that's 26 outside of Craig, Alaska. And then the bottom system 27 is an aerial view of a tension system, it's another catenary type system. This one's the farm that's out 28 29 at Woody Island here in Kodiak. 30 31 There are three main types of Next. 32 oyster growing systems that are being utilized in 33 Alaska. One is a lantern net system. For those of you 34 in the room that's on the left-hand side, those -- both 35 of those pictures on the left-hand side. There's also a metal stacking tray system, those are the pictures in 36 37 the middle. Metal stacking trays require more of a surface, a floating platform. And then on the right-38 39 hand side you can see pictures of some float bags that are being utilized. As far as our region goes or this 40 41 region for the RAC, the only oyster farm in the region 42 is in Larsen Bay here in Kodiak and they're using a 43 float bag system. 44 45 Next. There is a fairly arduous 46 process to acquire an aquatic farm site. The potential 47 farmer will submit an application to the Alaska 48 Department of Fish and Game who's issuing your permit 49 so for your species and your farm gear and design and 50

1 then that's jointed with Alaska Department of Natural Resources that issuing the lease. There are other 2 layers that are involved as well and this depends on 3 4 where you're at and what you're growing, there could be local government permitting that you're going through. 5 6 If you are growing shellfish you're also going to work 7 with the Alaska Department of Environmental Conservation and there are some Federal requirements as 8 well. So every farm site is going to have to either 9 10 have a letter or a permit through the U.S. Army Corps 11 of Engineers and there's also a review process looking 12 marine mammals, protected species, at essential 13 habitat, anything else that could be impaired by having 14 an aquatic farm site in an area. 15 16 Aquatic farming in the State of Alaska 17 is kind of considered a lowest priority so if there's 18 anything else going on within an area it's probably not 19 going to get approved. 20 21 So what are these seaweeds and oysters 22 being grown for. It's almost all food products, we 23 have some examples here of Barnacle Foods who has some 24 salsas and some seasonings, there's also hot sauces, 25 some purees that are being developed, beer, the Kodiak 26 Brewery has a seaweed beer that they've done, there's 27 oyster beers and then oysters are primarily going to a 28 ready to eat market, mostly restaurants. 29 30 There is some other experimental work 31 going on with seaweed, there's a lot of that's 32 different applications for seaweed, it's all about 33 developing those processing industries. 34 35 I don't have time to go through 36 training and education opportunities that are available 37 or coming up. One that is coming up really soon here 38 in Kodiak is a seaweed handling and processing workshop 39 which will take place at the Kodiak Seafood and Marine That will take place April 19th 40 Science Center. 41 through 21st and our application period closed, but if 42 anyone's interested in that workshop let me know 43 because we do still have some space available and we 44 have scholarships available for that as well. 45 46 There are also some really large 47 initiatives that were recently funded. The Alaska 48 Mariculture Cluster was funded through the EDA Build 49 Back Better Program at \$49 million. The first I guess 50

1 support that's coming out to the cluster, it's just getting up and running is right now there's a RFP out 2 3 for green energy development for the mariculture 4 industry. And there's going to be a lot of other 5 resources as well coming through this program. I would recommend checking out their website to see everything 6 7 that's involved. Alaska Sea Grant's playing a role in workforce development to this program. And you can see 8 9 the logo soup of all of the initial members of the 10 proposal. 11 12 There's also a lot of research Next. 13 that's being funded right now. One of the biggest 14 research programs that has been funded is through the 15 -- it was through the Exxon Valdez Oil Spill Trustee This is the Mariculture Research and 16 Council. Restoration Consortium. The goal of this program is to 17 18 really understand the impacts of aquatic farms within 19 the Exxon Valdez oil spill region. We do expect that 20 research coming through this project in these regions 21 give us some insights about areas as well, can 22 southwest Alaska, further southwest in Alaska and 23 southeast. So this project is not only looking at the 24 impact of aquatic farms, but also efficiencies in farm 25 sites and product development. 26 27 Next. And so I kept it short and sweet 28 and hopefully you have some questions. I'd be happy to 29 answer them now or offline. 30 31 ACTING CHAIR SKINNER: Are there any 32 questions from the Council. 33 34 Go ahead, Coral. 35 36 MS. CHERNOFF: Thank you for that. 37 Thank you for coming and presenting. Anddo you have --38 do you know how many current permits there are like in 39 waiting, like waiting in line to become permitted? 40 41 MS. GOOD: So that's a really good 42 question and it varies -- it varies by day. So this --43 both the dual State agencies are continuing reviewing 44 applications and there's an application window. So you can put in a application between January 1st and April 45 46 31st so we're right in the middle of that. I believe 47 right now that the State has about 20, I think just 48 over 20 applications that are in the review process. 49 Some of those they're waiting or most of those are 50

1 waiting for feedback or further information from the applicant and others are just in gueue waiting for the 2 3 full review from the agencies. Once the agencies find 4 an application complete it then goes out to public 5 review andthen there's a30 day window forpublic review. 6 7 ACTING CHAIR SKINNER: Further 8 questions. 9 10 Go ahead, Coral. 11 12 MS. CHERNOFF: And where would we go to 13 find out where that public review or when those are 14 coming up? 15 16 MS. GOOD: Yeah, the State of Alaska 17 put them out in their public notice platform on the 18 website, the State website. I can send a link to that, 19 it's kind of hard to find. I would be happy to send a 20 Yeah, and you can sign up there to receive link. 21 emails on whenever aquatic farm leases come up for 22 review. 23 24 ACTING CHAIR SKINNER: Chris Price, qo 25 ahead. 26 27 MR. PRICE: Do any sea mammals or 28 anything interact with the kelp and any subsistence 29 related activities happen around the kelp? 30 31 MS. GOOD: Yeah, so right now we don't 32 have very many instances of marine mammals interacting 33 with aquatic farms besides sea otters. In Kachemak Bay 34 sea otters are really well known to break into oyster 35 gear, especially those hanging lantern nets that you 36 Lantern nets are zipped -- kind of just zipped saw. 37 together with plastic string and the sea otters know how to just pull that out and get into them and they 38 39 like eating the oysters. But because we don't know a lot about it the Alaska Department of Fish and Game 40 41 does have guidance for avoiding marine mammals 42 interactions and configuring your gear, so does the 43 National Marine Fisheries Service and part of that 44 Mariculture Recon research project, ADF&G is doing really intensive surveys throughout Prince William 45 46 Sound, Kachemak Bay and the Kodiak region on what 47 marine mammal and seabird interactions are with aquatic 48 farms. 49

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ACTING CHAIR SKINNER: Any further --Coral, go ahead.

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4 MS. CHERNOFF: So are -- since this is, 5 I mean, fairly new, are there regulations about how your nets or how your gear is laid out and how big it 6 7 is and how much space it takes out, how close to shore? Because I know of several people running over lines out 8 here so it's become sort of a hazard or, you know, 9 10 people are learning about it now, they're like oh, now 11 we know that's there. But so that I guess regulations 12 on how or where. And then I was surprised like when it 13 first came in that those are set up all year round. Ι 14 guess that's -- do they need to be set up all year 15 round or again, what is -- are there regulations about 16 how these gears are set up?

18 I would definitely MS. GOOD: Sure. 19 talk to the State for specifics on that, I don't want 20 to speak for them. There are regulations on how close 21 an aquatic farm site and that's that least footprint 22 can be to anadromous streams and then marine mammal 23 haulouts, migratory pathways and rookeries. As far as gear design goes that is something that is reviewed by 24 25 the Alaska Department of Fish and Game and approved by 26 them. And when it comes to gear staying in the water 27 or being removed from the water that is permit specific 28 so every permit is different. Where some organisms 29 like oysters or your other shellfish you're going to 30 keep your gear in year round, where kelp farming right 31 now what is happening with sugar and ribbon kelp and as 32 we see other kelps species becoming cultivated, this 33 could potentially change as ribbon and sugar kelp are 34 outplanted in the fall, they grow throughout the winter 35 and then they're harvested in the spring. Whether a 36 farm has to take their gear out and what gear has to be 37 taken out is again farm site specific. Some gear is 38 allowed to stay in year round. What we often see is 39 the outside sets of the gear, the support system of the farm is allowed to stay in. 40 Some permits have 41 requirements where they have to sink it, some don't 42 have to do that, some have to completely remove it. 43 It's permit specific. And there's one permit per farm 44 site unless a farm site's really close then they can 45 have one permit covering two. But we haven't seen that 46 yet. 47 48 ACTING CHAIR SKINNER: All right.

40 ACTING CHAIR SKINNER: AIT FIGHT. 49 Well, thank you very much. 50

0323 1 MS. GOOD: Yeah. 2 3 ACTING CHAIR SKINNER: We're going to 4 move on to our next presentation. This is the Office 5 of Subsistence Management, Lisa Grediagin. 6 7 MS. GREDIAGIN: All right. Thank you, 8 Madame Chair, members of the Council. Lisa Grediagin for the record. And on behalf of the Office of 9 10 Subsistence Management I want to thank all Council 11 members for your exceptional work on behalf of your 12 communities and user groups. We value your expertise and the contribution of your knowledge and experience 13 14 to the regulatory process. 15 16 Last fall we held our first in-person 17 Regional Advisory Council meetings since the beginning 18 of the covid 19 pandemic three years ago. All 10 19 Councils were able to meet as scheduled in rural and 20 communities across the State. It's been a hub 21 tremendous honor to work with all of you, our Council 22 volunteers, OSM Staff, and our multi agency colleagues 23 in subsistence to accomplish our goals of informed 24 subsistence management and the implementation of title 25 VIII. We plan to repeat this success for the winter, 26 2023 Council meetings. We are so happy to work with 27 all of you face to face again. 28 29 Over the past few years we have 30 reminded Council members about the change in 31 requirements for U.S. travelers who must be Real ID 32 compliant to board domestic flights and access certain Federal facilities. Beginning May 7th, 2025 every air 33 34 traveler will need to present a Real ID compliant 35 license or other acceptable form driver's of identification such as a passport to fly within the 36 37 This applicable even when you fly on United States. 38 small commercial bush carriers. Please note that all 39 Council members will need to make sure that they have the required Real ID for travel to the fall, 2025 40 41 Council meeting. You can find more information on Real 42 ID requirements on the State of Alaska's Division of 43 Motor Vehicles website. 44 45 The Federal Subsistence Board recently 46 held a fisheries regulatory public meeting in Anchorage 47 the week of July 31st, 2023. This was the Board's 48 second in-person meeting and first regulatory meeting 49 since the covid 19 pandemic. The Board had a packed 50

1 agenda addressing fisheries proposals and closure reviews, deferred wildlife proposals and agenda items 2 3 touching on important subsistence and regulatory issues 4 across the State. We also listened to you, the 5 Councils, through your participating representatives at The Board is always better informed by 6 the meeting. 7 your expertise. 8 9 As for changing and staffing at OSM 10 there's not much new information to report since the 11 last time we met. OSM is advertising for а 12 cartographer position to help with our mapping needs and the closing date for that application was March 13 14 3rd. We hope that during the fall meetings we'll be 15 able to announce the hire of this new and important 16 team member. 17 18 While there have been no new additions 19 there has been one very large subtraction. The great 20 Tom Kron retired in early February after more than 22 21 with the program. Tom has been an OSM years 22 institution and his generosity and wealth of knowledge 23 will be greatly missed. 24 25 That concludes the OSM report and I'd 26 be happy to answer any questions. 27 28 Thank you, Madame Chair. 29 30 ACTING CHAIR SKINNER: Thank you. Are 31 there any questions. 32 33 Pat, go ahead. 34 35 MR. HOLMES: I'm surprised that Tom 36 retired, I thought he'd stay there for -- until he was 37 90 years old. 38 39 (Laughter) 40 41 MR. HOLMES: And he put in 25 years 42 with Fish and Game before he went there. 43 44 I heard there's some possibility of 45 having a joint Council meeting perhaps in Anchorage like we did about 10 years ago or whatever because that 46 47 was really productive to allow for networking with 48 particularly like our sister city, Sitka, but also 49 folks up in Bristol Bay and is there any potential that 50

0325 1 that might happen again? 2 3 MS. GREDIAGIN: Yeah, that is 4 happening. It's planned for next winter so a year from now in Anchorage. And actually when you get to that 5 part of the agenda of selecting the, you know, meeting 6 7 date and location for winter, 2024 you're basically just selecting the week because the plan is to have 8 another all Council meeting next year in Anchorage. 9 10 11 MR. HOLMES: Super. 12 13 ACTING CHAIR SKINNER: All right. Any 14 further questions. 15 16 (No comments) 17 18 ACTING CHAIR SKINNER: Okay. Thank 19 you. All right. 20 21 MS. HUTCHINSON-SCARBROUGH: Madame 22 Chair. 23 24 ACTING CHAIR SKINNER: Lisa, go ahead. 25 26 MS. HUTCHINSON-SCARBROUGH: Madame 27 Chair, members of the Council, I just thought this would probably be a good time to interject this since 28 29 it is OSM update. I did receive a letter from our 30 Assistant Regional Director Sue Detwiler, who spoke 31 with us a little bit earlier and it's just regarding it 32 was a feed -- some feedback from the Department of Interior regarding the move from -- some of the 33 34 questions that the Council had for Mr. Newland. 35 36 Anyway an email has been sent to all of 37 you so just wanted to give you heads up, they gave you some answers and some directions on where the meetings 38 39 were and who attended. So anyway if you want more information on that later I can talk to you about it or 40 41 show it to you. 42 43 Thank you. 44 45 ACTING CHAIR SKINNER: All right. 46 So now we are going back to a previous Thank you. 47 agenda item which is approving our annual report and that's in the original meeting book on Page 53. And I 48 49 did just want to say a few books about the process of 50

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1 this because I -- there was a couple Council members
2 had questions about why we were even talking about
3 changing this report.
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5 So in our fall meeting the Council 6 generated topics that they -- that we wanted to include 7 in our annual report. We conveyed those to Lisa, Lisa crafted them into this letter or this report or letter 8 and you can see it's got draft all over it. The winter 9 10 meeting is the normal time when we approve this report 11 so every winter we approve our annual report. After we 12 approve it at this meeting then it goes to the Federal 13 Subsistence Board. And normally every year we do make 14 at least some small changes to the draft because things 15 happen between the fall meeting and the winter meeting and we always think of other things we want to add in. 16 17 So this is just the normal process that we go through 18 every year to put together the annual report and then 19 approve it. We have the report as written in the book 20 and what I'm going to do is go through and note the 21 changes that were suggested yesterday. And some of 22 these I would consider noncontroversial, nobody had any 23 -- nobody voiced any concerns with them. Some of them 24 were controversial in that there may be disagreement or 25 we just need to clarify that the things do need to be 26 included in the report. And so we'll discuss that, 27 make sure that what is in the report is what we want to go to the Federal Subsistence Board and then we do need 28 29 to vote to approve it today. 30

31 So the first change I noted was in the 32 section 1, fisheries enforcement concerns. Pat had 33 asked that the word stressed be added in relation to 34 the streams so that the -- some of the salmon streams 35 stressed and that's particularly why we have these are 36 enforcement concerns with potential overuse. Although 37 I'm editorializing I think what Pat meant.

And then also there was a suggestion to include a sentence expressing our appreciation for Tyler Lawson and Sergeant Walsh's and whoever else, I don't mean to leave anyone out, but the efforts that the group made following our fall RAC meeting to address these enforcement concerns. So a sentence of appreciation.

47 So those were the suggested changes for 48 paragraph 1. 49

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0327 1 Paragraph 2 was the Proposed King Cove There was a suggestion to add a sentence that 2 Road. 3 references subsistence. So the -- conveying that this 4 road could be helpful or important for subsistence 5 access for the residents of King Cove. This one I would consider controversial. 6 There was I guess 7 opinions expressed both in support of including that sentence and not including it. 8 9 10 I didn't note any changes to 3, 4 or 5 11 or 6. 12 13 Paragraph 7 which is the Lake Andrew 14 section, there was a suggestion to add a sentence or 15 recommendation about developing a study -- a study team And Pat may need to to help come up with a plan. 16 correct that if I have that -- if I got that wrong. 17 18 But basically adding a recommendation that a study team 19 be developed to come up with a plan there. 20 21 And then Della suggested a -- what I 22 had -- in my head I'm thinking of it as a new topic. 23 So it would be a paragraph 8 that has to do with 24 resources, resource management, I think making sure 25 that we have good data, particularly in times where we 26 have constraints on resources and where there's 27 competitive uses. And earlier in the day I had asked 28 Della if she could come up with a couple of draft sentences there because I'm pretty sure I am not 29 30 summarizing what she wanted very well. 31 32 And then earlier today there was a 33 suggestion on adding another paragraph which would be 34 paragraph 9, comments regarding the moving of ___ 35 movement of OSM. And it might just be the -- maybe the lack of public notice and -- or notice to the RAC 36 37 at any rate. So that was a potential new members 38 paragraph. 39 40 So does the Council -- should I go back through the paragraphs, make sure that the changes I 41 42 noted are okay paragraph by paragraph, would that be 43 the fastest way to move through this and then did anyone have additional changes that they noted down 44 45 that we're going to need to talk about. 46 47 MR. PRICE: Can you pass it as you just 48 mentioned, I mean, can we just.... 49 50

0328 1 REPORTER: Chris. 2 3 MR. PRICE: Oh, I'm sorry. 4 5 ACTING CHAIR SKINNER: Was that Della. 6 7 REPORTER: No, Chris needs to turn his 8 mic on if he's.... 9 10 ACTING CHAIR SKINNER: Yeah. So if 11 what I said makes sense to at least one of you can make 12 a motion to approve this letter with the changes that I 13 have described. 14 15 MR. HOLMES: Madame Chair, I'd like to 16 do this point by point. There's just a few things and 17 I don't think it would take very long. 18 19 Thank you. 20 21 The basic concepts are there. 22 23 ACTING CHAIR SKINNER: Okay. We will 24 So paragraph 1, the suggested change again do that. 25 was to add in the word stressed to describe the streams 26 and then to add a sentence appreciating the efforts of 27 particularly Tyler Lawson, Sergeant Walsh, anyone else 28 I've left out, but their efforts to respond to and 29 address these enforcement concerns between our last RAC 30 meeting and this RAC meeting. 31 32 there -- is there So are any 33 corrections that need to be made to that or does that 34 capture the thoughts of the group. 35 36 Pat. 37 38 MR. HOLMES: On the sentence that 39 starts with 4,000 people, there are only a few stressed 40 salmon streams with weak returns. Now that very 41 precisely defines it in biological terms as to the 42 importance of the fisheries enforcement concerns. And 43 perhaps at the end -- I don't quite have the verbiage on it, but we could just have a sentence on there that 44 45 says that we received a report from Tyler and the 46 Department of Fish and Wildlife Protection that they 47 have -- are developing solutions to this problem. Ι 48 guess that's as close as I could come. 49 50

0329 1 ACTING CHAIR SKINNER: Coral, go ahead. 2 3 MS. CHERNOFF: I think I'm good with 4 that if we could possibly just get an okay from maybe Fish and Game Biologist or something that that might be 5 6 an appropriate summation of that, are the streams 7 stressed with poor returns. 8 9 ACTING CHAIR SKINNER: Well, I quess I 10 want to jump in that the..... 11 12 (Laughter) 13 14 ACTING CHAIR SKINNER:Council 15 members or the Council can have its own opinion of streams, but if you'd like to hear from Fish and Game 16 17 that's fine, but we do not have to agree with Fish and 18 Game's assessment. No offense meant to Fish and Game, 19 but you're welcome to come up..... 20 21 (Laughter) 22 23 ACTING CHAIR SKINNER:and share 24 your thoughts. 25 26 MR. LAWSON: Yeah, through the Chair. 27 That as Pat Holmes likes to say is a sticky wicket. 28 29 (Laughter) 30 31 MR. LAWSON: I don't know how much 32 longer you all want to be here, I mean, it really kind 33 of depends on which system we're talking about. If you 34 have specific ones in mind I'm -- we're happy to answer 35 your question and kindof give you an idea if there's --36 we have any input on if they are stressed or not. I'm 37 not sure that answers your question, but we're happy to 38 answer any specific questions you have about specific 39 systems. 40 41 MR. HOLMES: Ι don't have any 42 questions. I was thinking of starting at Morris Lake 43 and working all the way down to Iliuliuk and Unalaska 44 Lake because it's just not getting the escapement. And 45 that to me is stressed and weak. 46 47 ACTING CHAIR SKINNER: Yeah, it -- to 48 me it -- I don't know that it's -- I'm not viewing it 49 as terribly productive to spend a long time on this 50

1 very specific point. I took Pat's suggestion to mean he wanted to emphasize that and the -- one of the 2 3 reasons we're so concerned about the enforcement issue 4 is because there are streams that are stressed or maybe 5 not as productive or they're more heavily used than -and they need of a bit of an extra eye as far as 6 7 enforcement and that was my read of Pat's suggestion. And I don't know that it's necessary to specifically 8 9 define exactly which streams are stressed and we're --10 really we just want more enforcement presence in the 11 community. That is my -- that's my read of the 12 situation. 13 14 So, Coral, did that -- did you have --15 did you want more specific feedback from Fish and Game. 16 17 MS. CHERNOFF: Well, I guess my point 18 was just if we're going to put things in letters I want 19 sort of some accuracy or truth to some things that I don't -- I think it's not productive 20 we're saying. 21 when we're like sort of producing our own sort of 22 facts, loose facts on things. So I guess my idea is 23 that I think the original wordage is fine. I think 24 overstressing things that perhaps -- but that's just my 25 opinion. So I don't know, I guess we have difference 26 of opinions here. 27 28 So whatever the Council wishes to do, 29 but I just wanted to express how I felt about it. 30 31 ACTING CHAIR SKINNER: Chris Price, go 32 ahead. 33 34 MR. PRICE: Maybe there's a better way 35 to say this, to reflect -- I see the local concern about some of our rivers being, you know, damaged, I 36 37 mean, the environment is damaged and restoring, you 38 know, the systems and stuff like that. But I don't 39 know how -- if this really needs to be super specific or not. I really -- you know, this is kind of my first 40 41 time working on one of these with you guys and don't 42 know how specific we need to be. I mean, they have the 43 reports from the past so, I mean.... 44 45 ACTING CHAIR SKINNER: So, Chris, as 46 the representative and resident of Unalaska does Pat's 47 wording -- I mean, adding -- it's basically adding the 48 word stressed into the sentence. Does that -- does 49 that seem to somewhat correctly characterize -- does it 50

0331 1 seem accurate or does it seem more accurate -- are you comfortable with the wording or do you think we need to 2 3 leave it out. And I'm going to defer to you because 4 you -- you're from that community. 5 6 MR. PRICE: We're concerned about the 7 runs. 8 9 REPORTER: Chris, you..... 10 11 MR. PRICE: We're concerned about the 12 runs and how much is it environmental and how much is, 13 you know, all these other factors. I would defer to 14 the experts. We are going to have the Army Corps come 15 out and look at our -- some of our lake habitats and other areas in Unalaska because we do have some erosion 16 17 events that are happening and things like that. So 18 it's pretty dynamic. So it's hard for me, I'm not an 19 expert, I would defer to the opinion of Fish and Game 20 on what they thought, if the runs are stressed or if 21 they're, you know, damaged or whatever you want to call 22 it. 23 24 ACTING CHAIR SKINNER: Yeah, and just to clarify I think it was the streams that are being described as 25 26 stressed, not the runs although the concern is with the 27 run. 28 29 Okay. So to move us past this, I -- can I get a 30 nod of heads around the table, are we okay with Pat's 31 suggested addition of the word stressed or do -- should 32 we -- do we need to actually take a vote on this 33 particular -- on this specific sentence. 34 35 Coral and then Pat and then Sam. 36 37 MS. CHERNOFF: And I just want to reiterate that the wording was stressed with poor returns. And I'm 38 39 not in favor of that. I'm in favor of the original 40 language that we have in front of us on paper. 41 42 ACTING CHAIR SKINNER: Pat and then Sam. 43 44 MR. HOLMES: Madame Chair, I was basically using the words that Vincent Tutiakoff, the Mayor of Unalaska 45 46 and also one of the executive officers of the Unga 47 Corporation or the Aleut Corp -- anyway the corporation 48 out there. And I just was making a follow-up on that 49 because the main point that we -- I --s discussed at 50

1 three prior meetings was the Unalaska system and that that's the reason why we voted not to change things 2 3 there because if we were adding a new gear type, sport 4 gear, that could easily overfish the very small returns 5 and so that really applies to the whole area, but specifically Unalaska Lake. That is the points that 6 7 Vincent made. And that's the only reason I'm doing that. And also because I was a biologist there and I 8 came back 25 years later and nothing had happened and 9 10 it was worse. And if that isn't stress and weak 11 returns, I'm sorry. So let's just either doe it or 12 have a vote. 13 14 ACTING CHAIR SKINNER: Sam, go ahead. 15 16 MR. ROHRER: Yeah, thanks. Yeah, I'm 17 comfortable with Pat's language. I don't think they're 18 going to probably spend as much time looking at this as 19 we've spent talking about it. 20 21 (Laughter) 22 23 MR. ROHRER: I think it's fine. But 24 yeah, the point is we have concerns. We have concerns. 25 And so it helps convey that. 26 27 ACTING CHAIR SKINNER: Okay. If we could do this. Pat, can you make a quick motion to approve your language. I think the language is clear 28 29 30 if someone -- if you could make that motion, we'll 31 second it and we'll just take a quick vote so that we 32 can move on through this. 33 34 MR. HOLMES: Madame Chair, I'd like to 35 make a motion that that sentence read the population of 36 Unalaska is over 4,000 people and that there are only a 37 stressed salmon streams with weak returns that are few 38 easily accessible from the limited road system. 39 40 MR ROHRER: I'll second it. 41 42 ACTING CHAIR SKINNER: Okay. Is there 43 further discussion. 44 45 (No comments) 46 Okay. Is there 47 ACTING CHAIR SKINNER: 48 objection to the suggested language. 49 50

0333 1 (No comments) 2 3 ACTING CHAIR SKINNER: Okay. Hearing 4 no objection that passes. 5 6 All right. And then there wasn't any 7 discussion -- oh, sorry. Thank you, Fish and Game. 8 9 (Laughter) 10 11 MR. LAWSON: Thanks, Pat. 12 13 ACTING CHAIR SKINNER: Yeah. There 14 wasn't any discussion on the sentence about appreciating the..... 15 16 17 MR. HOLMES: No. 18 19 ACTING CHAIR SKINNER:or I guess 20 there wasn't disagreement about the sentence expressing 21 appreciation so I'm assuming that that sentence is 22 okay. 23 24 (No comments) 25 26 ACTING CHAIR SKINNER: Okay. Moving on 27 to the King Cove road paragraph, the suggestion was to add a sentence that referenced subsistence harvest and 28 29 how the -- linking the King Cove road to subsistence 30 access. And, Della, do we still have you on. 31 32 MADAME CHAIR TRUMBLE: Yeah, I'm still 33 here. 34 35 ACTING CHAIR SKINNER: Okay. So the 36 concern here that was raised is that if additional uses 37 for that road beyond the emergency medical uses were added in that that could be actually detrimental to 38 39 getting the road because then it'll look like the road 40 is going to be used for more things than just the emergency medical use. 41 When we talked about this 42 yesterday it didn't sound like you thought that that 43 was a concern or that would be a problem and in fact I 44 think you said that from a community standpoint you guys were going to start referencing subsistence access 45 46 anyway in regards to the road. So I just wanted to 47 give you a chance to say does that -- does the language 48 adding a sentence and referencing subsistence, does 49 that concern you, do you think it's going to hurt 50

0334 1 getting the road actually approved or what are your thoughts on this paragraph. 2 3 4 MADAME CHAIR TRUMBLE: Basically I 5 don't necessarily think it needs to be, I'm not sure 6 exactly how to do -- I know that a prior EIS lacked the 7 issue of surrounding subsistence as one of the issues that came up. I think that the point that it will 8 allow access to subsistence areas on King Cove 9 10 Corporation lands within the Cold Bay area are -- I 11 mean, that's fine. It's not going to be of the road system, it will be -- yeah, that's -- I just kind of --12 13 I think -- to be honest with you I think it's fine just 14 the way it is. 15 16 ACTING CHAIR SKINNER: Okay. Thank 17 Okay. So Della has indicated that the you, Della. 18 paragraph seems fine without that addition. Is that 19 okay, can I get nods of heads. 20 21 Pat, go ahead. 22 23 MR. HOLMES: Yeah, that would be fine 24 with me if that's what Della was thinking. I -- my 25 thoughts on doing that was the fact that that -- this 26 comment has nothing to do with subsistence and that's 27 what our Council talks about. And even though I'm 28 emotionally strongly in favor of the road and it's been 29 so abused in the environmental impact statements, so 30 many of my friends are dead because they couldn't get 31 out, but I was just thinking that having a reference to 32 subsistence would tie it into our Council rather than having just a straight emotional or political statement 33 34 which is what it is because that's why it hasn't 35 That's the reason why I suggested that happened. 36 sentence. So whatever Della wants, that's fine. 37 38 ACTING CHAIR SKINNER: All right. 39 Thanks. Any additional comments. 40 41 MADAME CHAIR TRUMBLE: Yeah. 42 43 ACTING CHAIR SKINNER: Go ahead. 44 45 (No comments) 46 47 ACTING CHAIR SKINNER: Oh, okay. 48 49 MADAME CHAIR TRUMBLE: I think -- or 50

0335 1 that's it. 2 3 ACTING CHAIR SKINNER: Yes, go ahead. 4 5 MADAME CHAIR TRUMBLE: I think if you 6 basically before the last sentence basically say it 7 would also residents of King Cove access to subsistence on the Cold Bay side. I mean, there's -- you've got 8 subsistence that you can get from Mortensen's to 9 10 different areas that you have to -- you can drive on 11 the And (indiscernible road to get there. 12 distortion) even including birds. 13 14 ACTING CHAIR SKINNER: Okay. So I'm 15 now seeing nods around the table that people are okay 16 with that. Della is saying she's not concerned that 17 that language will harm the chances of the road getting 18 approved or not. So is there any objection to 19 including a sentence referencing subsistence to 20 paragraph two. Although I guess technically we didn't 21 have a motion, but nod of heads. Okay. So that sentence will be added to paragraph two. 22 23 24 Going to paragraph seven adding a 25 sentence about a recommendation to develop a study team 26 and plan. I didn't hear any objection to that. Is 27 that -- is there any further discussion on adding such 28 a sentence. 29 30 Chris Price. 31 32 MR. PRICE: I was just going to say they should put the Aleut Corp on there, I don't see it 33 on there, but they need to be consulted with. And then 34 35 I would say the City of Adak too, right. 36 37 ACTING CHAIR SKINNER: Okay. 38 39 MR. HOLMES: Madame Chair, would you like me to give you a rough thing that I had laid out 40 41 for that sentence? 42 43 ACTING CHAIR SKINNER: Yep. And let's 44 make sure Lisa's ready to take notes on that. 45 46 MR. HOLMES: Okay. 47 48 MS. HUTCHINSON-SCARBROUGH: Go ahead. 49 50

0336 1 MR. HOLMES: Basically it would add in the sentence up -- at the end of the first paragraph 2 3 that would say our Council wishes to have developed 4 with the Fish and Wildlife Service, ADF&G, Navy RAB, 5 Aleut Corporation, to develop a plan along with the 6 community of Adak to solve the -- solve and maintain 7 the problems with the Lake Andrew outlet. 8 9 ACTING CHAIR SKINNER: All right. Is 10 there any comments or questions on that. 11 12 (No comments) 13 14 ACTING CHAIR SKINNER: Okay. Is there 15 any concern with adding generally that sentence. 16 17 (No comments) 18 19 ACTING CHAIR SKINNER: Okay. I'm not 20 seeing any issues with that. That was the only change 21 I had written down for paragraph 7. 22 23 The next thing was adding a new 24 paragraph 8 and, Della, did you get a chance to develop 25 some proposed language for a paragraph 8. 26 27 MADAME CHAIR TRUMBLE: Thank you, 28 Madame Chair. I think I'm going to throw this out 29 there and I can tweak it every which way, but I -- I'm 30 going to go on the lines of our RAC is thankful that 31 OSM continues to allow us to work with other agencies, 32 whether they're migratory birds, sea otters, State of 33 Alaska, to be able to make decisions regarding 34 resources, especially those resources that have over, I 35 need a word here, that have crossover with regions and 36 ability to try to work together in those times that it 37 does. I think that basically says this for a number of 38 reasons. Number 1, the idea is that we, and I'm going 39 to say we from King Cove, are responsible for the bird population in the AYK. I don't -- there's I think some 40 41 education teaches and that's why I think sharing some 42 of this information with different regions is good so 43 they understandbasically what's happening, that it's --44 that we need to work together, that's one things, but it just -- it's a problem that, you know, there's -- I 45 think there's more than one reason sometimes that 46 47 things are happening and we need to work together to 48 resolve them. But it's just kind of along those lines 49 that whenever, you know, we have issues that cross 50

0337 1 those -- crossover with regions that have an impact on resources that we need to better work together to 2 3 resolve them. 4 5 ACTING CHAIR SKINNER: Okay. Yeah. 6 7 MADAME CHAIR TRUMBLE: I don't know if 8 I made sense, I'm getting tired. 9 10 ACTING CHAIR SKINNER: Yep. Yeah, so 11 the concept there of resources that span across different regions and I -- I mean, we could specify RAC 12 regions or we could just live it regions, a little bit 13 14 more general, but I probably, you know, better understanding what -- it is getting late, I'm -- I 15 don't have the words either, but what is happening with 16 17 those resources because different things are happening 18 in different areas. So in some areas the resource 19 might be going down, in some other areas it might be 20 going up. But this concept that we are able share 21 information and have a better understanding across 22 areas. 23 24 Is there any additional comment or 25 concern with adding a paragraph 8 that captures what 26 Della just described. 27 28 Pat or -- oh, okay. 29 30 (No comments) 31 32 ACTING CHAIR SKINNER: Yep. Okay. I'm 33 not seeing any concern with that. 34 35 Lisa, was that -- is that clear enough 36 and, Della, you're going to send this to Della as Chair 37 to read the letter once you draft it anyway. So she'll 38 be able to take a look at it. 39 40 MS. HUTCHINSON-SCARBROUGH: Yeah, it 41 would be really helpful, Della, if you could write that 42 down and email it to me so and not -- because I'm not 43 -- my computer went dead and I don't write very fast. 44 So just so I can know what your concept is. 45 46 MADAME CHAIR TRUMBLE: Okay. 47 48 MS. HUTCHINSON-SCARBROUGH: So thank 49 you. 50

0338 1 MADAME CHAIR TRUMBLE: Okay. Will do. 2 3 ACTING CHAIR SKINNER: Okay. And then 4 the last thing earlier today there was a suggestion to address in our annual report the -- potentially moving 5 OSM from where it is now to where it was proposed to 6 7 And so I'm going to look at Sam. Sam, you qo. suggested that. Do you -- do you still want this 8 included and if so generally what would you like 9 10 included. 11 12 Thanks. I would like to MR. ROHRER: 13 see if included and I guess for me I have some 14 questions and the number 1 question is what are the 15 deficiencies the move is seeking to address, what's broke that we need to fix, that the Department of 16 17 Interior thinks needs fixed. I'd like to know the 18 answer to that. 19 20 And then I have concerns and I guess my 21 two biggest concerns are seeing OSM run from D.C., 22 that's scary and I think bad. And then I also have 23 concern about the Department of Indian Affairs management background. We all know the Fish and 24 25 Wildlife Service manages wildlife and lands, but 26 what.... 27 28 UNIDENTIFIED VOICE: And fish. 29 30 MR. ROHRER: And fish, yeah, thank you. 31 What management expertise does Department -- does 32 Bureau of Indian Affairs have. I don't know the answer 33 to that, I'd like somebody to be able to explain that 34 to us. So I guess the biggest issues is RACs -- the 35 RACs should be involved in this process and they should 36 be going out for wider public involvement than just the 37 little bit they have. 38 39 So that's kind of my concerns in a 40 nutshell. 41 42 ACTING CHAIR SKINNER: Okay. Thanks. 43 And then my thought, I would -- I would like the letter 44 to express disappointment that the RACs were not notified of at least the listening sessions which my 45 46 understanding is those were -- those were not tribal 47 consultations. I understand why we would not be part 48 of tribal consultations, but I am disappointed that we 49 weren't at least notified so that we could participate 50

0339 1 in the -- in the listening sessions. 2 3 Is there additional comment and/or does 4 anyone have concerns with including this new paragraph 5 9. 6 7 Pat, go ahead. 8 9 MR. HOLMES: I like your verbiage 10 there, disappointed that we were not involved and maybe 11 say involved prior to this being submitted to 12 Washington, D.C. And there might be questions, I looked at section VIII again and there's a definition 13 14 in there that this process is defined for all rural 15 residents. And so there's a potential that will this meet that requirement. 16 And in my mind Fish and 17 Wildlife Service as Sam pointed out is the best agency 18 for subsistence management because of their background 19 with the resources and the -- and the lands. So if we 20 can muckle something out of that, I think that kind of 21 gets obey and just. 22 23 ACTING CHAIR SKINNER: Okay. Are -- is 24 there any concern or objection with having Lisa draft 25 up what was just said into a paragraph and including it 26 in our annual report. 27 28 MR. HOLMES: That would be fine. 29 30 ACTING CHAIR SKINNER: Okay. I am not 31 hearing any concern with that. Okay. So unless 32 there's additional items that people want included at 33 this point we could -- I would take a motion to approve 34 the annual report at -- with the changes that we've 35 discussed. 36 37 MR. ROHRER: I'll make a motion to 38 approve the annual report with the changes we have 39 discussed. 40 41 MR. HOLMES: Second. 42 43 ACTING CHAIR SKINNER: All right. 44 Thank you. Is there further discussion. 45 46 (No comments) 47 48 ACTING CHAIR SKINNER: Okay. Is there 49 any objection. 50

0340 1 (No comments) 2 3 ACTING CHAIR SKINNER: Okay. Hearing 4 none, the annual report with the changes as discussed 5 is approved. And then I just want to confirm, Lisa, that once you have something drafted up you usually 6 7 send it to Della to look over anyway, right? 8 9 HUTCHINSON-SCARBROUGH: Yeah. MS. 10 Correct. And if it's okay with you, Council, I'd 11 probably want to maybe send it to all of you just to review particularly every -- like Pat, I'd like to have 12 13 you review your last item and -- just to so I know I'm 14 on the right page. But if that works. 15 16 Thanks. 17 18 ACTING CHAIR SKINNER: Okay. Yeah, I 19 think that would be appreciated. 20 21 annual report Okay. So our is 22 approved. Going on to our next agenda item, again 23 going backward. We need -- we don't need to, but if we 24 want to take some action on the correspondence policy. 25 So if we would like to make comments or suggest changes 26 this would be the time to do that, but we are -- we are 27 not being asked to approve this, but if we want to make 28 comments this is the time to do it. 29 30 So I will open the floor to does anyone 31 to suggest changes to or not suggest changes, make 32 comments on the draft Council correspondence policy. 33 34 MR. HOLMES: Madame Chair. 35 36 ACTING CHAIR SKINNER: Go ahead, Pat. 37 38 MR. HOLMES: Well, I'd like to 39 compliment the OSM Staff because I think this clarifies 40 things very simply and it's well stated in my mind. 41 42 Thank you. 43 44 ACTING CHAIR SKINNER: Okay. I guess 45 the only thing would be if somebody wanted to make a 46 motion that a line under number 5, a line be added in 47 for the Council Chair to review draft correspondence 48 before it gets transmitted to the Assistant Regional 49 Director. That was something we talked about 50

0341 1 yesterday, but just to capture on the record if somebody wanted to make that motion. 2 3 4 MR. ROHRER: I'll make that motion. 5 6 ACTING CHAIR SKINNER: Okay. Thanks, 7 Sam. Is there a second. 8 9 MR. PRICE: I can second that. 10 11 ACTING CHAIR SKINNER: Okay. Thanks. Is there any discussion on that. 12 13 14 (No comments) 15 16 ACTING CHAIR SKINNER: Okay. Seeing 17 none, is there any objection. 18 19 (No comments) 20 ACTING CHAIR SKINNER: Okay. 21 Seeing 22 and hearing none. So if that comment or suggested 23 change could be transmitted to the appropriate people. 24 And other than that we don't need any other action on 25 this correspondence policy. 26 27 (No comments) 28 29 ACTING CHAIR SKINNER: Okay. So that 30 will conclude the correspondence policy. 31 32 Okay. We are down -- now down to item 15, future meeting dates. First we need to confirm our 33 34 fall, 2023 meeting date and location. There's a note 35 that this is in supplemental Tab 11. And just a 36 reminder that at our last meeting we picked the dates 37 of September 19th and 20th in King Cove. So if that 38 still makes sense to people, we just need to confirm 39 that that makes sense or if we want to change it this 40 would be the time to discuss and come up with new dates 41 and location. So is there any -- I guess is there any 42 concern with leaving it on September 19th and 20th in 43 King Cove. And this is for fall, 2023. 44 45 MR. PRICE: What does Della think. 46 ACTING CHAIR SKINNER: Della, is that 47 48 still okay with -- I mean, does that still make sense 49 from your end? 50

0342 1 MADAME CHAIR TRUMBLE: Yeah, I don't have a problem with it. We may want to suggest a 2 backup though in Cold Bay in the event the weather gets 3 4 bad. I think we've done that before. 5 6 ACTING CHAIR SKINNER: Yeah, I have 7 vague recollection. Lisa. 8 9 MS. HUTCHINSON-SCARBROUGH: Well, Ι 10 just recall from our last meeting we had to move the 11 date to Wednesday, Thursday because of the airline schedule so that we might need to keep that a little 12 bit flexible, but I don't know what Ravn's going to be 13 14 doing in September. Just a thought. 15 16 ACTING CHAIR SKINNER: Okay. Yeah. 17 But I think for now if it's around the 19th and 20th or 18 the 20th and 21st in September in King Cove it sounds 19 like that is still the will of the Council. 20 21 Do you need another motion on that or is nod of heads okay. 22 23 24 MS. HUTCHINSON-SCARBROUGH: Okay. 25 26 ACTING CHAIR SKINNER: Okay. All 27 right. Moving on to selecting preferred winter, 2024 28 meeting dates. I am assuming that Lisa or somebody 29 will have more comments because of the -- apparently 30 we're having an all Council meeting in the winter; is 31 that correct. 32 33 MS. HUTCHINSON-SCARBROUGH: That is 34 correct or at least that is the plan. And so what 35 we're -- we're trying to -- this isn't a definite date, but we're trying to ask every Council what is their 36 37 kind of number 1 availability and then when we kind of narrow it down and get -- we'll let you know later. So 38 39 it may not be the date that we choose, but we'd like to get your first. And the all Council meeting will be 40 41 about five days, right, approximately five days. Ιt 42 could even be on the weekends too if that's something that kind of works with you. So anyway just if we 43 44 could come up with maybe a first choice and second. 45 46 Thank you. 47 48 ACTING CHAIR SKINNER: Okay. So just 49 to clarify the calendar that's under Tab 11 that shows 50

0343 1 the preferred weeks for the different Councils, those are the weeks that those Councils have said this is 2 3 when we would like to have this all Council meeting in 4 Anchorage. Am I interpreting that correct? 5 6 HUTCHINSON-SCARBROUGH: MS. Yes. 7 Correct. The Councils that have met so far and also Nome is not on there, the Seward Peninsula and they 8 9 chose the last week of March was the week that they 10 selected. But again we're going to come down with one 11 week for everybody, but that's the only one that's not 12 on your calendar. 13 14 Thank you. 15 16 ACTING CHAIR SKINNER: Okay. So 17 normally when we're looking at these calendars we're 18 trying to find a week that nobody else has picked, this 19 is the opposite. We -- you know, if we see a week 20 where more people have kind of coalesced around that it 21 would probably be helpful. 22 23 So I'll open it up for suggestions from 24 the Council. 25 26 MR. HOLMES: Madame Chair. 27 28 ACTING CHAIR SKINNER: Go ahead, Pat. 29 30 MR. HOLMES: How about if we just think 31 the middle of the month, you know, March 20th, 21st or either way, just in the middle of the month and that 32 33 would give us some flexibility all the way around. 34 35 And I'd like to make a thought toward a 36 future fall meeting possibly if something is going on 37 with one of the conventions or meetings for the 38 Aleutians and Pribilofs out at Dutch Harbor, I think 39 that would be a very educational thing and it would be really neat to have a fall meeting. And then to have 40 41 Vince give us a tour or Chris and go out and look at 42 those streams, maybe get somebody to run us out to 43 McLee's Lake and so folks can see that if the weather 44 allows and just get a feeling for -- go to Town Beach and just so that we -- folks in the Committee could 45 46 understand how folks in Unalaska feel about their 47 resources and how they obtain them. So I'd like to 48 toss that out for the future. But.... 49 50

0344 1 ACTING CHAIR SKINNER: Okay. Yep. And 2 we're not to the fall meeting yet, we're still on..... 3 4 MR. HOLMES: No. 5 6 ACTING CHAIR SKINNER:next year's 7 winter meeting. Pat has suggested the middle of the month which is March -- it doesn't look like those are 8 around the preferred dates of the other Councils. So, 9 10 I mean, I don't have any at this point any conflicts in 11 the month of March so I'm okay with any set of dates in 12 March. 13 14 Sam. 15 16 MR. ROHRER: The only comment I'd make 17 is that Board of Game's meeting in Fairbanks the 15th 18 -- March 15th through the 22nd so it would be nice to 19 avoid those dates because there will be a lot of folks 20 wanting to be there. 21 22 ACTING CHAIR SKINNER: Okay. That's 23 helpful. 24 25 MR. HOLMES: So what days would you 26 pick then? 27 28 MR. ROHRER: Just -- just early. Well, 29 frankly, that March 4th through the 8th where most of 30 the groups have fit, they have picked probably makes 31 the most sense to me, but.... 32 33 ACTING CHAIR SKINNER: Yeah, I'm -- it 34 makes sense to me to go aim for that first week in 35 March because several other groups have already 36 indicated that they're okay. And again this is the all 37 Council meeting so everyone's going to be at the same 38 meeting in Anchorage. 39 40 MR. PRICE: Iditarod's in the first 41 week of March I believe. 42 43 ACTING CHAIR SKINNER: What was that, 44 Chris. 45 46 MR. PRICE: I think the Iditarod's the 47 first week of March too. 48 49 ACTING CHAIR SKINNER: That would 50

0345 1 explain why everybody wanted that week. Okay. Well, would -- does -- if somebody would like to make 2 а motion for a set of dates and we'll take it from there. 3 4 5 MR. KOSO: Make a motion to go to March 6 5th through March 8th. 7 8 ACTING CHAIR SKINNER: Thank you, Rick. 9 Is there a second. 10 11 MS. CHERNOFF: Second. 12 13 ACTING CHAIR SKINNER: Okay. We have a 14 motion and a second. Is there further discussion on 15 going with the dates of March 5th to March 8th, again this is for the all -- winter meeting, all Council, in 16 17 Anchorage for 2024. 18 19 (No comments) 20 21 ACTING CHAIR SKINNER: Okay. I'm not 22 hearing or seeing any -- anyone with their hand up. Is 23 there any objection. 24 25 (No comments) 26 27 ACTING CHAIR SKINNER: Okay. Hearing 28 none, we can note down that the KRAC would also like 29 that March 5th through March 8th week. 30 31 Now we're moving on to fall, Okay. 32 2024. And Pat just shared some thoughts. Oh, I think 33 what I heard him say is meeting in UnAlaska and I 34 forget if he mentioned a specific time period in there. 35 36 MR. HOLMES: No, I didn't, but often we 37 -- when were we out there last time, it was like second 38 week of September when we came out the last time, 39 Would that give the Council a good idea to see Chris. 40 the different things that are going on out there or --41 I don't know, tentatively why don't we..... 42 43 MR. PRICE: What about the first open 44 week of.... 45 46 ACTING CHAIR SKINNER: Wait. If we can 47 use the mic. Thank you. 48 49 Go ahead, Chris. 50

0346 1 MR. PRICE: The best timeline when the window opens, August 20th through the 23rd is your best 2 3 opportunity for all the excitement of our summer, it's 4 still summertime. So..... 5 6 All right. ACTING CHAIR SKINNER: 7 So.... 8 9 MR. PRICE: Plenty to do. 10 11 ACTING CHAIR SKINNER:right now 12 we're tossing around the idea of Unalaska the week of 13 August 20th. I think in the past I recall there have 14 been concerns with meeting in August so does anyone 15 have comments on August -- the week of August 20th in 16 Unalaska. 17 18 MADAME CHAIR TRUMBLE: This is Della. 19 20 ACTING CHAIR SKINNER: Yep. Go ahead. 21 22 MADAME CHAIR TRUMBLE: We normally do 23 our -- a couple big fundraisers here in August. Ι 24 don't know, but September actually works better for me. 25 I'm not sure what other people's schedule looks like. 26 27 ACTING CHAIR SKINNER: We have.... 28 MR. KOSO: Yeah, Madame Chair, this is 29 30 Rick. 31 32 ACTING CHAIR SKINNER: Go ahead, Rick. 33 34 MR. KOSO: I'm with Della on that's better because August we still have people probably 35 salmon fishing or something. 36 So I would suggest 37 September. 38 39 ACTING CHAIR SKINNER: Okay. Lisa, qo 40 ahead. 41 42 MS. GREDIAGIN: Yeah, Lisa Grediagin 43 for the record. And just a note of caution of the Councils is we've had that window open in August, but 44 45 we may have to shorten that window so if you do do 46 August there's a chance next fall we'll have to ask you 47 to move it just based on our whole regulatory timeline. 48 So OSM's working on that like next week. And maybe 49 not, but I just wanted to put that note of caution out 50

0347 1 there that if you do schedule it for August we might 2 need to ask you to change it anyway. 3 4 ACTING CHAIR SKINNER: Pat, go ahead. 5 6 MR. HOLMES: Perhaps the first week of 7 September then because that's still -- you know, there's still some -- that's when the silvers are 8 starting to show up and, you know, still take a look at 9 10 the streams in the community and what happens there, 11 get more of a feel of summer still at that point. But 12 and then you'll miss -- I don't know, when I was out 13 there usually the third and fourth weeks of September 14 end up getting some darn monsoon come ripping snorting 15 in, but god knows. So let's just maybe consider that first week. 16 17 18 ACTING CHAIR SKINNER: Okay. So we 19 have a suggestion for the week of September 3rd and I 20 think a suggestion for a three day meeting..... 21 22 MR. PRICE: Yeah. 23 24 ACTING CHAIR SKINNER:because we 25 need three days to fully absorb subsistence and..... 26 27 MR. PRICE: Yeah, that sounds good. 28 29 ACTING CHAIR SKINNER:we'll come 30 up with some reasons why we need a three day meeting. 31 32 MS. HUTCHINSON-SCARBROUGH: That's also 33 your fisheries closures review so it's going to be..... 34 35 ACTING CHAIR SKINNER: Oh, and fishery 36 closure reviews which will be very helpful. Okay. So 37 proposal for the first week in September in Unalaska. 38 Is there -- does that make sense to people, the week of 39 September 3rd. 40 41 MADAME CHAIR TRUMBLE: What I'd 42 recommend is if you're using the 3rd for a travel date, 43 most all these communities out here have a silver 44 salmon derby for Labor Day weekend that goes Friday, Saturday, Sunday and Monday. I know if you're using a 45 travel day maybe September 3rd that might be -- that 46 47 might work, but let's just keep -- you might want to 48 keep that in mind. And I don't know what Dutch Harbor 49 does for silver salmon, but I know in King Cove, Cold 50

0348 1 Bay and Sand Point are pretty big on their silver salmon derbies. 2 3 4 ACTING CHAIR SKINNER: Okay. So Ι 5 think what I'm hearing is if we had a three day meeting September 4th, 5th and 6th. Okay. I'm seeing nods or 6 7 at least no one shaking their head around the table. 8 9 Okay. Can I get a motion for those 10 dates for fall of 2024 and location. 11 12 MR. HOLMES: Madame Chair, I'd like to 13 move that we consider having our fall meeting at Dutch 14 Harbor, depending on airline flights, the 4th, 5th and 15 6th of September. 16 17 ACTING CHAIR SKINNER: All right. 18 Thank you. Is there a second. 19 20 MS. CHERNOFF: Second. 21 22 ACTING CHAIR SKINNER: Okay. Is there 23 any.... 24 25 MR. KOSO: Second. 26 27 ACTING CHAIR SKINNER:discussion 28 and part of discussion we might want to also identify a 29 backup so if for some reason Unalaska doesn't work 30 we'll -- we've already identified the backup community. 31 32 MR. HOLMES: Cold Bay or King Cove I 33 quess. 34 35 MR PRICE: Anchorage because we'd be 36 stuck in Anchorage. 37 38 (Laughter) 39 40 ACTING CHAIR SKINNER: Yeah, 41 unfortunately the jokes aren't being caught, but somebody suggested Anchorage because we'll probably be 42 43 stuck in Anchorage on our way to Unalaska. 44 MS. CHERNOFF: Sand Point. 45 46 47 ACTING CHAIR SKINNER: So backup, I've 48 heard King Cove was thrown out, Cold Bay was thrown 49 out, Sand Point was thrown out, Anchorage was thrown 50

0349 1 out. 2 3 MADAME CHAIR TRUMBLE: Cold Bay works 4 for me. 5 6 ACTING CHAIR SKINNER: Okay. All 7 right. Backup then will be Cold Bay. 8 9 MADAME CHAIR TRUMBLE: We could do 10 Anchorage, but maybe -- yeah, I don't know. 11 12 ACTING CHAIR SKINNER: Okay. So backup 13 location is Cold Bay trying for the -- those -- that 14 same week in September of 2024. And is there any 15 objection to September 4th, 5th and 6th and Unalaska is the first choice, Cold Bay is the second choice. 16 17 18 (No comments) 19 20 ACTING CHAIR SKINNER: Okay. Seeing no 21 objection, those are our preferred fall, 2024 meeting 22 dates. 23 24 Okay. We are on closing comments. So 25 I'm going to go around the table and give everyone an 26 I'm going to start down with Chris Price. opportunity. 27 28 MR. PRICE: Through the Chair. 29 Appreciate the meeting this week and being in Kodiak is 30 really exciting and really friendly, friendly town and 31 people here are -- and the weather's been great so I 32 really enjoy Kodiak. And thank you for hosting this 33 very good meeting and the OSM Staff are excellent and 34 they're professionals and they're doing a great job. 35 And the Chair did a great job running the meeting. 36 37 So thank you, guys, I really appreciate 38 it and looking forward to having you guys -- well, 39 seeing you next winter in looks like Anchorage and then 40 hopefully in Unalaska in the fall of 2024. 41 42 ACTING CHAIR SKINNER: All right. 43 Thank you, Chris. 44 45 Sam. 46 47 MR. ROHRER: Yeah, thank you. I just I 48 guess first would say missed getting to see you, Della 49 and Rick, I'll always miss when we're not all in 50

1 person, but glad you're able to join us by phone. all of our presenters for great 2 Thanks to presentations, lots of information, maybe a little bit 3 4 too much information to retain it all in two days, but certainly a lot of good presentation. And, Rebecca, 5 great job running the meeting for us so thank you for 6 7 filling in for Della there. And thank you to the other 8 Council members. 9 10 So thanks. 11 ACTING CHAIR SKINNER: Thanks. 12 13 14 Coral. 15 16 MS. CHERNOFF: Just thank you, 17 everyone, for being here, for coming to Kodiak and 18 having an in-person meeting and thank you for all the 19 people who presented, we got lots of good information. 20 And thank you, Rebecca, for running such a smooth 21 meeting andkeeping uson track and giving usshort breaks. 22 23 (Laughter) 24 25 ACTING CHAIR SKINNER: Pat. 26 27 MR. HOLMES: I quess I'll start with 28 one of my dumb jokes. I think our comments of worrying 29 about shifting OSM, I would probably be less worried if 30 it was Glenn Chen and cousin Oliver that were going to 31 be running the show, but when it gets to Washington, 32 D.C. I'm iffy. And I think our meetings are just so 33 cool because it emphasizes how folks from small towns 34 in rural Alaska can get together and sit down and 35 discuss things and come up with some good solutions to 36 some really sticky problems. And I would like to close 37 by saying, Becky, you have the most wonderful ability 38 of doing four things at once and it seems like through 39 time you just get better. 40 41 Thank you. 42 43 ACTING CHAIR SKINNER: All right. 44 Thank you. 45 46 We'll go to Rick. 47 48 MR. KOSO: Thank you, Madame Chair, and 49 all the Board members and whatnot. Sorry I didn't make 50

0351 it to Kodiak, I miss that, but able to attend here. 1 But I don't know about you guys, but I start shortening 2 3 out after the first day so I'm not sure what happened 4 the second day. But anyway it turned out to be a 5 pretty good meeting and we'll be seeing you guys in the 6 winter I guess it is. 7 8 So thank you again, Rebecca, for 9 running the show and we'll talk to you all later. 10 11 ACTING CHAIR SKINNER: All right. 12 Thanks, Rick. 13 14 Della. 15 16 MADAME CHAIR TRUMBLE: Yeah, thank you, 17 Rebecca. Thank you for Chairing the meeting for me and 18 actually I enjoyed being able to sit back and look 19 through the information in full. That was -- that was 20 nice. I want to thank Lisa for putting this together. 21 There was a tremendous amount of material in this 22 meeting, but it was very valuable. I -- this is 23 probably one of the better meetings that I've attended. 24 And just working with this Council and the ability with 25 the many different areas that we go and we take the 26 time to look at and how important it is to our 27 communities and our region, I mean, you know, I'm 28 really -- I feel really good about continuing to work 29 with everybody here. I will say I'm sorry I missed 30 going to Kodiak, I would have loved to go to Melissa's 31 restaurant and hopefully next time I do make it. 32 33 I want to thank all the migratory, all 34 the bird reports, Tyler, the State, all the Federal 35 agencies, our Refuges and I think the reports are 36 exceptional and I think we've got more to look forward 37 to working on as we move forward. 38 39 And again thank you, Rebecca, 40 appreciate it. 41 42 ACTING CHAIR SKINNER: Thanks, Della. 43 I just want to thank all of the members of the public 44 who attended our meeting and of course all of the Staff who presented and then thank you to the Council members 45 46 for the time that you put into preparing for and 47 attending this meeting. 48 49 And those are my comments. And so I 50

think we're not at the point of adjourning the meeting. So we'll go ahead and adjourn at 5:45. Thank you. MR. HOLMES: One point. Somebody asked about the museums and things to see in town. If you're not leaving tonight and are going to be here tomorrow, leaving in the afternoon or staying until Monday, the Alutiiq Center is right up the street here, that cream colored building down below and, April Actone said they are open from 10:00 to 4:00 on Friday and 10:00 to 4:00 on or 12:00 to 4:00 on Saturday. And the Baranov or the historical museum right across the street, the Russian one, Friday they're open 10:00 to 7:00 and Saturday 10:00 to 4:00, but both places have really a good collection of Kodiak's history. So you might enjoy that. Thanks a lot. (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 02 through contain a full, true and correct Transcript of the KODIAK/ALEUTIANS FEDERAL SUBSISTENCE REGIONAL ADVISORY COUNCIL MEETING, VOLUME II electronically on the 30th day of March 2023; 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 1st day of May 2023. Salena A. Hile Notary Public, State of Alaska My Commission Expires: 09/16/26