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            ALASKA MIGRATORY BIRD CO-MANAGEMENT COUNCIL
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                      SPRING MEETING - ZOOM
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                            VOLUME II
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                         October 6, 2022
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     Members Present:
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     Ryan Scott, Alaska Department of Fish and Game
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     Wendy Loya, U.S. Fish and Wildlife Service
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     Brandon Ahmasuk, Kawerak
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     Cyrus Harris, Maniilaq
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     Gloria Stickwan, Ahtna Intertribal Resource Commission
27
     Priscilla Evans, Chugach Regional Resources Commission
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     Taqulik Hepa, North Slope Region, Barrow
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    Coral Chernoff, Sun'aq Tribe of Kodiak
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     Gayla Hoseth, Bristol Bay Native Association
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     Peter Devine, Aleutian/Pribilof Island Association
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     Randy Mayo, Tanana Chiefs
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     Executive Director, Patty Schwalenberg
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0100 1 PROCEDINGS 2 3 (ZOOM - 10/6/2022)4 5 (On record) 6 7 MR. LACEY: You cannot hold a meeting 8 use these funds, however, if you do want to go out like Gayla was asking about, buying products and supplies, 9 10 you can do that but it's not -- you need to do it this 11 month because we want whatever action you take this 12 month to be within the scope of the agreement. And so 13 if you were to start buying supplies or materials for 14 outreach in November, you know, that's going to be into 15 the next grant period and so we don't want any type of 16 overlap, anything of a audit -- in terms of an audit on 17 the grant. 18 19 MADAME CHAIR HOSETH: I'm going to ask 20 a question right there, Will. 21 22 MR. LACEY: Yes. 23 24 MADAME CHAIR HOSETH: We only have 25 certain -- a certain dollar amount for our supply line 26 items and a lot of the things that we weren't able to 27 do with travel and hold the meetings, would we need to do a grant modification with you to allocate those 28 29 travel funds to go towards supplies? 30 31 MR. LACEY: No. 32 33 MADAME CHAIR HOSETH: Okay. 34 35 MR. LACEY: It's authorized. 36 37 MADAME CHAIR HOSETH: Okay. Can we 38 move any of those remaining funds towards wages and 39 fringe (ph)? 40 41 MR. LACEY: Yes. 42 43 MADAME CHAIR HOSETH: Okay. Okay, so I 44 don't know if any other regions are in the same position of having left over funds and not able to 45 46 spend down due to no meetings, I know that we're 47 sitting on, you know, a lot of remaining funds and just 48 want to be able to spend those down and not return 49 them.

0101 1 MS. HEPA: Gayla, this is Taqulik. 2 3 MADAME CHAIR HOSETH: Go ahead. 4 5 MS. HEPA: I just wanted to make sure, 6 yeah, I was -- I think I misunderstood the extension. I 7 thought that we were able to meet between now and the end of December and finalize everything, including the 8 reports before December 29. So that's not the case 9 10 then, so we can't hold another meeting this fall? 11 12 MR. LACEY: Taqulik, that is correct. 13 You cannot hold a meeting. The purpose of the 14 extension was a.... 15 16 MS. HEPA: Okay. 17 18 MR. LACEY: .....there it's just to 19 allow for this meeting, that should have been held in 20 September according to the original award. So because 21 it couldn't be held in September, we had to extend the 22 grants to allow for the meeting. That was the main 23 purpose of the extension. If you look at the scope of 24 work, it says that these -- that the meetings that 25 you're proposing to hold should have been held prior to 26 the statewide, so, therefore, if you're holding a 27 meeting after the statewide it's not within the terms 28 of the current grant. Hopefully you understand -- I'm 29 clear in what I'm saying right there. 30 31 UNIDENTIFIED VOICE: But, now, Will, 32 did you not say yesterday that they could hold meetings 33 in the fall but they would be covered on the new grant; 34 is that correct, or am I getting..... 35 36 MR. LACEY: Oh, I didn't mention that 37 yesterday. But, yes, you can -- any meetings that you 38 hold will be -- can be charged to the grants which I'll 39 be talking about on the next slide. So if you're 40 having a meeting, it's part of the new agreement that 41 we hope to award by 1 November. 42 43 MADAME CHAIR HOSETH: Thank you. Go 44 ahead, Patty, sorry, your hand is up. 45 46 MS. SCHWALENBERG: Through the Chair, 47 sorry. So I just want to understand this correctly, 48 Will. So for this meeting, this is going to not be

included in the narrative report, the final narrative

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0102 1 report, it will go into the next grant agreements 2 because the.... 3 4 MR. LACEY: Sorry for the confusion 5 Patty. 6 7 MS. SCHWALENBERG: Yeah. Because I'm 8 also confused about the financial report. Do we or do 9 we not include expenses after October 1, like this 10 meeting? 11 12 MR. LACEY: Okay. The report that's 13 due 29 December is an interim report, and the period of 14 performance is 1 October '21 to 30 September 2022. So 15 you need to report all financial information and 16 whatever your performance was during that period of 17 performance, and that's what you report on 29 December 18 2022. And then on 29 April, or before 29 April, you're 19 going to do your final report and that's going to 20 include everything. It's the final report. So you 21 will have whatever expenses that you used to hold this meeting, any activity you've done through the remainder 22 23 of the agreement which was 30 December 2022 because 24 that's what it was extended to. 25 26 Did that answer your question, Patty? 27 28 29 mute, sorry. Thanks, that clears it up. 30 31 32

MS. SCHWALENBERG: Oh, yeah, I was on

MR. LACEY: Okay. Does anybody else have any questions. I think I made that more confusing than it should be.

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MS. HOSETH: It helped clarify and we could always ask questions if you wanted to continue. I just wanted to ask about -- I know on some of our other grants that we have is that we would have to get -you know, what funds are we moving to different line items over 10 percent. So with this one we don't need to do that or do we?

MR. LACEY: So if you're going to move between budget line items, if it's within the scope of work it's okay. If you are trying to move money into a budget line item that wasn't previously approved then you'd have to come to us and we'd have to -- you know, you do a grant note, we'd have to approve that budget reallocation. But budget -- budget submissions are

estimates and it isn't totally expected, you know, to be accurate to the penny, it's just here's our budget narrative, this is what we expect to pay and that's what's on the award when we award it. But the 2 CFR 200 explains what conditions would require a budget, an actual revision to the budget and just moving between them isn't enough to warrant a formal amendment, or even a notification. It's when it's not within scope that drives that requirement.

MS. HOSETH: Okay, thank you. And then you're available to help us if we have any individual questions on our grants?

MR. LACEY: Yes.

MS. HOSETH: Okay, thank you, Will.

MS. HEPA: Can I ask one question?

MR. LACEY: Yes.

MS. HOSETH: Go ahead, Taqulik.

MS. HEPA: Thank you. So we are planning on having a -- because we were not able to get to meet in September, we were planning on having our next regional management meeting the last week of November, first week of December and without an agreement in place, how do we reference that? Do we do like a -- I'm not sure, because it's in between funding, right?

MR. LACEY: So the award, when it's awarded, is going to state from 1 October to 30 September, even though we haven't awarded the grant yet and the reason why it will have a 1 October date is because we posted the announcement and you apply to the grant before 1 October, and so any cost that you incur, if you were to incur a cost before you actually had the grant in hand, it's still chargeable to the grant. But unfortunately, you know, it's a reimbursement, because we haven't awarded it yet. So it'll be reimbursed back to you, you can pull down the funds once it's awarded.

MS. HEPA: Okay. We'll probably call you soon just to help walk us through this. Thank you.

MR. LACEY: Okay.

0104 1 MS. HOSETH: Yeah, I think that would 2 be best. Thank you. 3 4 MR. LACEY: I just tried to change 5 slides on my presentation and my final slide isn't 6 showing. I am going to have a brief disconnection so 7 there'll be a brief interruption. Hold on, please, 8 while I try to bring up that slide. 9 10 (Pause) 11 12 MR. HARRIS: Harold, any time you got 13 any questions for Will, feel free. I know you guys do 14 some pretty inside work, and I do the outside work of 15 migratory birds, so I wish Neva was there with the 16 finance department. 17 18 19 20

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HAROLD: Thanks, Cyrus. I'm kind of just watching and paying attention here and I guess whenever you and I meet tomorrow I'll get a better idea of what you need to include for the budget for the next cycle.

MR. HARRIS: Okay, thank you. So we'll get Will's contact information before tomorrow.

MR. LACEY: Do you all see my screen?

MS. HOSETH: Yes.

MR. HARRIS: Gotcha.

MR. LACEY: All right. So next I want to talk about the new grant. The new grant is a -again, it'll be a five year agreement running from 1 October through 30 September 2027. Applications are currently under review. When we talk about under review, what that means is I'm going to look at your applications and see if you -- if they contain all the mandatory requirements which were attached to the notice of funding opportunity. We also will be looking over the budget and if there's any concern with the budget we will be reaching out to each region to talk about it. Each line item on your budget submission will be reviewed by our ARD, and, again, if there's any need to reach back to you we will do so.

I am waiting for applications from AVCP and Kawerak. I've been in communication with both

0105 1 Jennifer and Brandon. They're aware of the dates that 2 it's due by 31 October. 3 4 Just as a reminder to both you, 5 Jennifer and Brandon, please route your packages to us 6 prior to inputting them into Grant Solutions, that way 7 we can go ahead and do that review process in advance 8 and when you submit it it'll be one and done. 9 10 The estimated award date -- I'm sorry, 11 I said 1 November, but the estimated award date is 1 12 December. So what our plan, is this, we want to make 13 sure that we get with each region and finalize their 14 budgets by 15 November, and then that will give me a 15 chance to do our part on the Fish and Wildlife Service 16 side, to get the awards, the grants awarded by 1 17 December. 18 19 Is there any questions about that 20 process? 21 22 (No comments) 23 24 MR. LACEY: Thank you. 25 26 MS. STICKWAN: Did AITRC turn in their 27 budget? 28 29 MR. LACEY: I'm sorry, can you repeat 30 the question? 31 32 MS. STICKWAN: Did AITRC turn in their 33 report? 34 35 MR. LACEY: Well, we're talking about 36 the new agreement that you all already applied for and 37 we'll be looking at those budget narratives that were attached and if we have any questions or if we need to, 38 39 you know, negotiate -- I don't know if that's the right word, but if we need to have a conversation about the 40 41 budget it would be done by our -- by Wendy one on one 42 and then when you come to that final number, I will 43 need a new document. So I will return the grant solution submission, I will return it back to the 44 45 organization so that you can attach any revised budget 46 narratives and resubmit. 47 48 Hopefully I'm answering your question,

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Gloria.

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MS. STICKWAN: I just heard you say AVCP and Kawarek hasn't turned in their applications, I was wondering about AITRC.

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MR. LACEY: Yeah, everybody else has submitted their applications.

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MS. STICKWAN: Thank you.

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MR. LACEY: So this year we did a separate agreement, AMBCC executive director agreement. Patty mentioned that earlier. The reason why it was separated out is because it's two different functions. That's why we had to make the change. The AMBCC grant is for the purpose of holding the AMBCC meetings. executive director was a totally separate function and should never have been combined. So we had to separate it out just to make it correct in terms of proper granting. So we separated it out, it's awarded to CRRC, and we are hoping to have that awarded by 1 November 2022. And like Patty mentioned earlier, it was a three year award.

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And that is the last item I have.

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As always, if anybody has further questions they are invited to contact me directly, I prefer it as a matter of fact, just working through one on one because every situation is different in little ways and it's a learning process for me when we do that.

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So, again, finally, if there's any questions that I might be able to answer.

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## (No comments)

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MADAME CHAIR HOSETH: Does anybody have -- I think that if we have like specific questions within each region we could give you a call. I did have a question, though, if we were able to extend our current grants right now until October, how come we couldn't just get a no cost extension on those funds going into this next year because we've been holding on to this money for a couple years due to Covid?

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MR. LACEY: It was a five year agreement. That extension was -- we had to justify the extension and because the meeting was supposed to be

0107 1 held and was part of the original terms of the agreement, but couldn't because a quorum couldn't be met in September, that was justification for the extension. Okay, so there has to be a reason to extend 5 it, otherwise it's a five year agreement, it's going to 6 close and we had to, you know, do a new five year 7 agreement going forward. 8 9 MADAME CHAIR HOSETH: Okay. Go ahead, 10 Taqulik. 11 12 MS. HEPA: I just want to make sure. 13 didn't look through all the materials that Patty sent 14 but were these, your slides, included in the packet. 15 just want to print -- if you could please provide them so I could make sure I follow the instructions 16 17 correctly and the timelines. Thank you. 18 19 MS. SCHWALENBERG: I didn't send that 20 information out because there was about three 21 presentations we received that did not make the packet 22 so I'll send all those out. 23 24

MS. HEPA: Perfect, thank you, Patty.

MR. LACEY: Thank you, Patty.

MADAME CHAIR HOSETH: Go ahead,

Jennifer.

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MS. HOOPER: Hi, good morning. I have, I guess kind of a general funding question and I'm not sure if we're going to have any more discussion on the agenda. I guess I want to think about and look at our funding situation correctly. In preparing these new grant applications, I guess I want to assume that the expectation is that budget requests are going to be, you know, almost cut in half, because of this new virtual meeting scenario that we're in. Is that -- is that kind of a general accepted assumption moving forward with our current funding situation?

MS. LOYA: I might jump in here on this one, Will, is that -- so thanks for that question Jennifer. Yeah, we are -- I would anticipate that in past meetings Eric Taylor has conveyed that the Fish and Wildlife Service has had a declining budget overall, including the funding that we use to support AMBCC and I think I can say, with confidence, that the

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Director of the Fish and Wildlife Service supports comanagement, our Regional Director, Sara Boario supports co-management, I am here as the Assistant Regional Director supporting co-management, but unfortunately that doesn't necessarily change our budgets, but we are working to do that. And so I do think that we are looking to work with you. I wish I knew this better, there's a budget committee and we'll work together to be transparent and open about what's going on, we'll be working in the region to identify how to best fund this and our other co-management efforts, and -- but I do think that at this time moving towards one in person and one virtual statewide meeting was the goal in order to be able to save some money but also, in some ways to be inclusive of people that were not able to travel. And so there are pros and cons and we can certainly continue to discuss that as a group on how to move forward. But that is the intent right now is to have in-person and virtual meetings, split in half.

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MADAME CHAIR HOSETH: Go ahead, Taqulik, I see you raising your hand. You're on mute.

MS. HEPA: Sorry about that. And thank you for that Wendy. Just for people to think about, is that -- so we missed the opportunity because the price quotes for our travel were really high during the month we wanted to go so we decided to postpone it thinking we were going to use those monies with the extension and that's not the case. But in using the money this fall is going to limit our ability to get together and talk about these very important issues because, you know, we have things that we need to communicate about this co-management organization and the things that we're obligated to with the regulations, the closures, so on and so forth, so it's a little bit confusing right now. But as we move forward with this back up of funds and the reduction of meetings is think about the operational effectiveness of this co-management organization because there is an obligation to bring us together to make sure that we're moving forward and doing the work that is needed to meet the requirements of why we are a co-management organization.

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I just wanted to throw that out there because now I'm just a little bit of confused about the timing and are we going to have enough funds to do what we need to do.

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MS. LOYA: Yeah, let's make a time to talk with you and Will and I. Will is here to keep us out of jail, which is great, he keeps us doing the right things at the right timelines. Again, if we need to revise a particular region's proposal, I don't know if this can even happen, Will, but if Taqulik had anticipated using expiring five year agreement funds and that's not available, we will bring those back to the Fish and Wildlife Service or perhaps those funds could be included or modified in a future year. So there is the chance to meet this fall if you need to, we just need to figure out how to include that in the next agreement. And, again, while it may not come out quite before you meet, that money will be there to pay those costs, either after they come in or soon after they come in. So I think we can make it work.

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MADAME CHAIR HOSETH: We need to have a budget committee. We need to call a budget committee probably as soon as possible, those of us who serve on the committee -- Patty, if you have that list of who serves on the budget committee because there's some real concerns. I mean we're operating at very minimal costs as much as we are operating right now and then to be asked to reduce our funding even more, the price of air travel out here is very expensive, food is very expensive, everything -- our costs are going up for transportation. And for us to have very little bit money coming from U.S. Fish and Wildlife for us to operate AMBCC, to now reduce us by how much  $\operatorname{--}$  I asked for more than -- for more than what was said on the grant award based on the information that, you know, for us to have these meetings and if we go to one virtual and one in-person. You know the information that we gather from the people that serve on the Councils of our regional councils are traditional knowledge bearers and they're traditional -- they need to be -- one thing that I was wanting to do -- and I think that we talked about this before, is adding in stipends for our Council members as they serve on these committees, the information that they share is not free. And a lot of the stuff that we share, you know, helps U.S. Fish and Wildlife Service. So when we have that budget committee, information that isn't really shared to us regionally, is how much money is coming in to U.S. Fish and Wildlife for the AMBCC Program or for the Migratory Bird Program, how is that then disbursed out to all of regional organizations to have these meetings and to do the work that we're doing. But for

us to apply for very minimal funds is very hard and, you know, Will's doing a really great job helping us through the grant process and, you know, as we're going through this turnover with you sitting now for U.S. Fish and Wildlife Service, these are really big issues that we're facing. And if you don't really come out here and see how we live and how hard it is to travel and to get around, it is really hard.

MS. LOYA: And I completely understand and agree. And I think Patty -- thanks, Patty, for pulling up the budget committee. I think that's a great place to start but I also do hope that with the spring gathering that we can dig in as a team and figure out how to do this. The Federal government right now is under a continuing resolution through December so we won't know our budgets until maybe December, but it often gets further kicked down the road and, you know, you'll see -- we lost our AMBCC Coordinator position, you know, Eric's leaving. not sure how we'll refill that position. So we have lost a lot of Staff that support AMBCC and we do need to figure out how to help from the Service and we also need to work with you guys to make sure you're meeting but we're also being strategic together to do it right but also use our money -- our limited funds to the best that we can.

I don't know if this will mean anything to everyone. We have to find the money to do this but we aren't given a line item that says money specifically for AMBCC in our budget, and so it comes out of more general funds to the -- to one of the programs in the region. And so we really need to figure out how to fine-tune that so it isn't -- this program isn't taking a hit. So there's a good conversation to be had with our leadership team and that's coming up. So you have my commitment to keep working on it and our leadership, it's just we're not the ones at the end of the day that pass the budget so we'll work together.

MADAME CHAIR HOSETH: Yeah, I like to hear that, you know, that we are going to work together as a co-management and the budget is really an important issue for everybody within U.S. Fish and Wildlife Service, ADF&G and Native Caucus. There's some -- I would say that we should probably have a budget meeting and looking at the people who are on the

 list of the committee, maybe we can meet within maybe next week if that's not too short of notice. We could poll everybody and see if we could meet next week to kind of go over some of these things because we have some big concerns, and now that we're not going to get our award letter until December people are trying to have their fall meetings and kind of like what we talked about in our regional reports.

And, you know, if we have any funding issues there's a lot of us that, you know, are tribal leaders and have connections to different organizations and different Federal agencies that we do work with directly that we could bring those concerns, so we could talk about that in the budget committee.

This is really frustrating on our end. I'm sure it's frustrating on your end. But if you're able to run your program with \$20,000 you're not going to get very far.

 $\label{eq:common_problem} \mbox{Anybody have any more questions or comments for Will.}$ 

UNIDENTIFIED VOICE: Thank you, Gayla. You said it very well. Thanks for being there as our Chair person. I had something, Will. You know I know that we're going through budget cuts, was it due to overspending or is it the funds were there and just get reappropriated elsewhere. I mean evidently the over spending didn't really come from the 12 regions but from somewhere else inside. So these are just questions running through my mind, and I'm not too sure if I'm on the right page or where we could make those corrections.

MS. LOYA: Well, I might jump in and just provide a very general answer to that. In that, when your budget is held flat over time and inflation goes up, so the cost of people, the cost of space, the cost of travel, the cost of everything goes up, any money you have that doesn't go towards, yeah, fixed costs, starts to disappear and that's a little bit where the Fish and Wildlife Service is at. And so we're hopeful we'll be getting some funding increases that are strategic but sometimes those take a few years to be realized because of the way the budgeting process works. They're already contemplating -- apologize for the background noise -- they're already contemplating

0112 1 the FY24 budget so it's difficult to know ahead. So I 2 appreciate your patience, I appreciate your questions. I'm happy to explain it and I share your frustration 4 and I know that it's our job to help figure out halfway 5 through it with you. 6 7 MADAME CHAIR HOSETH: Okay. And then 8 also just to let everybody know that our budget 9 committee is open to all the AMBCC members. So if you 10 want, we could send that to everybody, and if you're 11 not on that committee, you're welcome to join us. 12 13 MS. SCHWALENBERG: Madame Chair. 14 15 MADAME CHAIR HOSETH: Yes, go ahead, 16 Patty. 17 18 MS. SCHWALENBERG: You know I just also 19 wanted to really thank the Fish and Wildlife Service 20 for allowing Will to engage and stay engaged with the 21 AMBCC. I know the Native Caucus have been asking for 22 years to have someone from contracts and grants speak 23 to the Council and that never happened, and since 24 Will's been on he's been to every meeting. He's always 25 Johnny on the Spot when you email him and, so, Will, we 26 really appreciate you and very thankful that you're so 27 engaged with the regions and the AMBCC. 28 29 (In Native) 30 31 MADAME CHAIR HOSETH: Yes, thank you, 32 Will, and thank you Patty for recognizing Will. He's 33 been very helpful. Especially with the new grant 34 solutions that we have to work with now. 35 36 MR. LACEY: Thank you, very much. 37 38 MADAME CHAIR HOSETH: Well, if that 39 covered -- does anybody else have anything else to talk 40 about on budgets. 41 42 (No comments) 43 44 MADAME CHAIR HOSETH: Okay, hearing 45 none, we could just jump back on our agenda and go to 46 new business, the aerial waterfowl survey results. 47 Julian. 48

MR. FISCHER: Good morning everyone.

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Good morning, Madame Chair. Members of the Council.

MADAME CHAIR HOSETH: Good morning.

MR. FISCHER: Visitors. Guests. Give me one moment while I pull up this presentation and share it on my screen. And I'm going to actually turn off my video because I'm having some connectivity issues and you might be able to hear my voice better if I just turn this off so please standby.

(Pause)

MR. FISCHER: Okay, and if someone could just let me know if you can see that first slide.

MADAME CHAIR HOSETH: We could see it.

MR. FISCHER: Thank you. Okay, good morning again. My name is Julian Fischer. I live in Anchorage here where I work for the Fish and Wildlife Service, Migratory Bird Program. And our program's charged with with monitoring the health of Alaska's migratory bird populations.

So within the Waterfowl Program we conduct aerial and ground-based surveys and our purpose really here is to track distributions, abundance of birds and to detect if bird numbers are changing over time. And the reason we do this work is to provide information to subsistence hunters, migratory bird comanagement participants and others. And all of you are going to be making decisions that support subsistence harvest in the future so that's one of the large reasons why we are here collecting information.

Okay, so our program is comprised of a number of individuals shown here on the slide, the top row, are the waterfowl section folks who have a diverse set of skills including operating aircraft and aerial survey expertise, mapping distributions of birds, project planning, logistics, and coordination. We also work with other personnel in other portions of the Migratory Bird Program. You'll see Tamara Zeller there in the middle, she's our Outreach Coordinator but she also serves as an aerial observer on several projects. And we're further supported by the Quantitative Ecology Section shown down at the bottom there. Tammy Patterson manages our data. Chuck Frost, who's also on

the call today is involved with the AMBCC quite a bit, he generates the abundance estimates from the data we collect. And Eric Gosness oversees the statistical analysis for the division as a whole. So everyone you see on the screen has an active role on the AMBCC or a support role. Not shown on this slide are additional folks in Migratory Birds who specialize in other bird groups such as land birds, shorebirds, raptors and seabirds as Robb Kaler will be presenting other information later on, he's in the seabird section.

But in this presentation I'll just be focusing on the waterfowl surveys that we conducted in 2022.

Okay. So our work spans most of the annual cycle, starting in February where we conduct the Alaska portion of the Pacific Flyway winter brant survey. By spring we conduct the aerial breeding population surveys of migratory birds major production areas around the state. In mid- and late summer we conduct several goose and duck banding projects and then in the fall we have a final aerial survey at the Izembek Lagoon at a time when virtually all Pacific brant stage there during the month of October. Many of these surveys are cooperative with other partners, some of whom are on the call today, that are either within other divisions of Fish and Wildlife Service or other offices out of agencies and some mare in other parts of the country. So I'm going to go through each of the surveys and some brief results of each. I want to point out that the results are also available on an annual report that's published by our headquarters office and that report can be reached at that website above. I would share it in the packet but it's hundreds of pages long so I provided the website.

Okay, so the first survey I'll describe is the winter brant survey so Pacific brant, they breed in Northwestern Russia, the high Arctic of Canada and Alaska and within Alaska brant colonies are found on the North Slope and the Yukon Delta. And there's probably some small colonies or lone pairs scattered along the Western coast line outside of these major areas. But by and large, within Alaska, most of the brant are breeding are on the North Slope or the Yukon Delta. In fall all of these birds migrate south to the Alaska Peninsula and then many continue on outside of the state going down as far as Baja Mexico. And come

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January brant are pretty much in place at all their wintering sites and it's at that point that a combination of partners from Alaska to Mexico together conduct a winter brant survey and our office conducts the portion of that survey that occurs in Alaska at the Izembek Lagoon. So the result of the coordinated survey, the count across all those wintering sites is compared against thresholds that were defined originally in the Yukon Delta Goose Management Plan in the 1980s and now were then adopted in Pacific Flyway Management Plans, and states use that plan to determine whether harvest restrictions should be put in place during fall and winter in order to maintain stable populations for the long-term.

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So looking at some results from that survey, the figure in the bottom left shows the counts of Pacific wintering brant across all survey areas from 1981 to this just past winter. During that timeframe counts have varied between 100,000 to 200,000 brant with not a clear long-term positive or negative trend. Current three year average is roughly 150,000 brant, which is just 11,000 shy of the population objective. While there's no clear trend during the long-term, there is a clear increasing trend in the number of brant overwintering in alaska. So the figure on the bottom right shows the total counts from 1981 to 2022 and these bars are divided into the portion of brant that are in Alaska versus elsewhere in mid-winter. so as you can see through time the bars showing dark have increased, this is the number of birds that are overwintering in Alaska. So this winter we had an all time high, it's just been increasing year after year, we had 67,000 brant, which was comprising over 40 percent of all Pacific brant in the continent in wintertime. So with the Lagoon generally no longer freezing over, brant have access to eelgrass throughout the winter and so more of them are remaining in Alaska and that strategy can be really successful for them because the geese are not subjected to that grueling energetic cost of flying all the way to Mexico. But remaining in Alaska does come with some risk. For example, if you had a long cold snap, it could freeze over the lagoon, it could force brant out of that lagoon into less productive habitats. Another risk we're thinking about, too, is that eelgrass could eventually become overgrazed if the goose numbers continue to increase and feed throughout winter months. Luckily USGS has established a monitoring program for

eelgrass and that allows for periodic assessments of the health of eelgrass habitat.

All right, I've got a lot to cover so I'm going to move on to first of the breeding pair surveys.

So come spring one of the earliest arriving geese is the Dusty Canada goose, and dusties are a unique sub-species of Canada goose and they breed exclusively in Southcentral Alaska with the principal breeding ground on the Copper River Delta. Sub-species is relatively small population size and so it's actually closed to hunting in Oregon and Washington. Dusties are not closed to harvest in Alaska but the fall/winter hunting season is time to reduce take of dusties. For monitoring our office conducts an aerial survey in mid-May on the Copper River Delta and the State of Alaska, ADF&G conducts a ground-based assessment on Middleton Island, just off the coast of the Copper River Delta. And that combined count serves as a management index that's used int he Pacific Flyway to make decisions about fall and winter. And in this map on the bottom right you can see the transect lines that we fly in May.

 Okay. So this figure shows the results from the survey that we started in 1985 and the results are shown up to the present. Population monitoring surveys indicate a general decline in the populations through 2009 which is followed by increases, there's stable counts since then. The current three year average is about 15,000. It's 'twice the limit that would trigger restrictive regulations in fall and winter.

 Now, I'm going to move on to the waterfowl breeding population and habitat survey. It's a mouthful. This survey's been going on since the 1950s, it's conducted throughout North America. It spans all the major production areas across the continent including Alaska with the exception of the North Slope. That survey was established originally to measure abundance of ducks as well as the abundance of spring pond habitat. So duck populations are highly variable from year to year. That variability comes from many factors ranging from the prior years nesting success, overwinter survival, how many birds were hunted that particular year, habitat conditions, many

more factors. So the Bpop, I'll just call it the Bpop survey here, breeding population survey, it's useful in detecting long-term trends and it's less useful in year to year comparisons. But those single year comparisons — or single year counts, if they're combined with other factors including annual survival estimates which are calculated from leg banding projects, and harvest estimates that Bpop survey can be used to set bag limits and dates for fall and winter hunting.

So our office conducts the portion of that Continental survey that occurs in Alaska and looking at some results from that, what I've shown here in this slide and in the next slide, I have two graphs for each of these species, the counts are from 1955 to 2022. The top graph shows the total count across the entire Continental North America here for mallards, widgeon, greenmintteal. The dotted line, I'm not sure you'll be able to see that on the screen here, this is a North American population objective. The bottom graph shows just the counts from within the State of Alaska. So on a continental scale the estimates of these three species are at or near the population objective. Within Alaska the estimates from 2022 were a t or above the long-term mean, yet the counts are not as high as they were about 10 or 15 years ago. So most of the ducks that breed in Alaska winter in Pacific Flyway states and drought conditions there have been pretty severe for several years now. This may have contributed to the lower numbers of these ducks returning to Alaska. State surveys, surveys that are conducted in the states during summer on the Pacific Flyway also have indicated that duck populations there have declined in recent years.

Okay, I'm going to just show a couple more species from this survey, these three duck species, the Northern shoveler, Northern pintail and scaup trends in Alaska and the rest of the continent are a little bit more in synch. One species, though, I want to highlight, this is one of particular concern on a continental scale is the Northern pintail here in the middle. The counts of pintail have been below objective for four decades now in the continent and so allowable harvest has been restricted in the fall and winter generally at one or two bird bag limits in the Lower 48 states. And on a continental scale the count this year was the lowest on record and it's actually approaching a point where hunting closures could be

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considered if the counts continued to drop. Within Alaska, however, numbers of pintail during the last two years are very close to the long-term average and they were actually up from the prior six years. Pintail is a very interesting species. So one reason why we might be seeing a few more pintail here in most recent years is because we've had drought conditions in the Canadian Prairies over the last couple years. So how could drought elsewhere actually benefit pintail. While I'm not suggesting that droughts actually benefit any waterfowl but in the case of pintail it's been shown that in years of low water in Prairie Canada pintails would actually generally nest there but in drought conditions they overfly that region and just continue north and west until they reach more productive nest and habitat. So drought in Canada doesn't really benefit pintail per se here but instead it just forces them to search out alternative nesting areas. So waterfowl are pretty adaptable in that way.

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Estimates of scaup, they're also below the North American objective. The estimate of scaup in Alaska was the highest in roughly 10 years though it's still below the state's long-term average.

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Okay, I'm going to step away from ducks for a minute. We use the breeding population survey, the Bpop survey also now to monitor trumpeter swans. century ago trumpeter swans across North America were in serious trouble, actually even more than 100 years ago trumpeters had actually disappeared from the state of Minnesota and by the 1930s only a few dozen remained in the Lower 48 states. Swans here in alaska had remained -- had a strong foothold, although their numbers had declined, but eggs from their nests from several sites in Alaska were actually used to reintroduce trumpeters to the state of Minnesota and with great success. Trumpeters are very strong there now. But in the '60s we started doing a once every five year survey and numbers continued to rise, distribution of trumpeter swans expanded and by 2020 we decided we could no longer justify a very expensive statewide survey of trumpeters. The conservation concerns had been reduced. Our costs were going up and our budget was flat or declining. And so we now use the breeding population and habitat survey, the Bpop survey to monitor the population size of trumpeters. The 2022 count was the highest in the history of the survey and this is really encouraging for the health of

0119 1 trumpeter swans in Alaska. 2 3 Okay, moving..... 4 5 MADAME CHAIR HOSETH: Julian, could I 6 just ask, what is the total population of the swans? 7 8 MR. FISCHER: Good question, Gayla, 9 thank you for that. Are you asking about the total 10 population size of swans in North America or in Alaska? 11 12 MADAME CHAIR HOSETH: Well, in Alaska 13 to kind of go with the reports that we heard out during 14 the regional council reports of possibly increasing the 15 fall harvest. 16 17 MR. FISCHER: Okay. So in Alaska the 18 last statewide survey, full statewide survey, I want to 19 say the count was about 25,000. I'd have to pull that 20 up and I'm going to make a note and send the most 21 recent statewide survey report to you and just a sec. 22 That was the last time we did a full statewide survey. 23 The -- let me just go back to this one here. So the 24 count this year, it was less than 20,000, however, this 25 is not a full statewide survey. This is just sampling 26 within major production areas. There are swans that 27 have expanded outside of these areas that are actually 28 sampled. So this is what we call an index. This is 29 sampling a proportion, a consistent proportion of the 30 state every year. So what we're looking for here more 31 is the trend, rather than a total abundance estimate. 32 But I do have an abundance estimate from 2015 and I'll 33 send that to you. 34 35 MADAME CHAIR HOSETH: Thank you. 36 you could send it to the whole Council so that we could 37 have that as we work forward to write a proposal. 38 39 MR. FISCHER: I'll do that, yes. 40 41 MADAME CHAIR HOSETH: Brandon has a 42 question, go ahead, Brandon. 43 44 MR. AHMASUK: Yeah, thank you, Madame Chair. So the swan comments I had yesterday, I believe 45 46 that was for tundra swans, not trumpeter swans. But 47 the -- either way it's good to know both population

estimates, population for Alaska.

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 $\mbox{{\it MADAME}}$  CHAIR HOSETH: Okay, thanks for that clarification Brandon.

MR. FISCHER: Yeah, and, Brandon, I'll be bringing up tundra swans shortly.

Okay. The coastal zone survey, this is the Yukon Delta. So this survey was designed back in the 1980s and it was set up during the recovery period of white-fronted and cackling geese after the Yukon Delta Goose Management Plan was first written in 1984 and revised annually. So population thresholds defined in that plan are compared against the results of this survey. Those thresholds in that plan were then modified into the Pacific Flyway Management Plans of those species and is still used today. And then in 2016, the AMBCC advocated for a shift in monitoring emperor geese from our former spring staging survey to using the results from this coastal zone survey. So now those three species all are monitored for management purposes with this Costal Zone Survey.

In addition, tundra swan populations are monitored through this survey and then combined with the North American Bpop survey to come up with a -- or I should say, portions of the Bpop survey along Western Alaska to come up with the statewide index of tundra swans.

And then, finally, with the listing of spectacled eiders under the Endangered Species Act back in 1993 this survey was also adopted as the principal measure of recovery of the Western population of spectacled eiders. We typically do this in the last week of May, or into the first week of June, this depends on the timing of breakup, timing of initiation of nesting activity. This is information that we gathered from biologists in the field but also subsistence hunters on the Yukon Delta through coordination with the Refuge and the AVCP. It takes about a week to complete and it ranges from the mouth of the Kuskokwim to the mouth of the Yukon and roughly 30 miles inland.

Okay. So Pacific white-fronted geese. This population increased rapidly in the mid-1980s and that was boosted by a combination of harvest restrictions in the Lower 48 states at first and then increased food availability for these geese and

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agriculture in winter, particularly from rice farms. The population really increased very quickly and a lot. And so over the last 10 years or so the population appears to have leveled off but it's still well above the population objective of 300,000. The current three year estimate is about 558,000.

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Then we've got our cackling Okav. geese. Minimacackling geese, a sub-species of cackling goose. They had a very similar trend to white-fronts with rapid growth following the harvest restrictions in the 1980s and by the '90s down in the wintering area, cacklers made a really significant shift in their distribution whereas they had previously wintered in California they shifted north to the Willamette Valley of Oregon primarily and they were attracted by new agricultural practices there. And the increase in cacklers and that agriculture industry began getting conflict, damage to crops were becoming an issue but in 2016 the Flyway Management Plan was revised and there was a lot of negotiation about whether the objectives should be reduced. But with input from members of the AMBCC, particularly, AVCP, the plan retained that population objective of 250,000 that was originally established in the Yukon Delta Goose Management Plan. But it also set limits to keep the population within about 10 percent of that objective. So -- and you can see these lines here indicate where the objective is and where action would be taken to keep the population within a certain range. So bag limits for fall and winter hunting are increased when the population is above 275,000 cacklers and decreased when it drops below 225,000. The current three year average count is just below 217,000 so State agency managers have reduced bag limits in Oregon and Washington within areas where cacklers are concentrated and Alaska implemented a four bag daily bag limit for cacklers in fall and winter. And these more conservative harvest limits have been effective in the past to increase overall population sizes so we expect this will lead to cacklers rising again in the next couple years.

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Okay. Emperor geese. So Dave touched on a lot of this yesterday so I'm not going to go into too much depth here but I'm happy to answer any questions. They're far less numerous than white-fronts and cacklers but emperors also increased in abundance starting in the mid-1980s and this growth continued with some dips and surges through 2017 when the harvest

was reopened after 30 years of closure. The counts dropped in four years after the hunt opened, the '22 count was close to the average of the most recent decade. In fact the estimated population index of 28,864 was above the upper threshold defined by the AMBCC Management Plan. And so while not required under the management plan, the AMBCC voted to retain the current harvest closure for emperor geese and that was after deferring to the Yukon Delta's region's request to do so. Yukon Delta region is really the primary nesting ground of emperors. As Dave mentioned also yesterday the State of Alaska plans no change to the 500 bird quota to the fall winter registration hunt.

Okay. Now, we're going to move to tundra swans. This is the Western population of tundra swans. There's actually two populations of tundra swans. There's an Eastern population that nests on the North Slope. These birds winter to the East Coast of the U.S., the mid-Atlantic. And then there's 'the Western population, these birds breed in Alaska from Kotzebue Sound to the Seward Peninsula and Yukon Delta and Bristol Bay and in winter these birds migrate to the Coastal states within the Pacific Flyway and some venture further inland along the Pacific Flyway. it's the Western population that's shown in this graph and these counts are a combination of the Yukon Delta Coastal Zone survey and then portions of the North American Bpop survey. So tundra swans are above their population objective of 60,000 which is shown in the dotted line here. There's no positive or negative trend over this time period. The current three year average is 107,000 swans. I think that's all I've got on that slide.

Now, spectacled eiders, this is a really interesting story. The last species that I'm going to describe related to this particular survey is the spectacled eider and they were listed as a threatened species in 1993 after their numbers dropped significantly over a number of decades. There's other populations of spectacled eiders as well, one on the North Slope of alaska and then another breeding population in Arctic Russia. But this survey on the Yukon Delta is used to monitor the Western population of this species. So the data here generally are positive for spectacled eiders where estimates have increased over the last three decades. There have been three counts starting in 2015 where extremely low

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1 numbers were reported, two of these were in the last two years. So in both 2021 and 2022 biologists on the 2 Yukon Delta conducted ground-based studies as well on 4 other species and these were long-term studies that 5 folks had been involved with for a number of years and 6 they indicated that the presence of nesting eiders and 7 attending males was very low. So those were corroborated with these aerial estimates that we came 8 9 up with. And an explanation for the low counts, one is 10 that, well, the population declined precipitously. 11 Another explanation is just that these birds did not 12 come to the breeding grounds during those years, or 13 came at very low numbers or they arrived and they 14 quickly departed to sea. Causes of that could be that 15 they had poor energy reserves as a result of really 16 challenging winter conditions. Spectacled eiders 17 winter in the openings in the pack ice in the Bering 18 Sea, but ice conditions have become less table. 19 They've been highly variable from year to year, they've 20 been less predictable. So we are planning a winter 21 survey this March and we hope to generate a revised 22 world population estimate and to map the current 23 distribution of eider use of the Bering Sea during 24 winter. So we hope to find out more about that. 25 Looking further at the situation with breeding birds on 26 the Yukon Delta this past summer, we really want to 27 understand what's going on with nesting here and so we 28 implemented a new methodology for counting nests of 29 spectacled eiders in their core breeding area. We used 30 a system called distance sampling and it involves 31 walking to find transect lines within plots that are 32 distributed across the breeding habitat. There's a lot 33 of data entry that has gone on and there's data 34 checking that's still occurring. I don't have results 35 from this effort yet but I will in the spring meeting 36 and I'll share that at that time.

So after the Yukon Delta our air crew heads to the North Slope where we conduct the final breeding pair survey of the season. Similar to other breeding surveys the air crew conducts these flights across a set of established transect lines. We have four sets of transect lines and the crew alternates between the four sets each year. The survey is a multi-species survey but I'm just going to touch on a couple of these species in the interest of time.

First I want to display our results for lesser snow goose. So snow geese are a colony nesting

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species. They don't -- they're not spread widely across the landscape so when birds are clustered in colonies transect surveys are not the best way to monitor the populations. Our estimates in snow geese are really imprecise because most transects do not pass over those small but concentrated snow goose mountains. For that reason you see long error bars around the estimates. Nonetheless counts of snow geese are rising and they've really increased since the start of the survey design which was designed in 2007. And while our survey was not designed for such species like snow geese, the North Slope Borough with ABR, Inc., has conducted colony surveys that were designed specifically to project growth in species such as snow geese, and they recently published a paper summarizing their results which showed substantial increases in the numbers of adults and goslings along the Western portion of the North Slope. USGS has also been working in the Colville River Delta and during their time up there has witnessed some amazing growth of the snow goose populations.

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So we're generally glad to see when populations increase but we do become concerned about over abundant geese. Snow geese in other parts of North America particularly the Central Arctic of Canada have increased dramatically in recent decades and that has resulted in damage to habitat. The photo at the bottom left shows the effect of over grazing by snow geese in Canada. And what that photo is showing is a plot where a fence was erected to prevent grazing by geese. And what it shows is outside of that fence the sedge habitat was significantly transformed by grubbing of foraging snow geese while the sedge habitat remained intact within in the fence. So USGS is keenly aware of the concerns related to the over abundant goose issue and has recently published papers regarding snow geese on the North Slope and has studies ongoing to help us understand the current state and the predicted future states of geese on the North Slope. They have shown that the growth rates of brant and snow goose goslings are high. Goslings are healthy but growing at high rats and they have remained high despite the size of the growing snow goose populations. That's an important observation so there's no -- doesn't appear to be any impacts on goslings at this point. It also examined changes in the nutritional content of foraged plants with the warming climate and they predict that food sources will remain abundant and nutritious for

geese at least in the short-term. So food is not limiting for snow geese or brant and so there is potential for these populations to continue to grow.

In Progress is a publication by USGS that indicates that to-date nesting success of brant has not been negatively affected by the growing snow goose population on the Colville River Delta. So damage to the tundra, it has not been documented yet, but we are highly supportive of studies that would help determine whether management actions are needed to reverse the growth of snow goose colonies and growth within those colonies.

Okay. So....

 $$\operatorname{\textsc{MADAME}}$$  CHAIR HOSETH: Before we move on Brandon has a question.

MS. SCHWALENBERG: And there's a question in the chat as well.

MR. FISCHER: I can't see the chat so if someone could read the question or....

MADAME CHAIR HOSETH: Okay, we'll go to Brandon and then we'll go to the chat after Brandon.

MR. AHMASUK: Yeah, hi. Thank you, Madame Chair. On the spectacled eider population, sorry, we're going backwards a little bit. I am -- so I mean there was -- Julian, I believe you mentioned the population declined a little bit. I am a little bit concerned with -- in particular with this year's fall storm that hit Western Alaska, you know, jeez, Bristol Bay up to -- all the way up to North Slope. I am worried about nesting areas being destroyed or, you know, heavily impacted. Is there, I guess, is there going to be any kind of study for nesting site health?

 MR. FISCHER: Thank you for the question, Brandon. And thank you for your concern, I share your concern, I think many folks in — that study and watch these birds are concerned about this as well as all the species that nest on the Coastal areas. I think the storm is a wake up call, I think we've had a number of wake up calls recently. Spectacled eiders are a very Coastal oriented species, especially on the Yukon Delta, less so on the North Slope but also

generally close to the Coast. There are annual studies conducted by the Yukon Delta Refuge. There's also studies on the -- in brant colonies both on the North Slope and on the Yukon Delta. We had that experimental distance sampling study last year, which was not really looking at habitat per se, but just densities overall. We don't have a budget for that yet but I believe that the work on the Yukon Delta, by the Yukon Delta Refuge is an annual work plan so I hope to see that going forward. We don't have budgets or work plans in place yet to -- for me to directly answer precisely what we're going to be doing next year.

But, yes, Brandon, we're concerned about the health of those Coastal breeding birds especially after storms like Typhoon Merbok.

MADAME CHAIR HOSETH: Go ahead, Karen.

MS. PLETNIKOFF: What -- is it going to be just one more year of, you know, 1,500 birds or less than 2,000 birds before we do some sort of management action or what -- can you tell us what the next steps will be to protect this population?

MR. FISCHER: Yeah, thanks, Karen. -- I think I mentioned a couple minutes ago, this winter we are planning a winter survey of the world population of spectacled eiders. The way this is accomplished is by marking a subset of spectacled eiders with transmitters, which was accomplished by a number of partners from the Yukon Delta and the North Slope and then those birds head to the middle of the Bering Sea. By mid-winter they settle into their wintering areas and from the distribution of those birds we can design a survey around that area and so we should be coming up with a total population estimate from that work. That will be compared with prior estimates of the same type of survey. Last time in completion, about 10 years ago, and then we'll have a better understanding of whether the estimates that you're looking at on the screen right now reflect just the breeding population, the birds that were present at the breeding grounds or if there was a, you know, a wholesale decline in the population. One thing that is notable about this figure is you see that estimate in 2015 was a major departure from the overall trend. The subsequent year we were right back up on track with the rest of the main counts. So it appears that in that

year, it was an aberration, the birds were not present or if there was something else going on that led to that low count, and we're hopeful that that is the case in these last two years and that the birds will be back on the breeding grounds. Ultimately if they stop breeding, the population, of course, will crash.

So we'll learn a lot more this March when we're actually out with the birds over the entire World population where all of them congregate.

Okay, I'm going to -- are there other questions or should I kick back in here.

MADAME CHAIR HOSETH: There was questions, Lili asked a question about with the fencing area on the snow geese, what is the red thing out of the enclosure?

MR. FISCHER: Oh, okay, sorry, I should have explained that more. That's a different vegetation type that is -- I think it's salecornia(ph), it's a different type of vegetation that's not useful for geese. They've pretty much eaten themselves out of house and home there. But the other aspect of the overgrazing in that picture is that it affects other species as well. There were documented declines in useful habitat for songbirds in the areas that snow geese had passed through in Central Canada. So they were having widespread impacts on not just goose habitat but also songbirds.

MADAME CHAIR HOSETH: Okay, I think we captured everything in the chat.

MR. FISCHER: Okay. So I'm going to continue on here with white-fronts from the North Slope survey. So earlier I had talked about Pacific Greater Fronted geese on the Yukon Delta. On the North Slope we have an entirely different population of white-fronted geese. The white-fronted geese on the North Slope, they actually spend their winter in the Central and Mississippi Flyway states. They don't mix with the Pacific population at all. So the bulk of them end up wintering in the Gulf of Mexico region heading further south down into the highlands of Mexico. So on the North Slope estimates have generally raised between 150 to 250,000 since the survey was redesigned in 2007 with the exception of a few high counts about five years

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ago. There's no apparent trends in these estimates within that timeframe. In the -- on the right side, I'm showing an estimation method or the results of a different type of estimation method called Lincoln Peterson estimation and what this is, is it relies on banding geese and then recovering those birds from hunter harvested or found dead birds and combining that with some other information to come up with a total population size. Now, this is for the entire continent, this is not for the North Slope specifically. And so those estimates of the mid-continent population of white-fronted geese throughout North America are now in the range of about 2 million birds. So we contribute to that banding effort in Interior Alaska, where also mid-continent greater white-fronted geese occur and then USGS also bands geese on the North Slope for the same purpose and then we also work with the Canadian Wildlife Service who does their part by banning this population in their major breeding areas in Canada.

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Okay, brant on the North Slope. So far less numerous than snow geese, brant are also colony nesting species. And our estimates are less precise for other species because of that. So detecting a positive or negative trend over the short period is difficult. A complicating factor is that our monitoring of breeding brant is that many Yukon Delta geese migrate to the North Slope in June if the breeding conditions are poor down in the sub-Arctic. So these geese are not alternating their breeding sites like pintail can sometimes do if the conditions are poor in other locations but, instead, brant will come to the North Slope in mid-summer if they are either too young to breed or if they were in poor body condition and did not breed, or if they initiated a nest and it failed so a portion of those birds come to the North Slope. And so the timing that they arrive on North Slope is variable. So when we conduct our survey up there we may be actually counting a combination of North Slope breeding birds and Yukon Delta breeding birds. Nonetheless there are indications that numbers of brant are increasing on the North Slope in some colonies. Also in molting goose survey that we conduct in the Teshekpuk Lake area shows that numbers of goslings have increased through time, at least in that one portion of the North Slope.

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 $\ensuremath{\text{I}}$  am going to jump over to tundra swans. This is now the Eastern population of tundra

swans. These are the birds that breed on the North Slope and then migrate south to the mid-Atlantic states and they join the Canadian breeding tundra swans there. So our aerial estimates of swans appear stable with no change detected. The population index in 2022 was 12,000 swans within our survey area on the North Slope.

Okay, I'm going to check in with two species of eiders on the North Slope. So king eiders, they're a very important species for subsistence The graph on the left shows the numbers of the king eiders on the breeding grounds of Alaska from 2007 through 2018. The numbers were generally between 15 and 20,000, whereas the most recent two years of counts were in the range of about 10,000. The cause of that change is just not known. North Slope hunters are likely harvesting some king eiders that breed on the North Slope but it's likely that the majority of the harvested birds come from the breeding grounds further east in Canada where king eiders are more numerous. I'm unaware of any annual or periodic monitoring of the Canadian breeding king eiders so I -- I don't know what is -- what's going on with the breeding populations there and if that's affecting the hunting in the North Slope. So I'm interested to hear from North Slope hunters about their hunting success, and, particular, whether hunting success was good or bad for king eiders over the last couple years.

On the right side here we've got spectacled eiders showing from 2007 to present. These eiders are part of the Northern Alaska population. And similar to the pattern we saw with the Western birds on Yukon Delta, the count in 2022 was low. In fact it was the lowest since the survey was designed in 2007, and the cause is not known. But as I mentioned before it's reason for concern and we're looking forward to seeing what's going on on the wintering grounds this upcoming winter. Again, it could be that these birds were just in poor shape and were not — did not have the resources to breed and so they didn't show up to breed on the North Slope in high numbers as they have in the past.

Okay, last species group I'll touch on for the North Slope are the three species of loons that occur there. Council, these three species are highly variable. Both yellow-billed loons and red-throated loons migrate to Eastern Asia in winter and may be

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subjected to contaminants on the wintering grounds. That's one concern we have for the North Slope breeding of yellow-billed loons. In Alaska loons are generally not a focus for subsistence harvest, in general. But loons can be caught in fishing nets of subsistence fishers on the North Slope. Concern about loons prompted a new survey effort this year that our office participated in by providing an aerial observer. Analysis is being led by USGS with partners with the Refuge system. It was a helicopter based survey using a plot design which is much better suited for loons. I don't have any results to show at this time. Those are —— as I understand they're being worked on now and they'll be reported when fully reviewed and there is a plan to repeat that survey in 2023.

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Okay. The next survey that our office is involved with is happening right now. You may have seen Heather Wilson and Tamara Zeller present on the meeting yesterday morning and I think may be tuned in right now as well, I'm not sure. But we're here back at the Izembek Lagoon where we started this presentation. Now that fall migration's underway Pacific brant from Russia, Canada and Alaska have all funneled down through the Bering Sea and are arriving at Izembek Lagoon based on abundant eelgrass beds there. And they'll be there through October and likely many into November before departing and then, of course, a very large proportion of them will remain over the entire winter. But this month of October is really the primetime to measure the size of the entire Pacific population before they depart. So for decades, Refuge Staff and our office have conducted low level surveys of grant at the lagoon during that fall staging period similar to what has been done in winter. What's different, however, is that in fall the flocks are very large and mixed with other species of geese, like cackling geese, emperor geese and a number of species of ducks, so the counts are difficult. Replicate surveys are done in fall to try to reduce the variation in those annual estimates but they're still sources of bias that can't be ruled out. And so to improve the estimate of the population size and to increase safety of the air crews and reduce disturbance of feeding geese we initiated a photographic survey of Izembek Lagoon. It's conducted at 1,500 feet. This work has been completed and is continuing in close partnership with USGS who led the survey design and the analysis portion, while our office conducted the survey flights

and the data collection. We use a program called Aviatrics, it creates a flight plan over standardized transects and the program automatically triggers two high definition cameras when the aircraft passes over predetermined points, essentially taking a photograph every few seconds. It takes about three hours to complete the survey and it requires a pilot and a photo technician onboard. The imagery is high quality and it allows a trained observer to identify species and count geese within each photograph. The image on the left is, at first glance, it just appears like a grey image but then you can see white dots in it, but when a portion of that photograph is expanded you can clearly see birds and distinguish cackling geese from brant, here's a group of four brant and a single cackling goose. So because that camera is tripping every couple seconds a single survey yields about 10,000 photos which can be an overwhelming workload to sort through after a survey. However, we implemented a machine learning process by essentially training a computer to identify which photos contain geese versus those that did not, thereby reducing the workload by almost 90 percent. Ultimately if we had an automated counting system it would be ideal, but in the interim we're able to successfully reduce the manual counting birds to just those photographs that contain birds.

Most importantly, however, the preliminary analysis of this work indicates that the typical low level surveys of large flocks during this migration period are generally under estimating the population size. So the results of this work were written up by a USGS researcher, Emily Weiser, along with other USGS and Fish and Wildlife Service coauthors. It's currently being reviewed for publication.

So our air crew is down in there in position right now and will be collecting an updated estimate of the population over the next two weeks as weather allows.

And I'll conclude there.

You know Alaska's really large. Those millions of birds, hundreds of species, and here I just summarize the population counts for just a small subset, the waterfowl and just a few key production areas and staging areas. If you have interest in

0132 1 information that I didn't describe about specific areas or species, please let me know. If our office does not 2 have that information, I'll do my best to track it down for you, it may not exist, but, you know, if there's 5 interest in information that we are currently not 6 collecting there's always the potential to write 7 proposals, work with partners, et cetera. 8 9 So, anyway, I'll stop but I'm happy to 10 take any questions. Thanks very much, Madame Chair. 11 12 MADAME CHAIR HOSETH: Thank you, 13 Julian. Does anybody have any questions or comments on 14 Julian's report. 15 16 MR. DEVINE: Yes, Madame Chair, it's 17 Peter. 18 19 MADAME CHAIR HOSETH: Go ahead, Peter. 20 21 MR. DEVINE: Yeah, Julian. Last spring 22 I was commenting on the frequency of the storms that 23 are coming through and I was wondering if you could 24 have a comparison picture for our spring meeting, you 25 know, to show if there's any loss on the Barrier 26 Islands and Izembek. Just make note of that and have 27 that available, if possible. 29

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MR. FISCHER: Yes, sir. I made a note of that question and concern that you had at the spring meeting and at that time we had photos from our fall survey for 2021 and after this upcoming survey we'll have the same for 2022. I'm very interested in the same thing there. And, so, yeah, I'd be happy, it'll be very interesting to look at some comparisons. And with that photo survey that'll allow us to actually document potential changes of that type. So, yeah, I will, again, make a note of it and bring those up in at our next meeting.

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Thanks.

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MADAME CHAIR HOSETH: Thank you. And, Patty, if you could also make a note of that so we could keep track of that.

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MS. SCHWALENBERG: Yep. And I've just had a request for a short break.

MADAME CHAIR HOSETH: Okay. Do we want to finish Julian -- I was going to take a break right after Julian's presentation. Karen has a question.

MS. PLETNIKOFF: I'd just like to ask that we plan to have presentations about species that we're currently not able to access or have conservation plans on them. Just as a general practice, we'd like to understand the most endangered species that are part of this discussion. Both of those eiders are of interest to us, inherently of interest to us, and have significant problems. And their problems could be the same kind of problems that might be coming for other species, whether that's habitat or food sources. So we would be benefitted by understanding what the specific risks that are impeding recovery on. So we can plan to have a presentation on an annual basis of those species in recovery.

MR. FISCHER: That's a great idea, Karen. We have an endangered species program within the Fish and Wildlife Service. I'll contact the endangered species coordinator and request that such a presentation can be provided at the spring meeting.

 $$\operatorname{MS.\ PLETNIKOFF:}\ $\operatorname{Thanks}\ $\operatorname{so}\ $\operatorname{much},\ $\operatorname{that}\ $\operatorname{sounds}\ \operatorname{perfect}.$ 

MADAME CHAIR HOSETH: Thank you for bringing that up Karen. And we'll also make note on that. Does anybody else have any questions for Julian.

(No comments)

MADAME CHAIR HOSETH: Thank you, Julian. We're going to take a little break, you guys want to do 10 minutes, would that work, come back at -- in 10 minutes-ish. Thank you.

(Off record)

(On record)

 $$\operatorname{\textsc{MADAME}}$$  CHAIR HOSETH: Okay, everyone. We were able to get a quick snack.

 $$\operatorname{MR.}$  SCOTT: Well, Wendy, it looks like you're official.

0134 1 MADAME CHAIR HOSETH: Thanks for that 2 letter. 3 MS. LOYA: Yeah, thanks for your 4 5 patience in the process and excited to be here. 6 7 MADAME CHAIR HOSETH: Nice, thank you, we're happy to have you. And then Julian will be your 8 9 alternate when you need to step away. 10 11 MS. LOYA: Correct. And that might 12 happen here at the end of this meeting, so I'll drop it 13 in the chat if I need to leave. 14 15 MADAME CHAIR HOSETH: Okay. Just so 16 everybody knows, Wendy, we've received her letter of 17 appointment for U.S. Fish and Wildlife Service and in 18 that letter her alternate is Julian Fischer. 19 20 Okay, so we'll go to John Pearce with 21 USGS. 22 23 MR. PEARCE: Thank you, Chair. Thank 24 you everyone for the invite to come and present today 25 and provide some updates to USGS activities. So let me 26 share my screen here. Can everyone see that okay? 27 28 MADAME CHAIR HOSETH: Yes. 29 30 MR. PEARCE: Is it the full 31 presentation or does it look like multiple screens? 32 33 MADAME CHAIR HOSETH: It says USGS 34 Alaska Science Center on it. 35 36 MR. PEARCE: Okay, great. So, yeah, so 37 thanks very much again. I just wanted to brief 38 everyone on a few activities that we've been up to this 39 past year and I was here in the spring and gave a similar update so some of the things that I'll say 40 41 today -- I'll repeat some of that information but just 42 wanted to make you aware of these. 43 44 And I like to start talks, just to kind 45 of give everyone a reminder about what USGS is and what 46 we do. I think sometimes there's some confusion about 47 different Federal agencies. So just to remind everyone 48 that USGS is a non-regulatory science agency in the 49 Department of the Interior, so we don't manage lands,

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we don't manage resources, we are strictly a science agency and we really strive to provide science information to partners, especially those in Department of Interior. So as you heard in Julian's presentation we do have a lot of requests from Fish and Wildlife Service to help with analysis and surveys and fieldwork on important topics that Fish and Wildlife Service is tracking or is interested in. And then we also hear from you all in meetings like this and other meetings about important topics that people are interested in and so we try to develop science around those questions to address things that we think are going to come up in the future. And I really try to do as best a job as I can in sharing information out to everybody -- everyone about what we're learning and so I do regularly come to this meeting. I go to the WCC in Bethel when I can. Go to North Slope Borough meetings to let people know what we're doing on the North Slope. But we're always trying to do better at outreach and letting people know what we're doing both before projects start and once they're finished. So if you would like to get more information from our office or from other USGS offices, please, just let me know and provide some emails and I can send regular updates. We do a weekly highlights email and I can cut and paste specific highlights on studies that I think you'd be interested in and send those directly to you because it's mostly for Headquarters office but I like to send those to partners in Alaska so they know what we're up to.

So as far as moving through this document, I mentioned this in the spring meeting but the spring and the fall of this year, USGS has been airing a PSA, a public service announcement, on public radio stations about bird bands. And this started -this kind of idea started a few years ago when we were working with an ANSEP student from the Bethel area and he said that hunters are really curious about bands but they're not really sure what to do with them, and if they're legal to have and he thought it would be great to have better outreach by USGS about what bird bands are and why we use them. So we visited some different communities on the Yukon Delta in collaboration with Brian Daniels and the Yukon Delta Refuge and Jacob and I visited with AVCP in Bethel about some different ideas for outreach materials about bands, and then we also used this PSA that aired this spring and it's airing again this fall and then it won't go next year, I think we'll just do it this year. But once, you

know, we released that PSA, and then people then submit bands that they might harvest and those -- if they're banded under our permit and I get an email summary that a hunter has reported one of our bands to USGS and then I followup with a map that's shown on the screen there that shows the hunter where the bird was initially banded and then where they recovered it and I send information about why we banded this bird, what the study is about that this bird was banded as part of -and we get some really good responses back from people. This spring we had some great emails from people about the spring conditions and what they were seeing in migratory birds and thoughts about the highly pathogenic Avian influenza. We also had some emails from people that appreciated the information because they learned new things about birds that they didn't know. For example, one person who shot a brant on the Yukon Delta said he was not aware that they molted on the North Slope of Alaska which is where the band was originally put out. So it's been a great way to have conversations with hunters for those that do respond and so we'll continue to do that into the future.

And then I just wanted to share a list of recently completed work that involves USGS Staff in '21 and '22.

The first one is a comparison of indices to infer population dynamics of black brant. So this was a review paper basically did some analysis to look into all the different surveys that Julian showed in his presentation for Pacific black brant and try to understand so which ones are providing different kinds of information and are there few that are really best tracking population processes in this species. So this is just one step in a long series of conversations that we've had over the past few years and I'm sure that we'll continue into the future about how best to monitor brants through different types of surveys and applies to other species as well.

 Another paper used telemetry data to find that there's really strong evidence that black scoters in North America are two disjunct populations. So there's a population in the West Coast that breeds in Alaska and Western Alaska and then also a population that breeds in Northeastern Canada and to the West of Hudson Bay and there's a lot of evidence that those two populations don't intermix. Not only in telemetry data

but also genetics data that was part of a separate study. So that's just a paper on the telemetry data.

We also published a paper on prioritizing habitats based largely on abundance and distribution of waterfowl in the National Petroleum Reserve and this was a study that was requested by BLM. And it really just provides analytical framework for BLM to use. The Arctic Coastal Plains survey data that Julian presented to help them determine sort of where the best habitats are for Arctic nesting and molting geese as the BLM contemplates oil and gas development and lease sales and other stipulations up in the National Petroleum Reserve.

We were part of a publication this spring called Highly Pathogenetic avian influenza is emerging disease threat to wild birds in North America and oddly enough this paper was published right before the outbreak started in North America so this had been -- came about because of observations of increasing high pathogenic Avian flu in Europe and Asia and concerns that this might spread into North America. So it's a review article. So if you're interested in Avian flu, this goes into all the different details about how it spreads and what the most likely species are and other processes involving the virus. And then it also talks about how best to be informed and prepared and take action as appropriate around highly pathogenic flu. So that came out right before the current outbreak.

And then there were two papers that USGS Staff were involved in. And Karen VanHemert's on the phone and can answer specific questions about these papers that deal with paralytic -- or with harmful algae bloom toxins, if there's questions on those. The first was titled Paralytic Shellfish Toxins Associated with Arctic Tern Mortalities in Alaska and dealt with an Arctic Tern Mortality event in 2019 at two colonies in Southeastern Alaska. The second one is a broader review paper about harmful algae blooms in the Alaskan Arctic and it really does a great job of reviewing how algae blooms form, how they circulate and kind of like what the downstream effects might be and sort of where this might be going in the future of the Arctic. And so it's a real good thorough review of the issue.

And then lastly I just want to mention

that we've released a lot of historic data just recently on our webpages so we're in the process of archiving old data that were collected by our Staff back when we were part of U.S. Fish and Wildlife Service and making these available to the public so there's some older data from the Yakutat area from a study that was conducted there in 1980 just to understand more about migratory birds of the region. Also some long-term studies that were done in the National Petroleum Reserve around Teshekpuk Lake beginning in 1974 so all this data is now available at that website. And then lastly we had a major update on all the eelgrass assessments that we've been doing over the years and so we've created a new web page where all these reports and data are now available.

This took about two years to get done. These reports were largely unpublished to the Fish and Wildlife Service reporting on status of these studies that were done in the mid-2000s and so we've now made them all publicly available as well as the data and as Julian mentioned, we continue to do eelgrass assessments and Julian and I are actually meeting next week to talk more about this and how we're going to do this into the future. There is a standardized sampling protocol for Izembek Lagoon that's being published by U.S. Fish and Wildlife Service and USGS and so we're going to get together next week and just talk about how to get started on that standardized protocol and move forward. But we continue to sort of see how important eelgrass is and want to provide those assessments because of their importance to the habitat especially for black brant at Izembek Lagoon. So this map just shows all the different places where we've conducted assessments in the past and then the website is there up at the top.

and then lastly I just want to talk about field work that was completed in 2022. We had planned to start the first one, a status of spectacled eiders on the Kashunuk River on the Yukon Delta, we had planned to start that a few years ago but due to Covid we cancelled that two years in a row so this year we were finally able to get out there and conduct that field work. And that's just to assess sort of density changes of spectacled eiders nesting over time and we also collected blood samples from nesting female eiders to check for lead levels and to see if those had dropped over time as was predicted by a former USGS

study many years ago. So that's in the works as far as analysis go this winter. We've also been doing a lot of status assessments of seabirds and other birds in the Lower Cook Inlet and Kachemak Bay area through regular surveys and checking on seabird colonies. A lot of that work is also associated with ongoing studies of harmful algagotoxins, testing samples working with partners such as Robb Kaler and many of you on this phone call. We also are in the middle of a study understanding the status of loons on the North Slope, mostly red-throat and Pacific. There have been some recent declines in red-throats and we were concerned about it and wanted to find out more so that's an ongoing study that BOEM, Bureau of Ocean Energy Management, has funded us to do.

And Julian mentioned that we're working on snow geese on the North Slope, so, yeah, we continue to work on the Colville Delta looking at just the population dynamics of snow geese and brant, but also working with white-fronted geese and Pacific cackling geese as well. And then we have a number of studies to try to evaluate potential impacts of snow geese to habitat and other species on the Colville. And as Julian said thus far we don't have any evidence that is taking place but we've been doing some of those studies since 2018 and we'll continue those into the future.

And then we're also working in the Teshekpuk Lake area to evaluate possible impacts of helicopter disturbance to molting geese in the Teshekpuk Lake area so that's something that BLM requested us to do and now has been started last year and will continue again this year. And then as Julian said we're working on a study with Fish and Wildlife Service to use photo imagery to estimate numbers of black brant so that's ongoing but the initial paper is, I think, in final review at a journal so that should be available soon.

And then we're also putting transmitters on black brant at Izembek Lagoon. The Bureau of Ocean Energy Management asked us if we could assist with a study to understand the potential sort of intersection of black brant migrating down to the Coast of California and potential off shore wind development in Northern California in an area that BOEM is considering leasing, so there's no development there yet but if it happens, sort of what's the potential for

black brant to be in an area where there would be off shore wind energy development. So that data will help us answer that question for BOEM.

So that's my update. I know Caroline has to leave at 11:20 so if there's questions about harmful algae blooms she's here to help with those questions. But I just want to say thanks, again, and that your ideas are always welcome to USGS. You know we really want to work collaboratively with folks and we'd love to hear ideas in places where we are working, or in ways that we can help with other questions, so, yeah, just keep us posted. So thanks very much.

MADAME CHAIR HOSETH: Thank you, John, for your presentation. Does anybody have any questions.

(No comments)

MADAME CHAIR HOSETH: I have a question, John, for working with the Native Caucus and with the regional reports and doing a statewide eelgrass, I seen that with the areas that you guys have done eelgrass studies, is there a way that we could expand to different regions around Alaska, is there any kind of funding that we could possibly together on?

MR. PEARCE: Yeah, I was really curious about Brandon's questions yesterday and it would be nice to hear more information about that and find out who's involved there and how we can have a conversation about that.

MADAME CHAIR HOSETH: Is that something that we would want to do as a Native Caucus form maybe an eelgrass, like a working committee to learn more about it in the cities that have been going and see where we could add that across the state, maybe partnering with USGS.

MR. AHMASUK: Madame Chair.

MADAME CHAIR HOSETH: Go ahead,

45 Brandon.

MR. AHMASUK: So yes I did bring up the eelgrass, you know, for the Safety Sound Bonanza Channel area. But I'm wondering if at this -- in this

arena, I guess, maybe broadening it a little bit more, to more like a -- I don't know, maybe like an ecosystem type committee. I mean I don't want to just rule out -- or I mean have a particular group just for eelgrass, you know, when there's so many different areas that need to be studied as well. I mean, yes, eelgrass is very, very important. The -- anyway, just a suggestion, you know, maybe more of a broader area that would -- at least for the purposes of this Council, an eco-system type committee.

So the USGS guy, he popped off my screen, I don't know what happened to him. The -- I don't know if you wanted to have a one on one conversation about the Safety Sound Bonanza Channel area but it's also my understanding that Imuruk Basin area just north of Nome, east of Teller, also may have some eelgrass. But with this change in climate and this new storm that we just had, you know, this very, very big storm, wondering if eelgrass could have been carried to other areas, you know, making it -- expanding its territory, I guess.

So just I don't know if it's eelgrass but I'm going to give an example, so the Sunaq River, just west of Nome where my family's Native allotment is, when I was growing up the river mouth area never used to have aquatic plants but now it does, so much so that when I'm driving through there with my jet boat I get a bunch of weeds caught up in my intake on my jet — the jet intake. You know with climate change, different things happening maybe aquatic plants are moving in different areas.

So, anyway, just a suggestion.

MADAME CHAIR HOSETH: That sounds good. If we were wanting to form another committee, Patty, would we do it in the form of a motion if we wanted — I think that that's really good to identify areas that we need to have studied or different projects about the concerns that we have.

 $$\operatorname{MS.}$  SCHWALENBERG: Yeah, that would need to be a motion.

 $$\operatorname{\mathtt{MADAME}}$  CHAIR HOSETH: Brandon, do you want to make one.

0142 1 MR. AHMASUK: I lost the wording but I 2 guess make a motion to form an ecosystem committee for the purposes of, you know, gathering information. 4 5 MADAME CHAIR HOSETH: Do we have a 6 second. 7 8 MR. HARRIS: Second. 9 10 MADAME CHAIR HOSETH: Seconded by 11 Cyrus. Any further discussion on that or do we want to 12 identify who wants to be a part of that committee now 13 and we could start having a meeting. 14 15 Lili you want to be on there. 16 17 MS. NAVES: Well, I think about this 18 committee and I think that's a very interesting action 19 by the AMBCC and this ties to some discussions that 20 we've heard in the past that it's an interesting idea 21 if a committee can relate it to the eelgrass interest 22 but we have discussed it in the past about the 23 possibility having the AMBCC, a committee that discuss 24 priorities for the Council in terms of information 25 needs and research in general, which are priorities for 26 the AMBCC and the eelgrass could be one of those. So I 27 wonder if the AMBCC would consider having kind of a 28 broader committee that addresses this priority 29 information need and the research topics for the AMBCC 30 to consider. 31 32 MADAME CHAIR HOSETH: I think that would be good. Would it fall under this committee that 33 34 we just formed, we could think of a name of it, but I 35 think that we do need -- we've identified a need that 36 we need to form a committee to have further discussions 37 in committee. 38 39 Anyone interested in serving on the 40 committee. 41 42 (No comments) 43 44 MADAME CHAIR HOSETH: Okay, we got 45 Liliana. 46 47 MR. AHMASUK: Since I mentioned it I'll 48

put my name in there.

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                      MADAME CHAIR HOSETH: Okay. Brandon.
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      Chuck, did you want to be on there, is that a hand that
      you want to be on there.
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                      CHUCK: Yep, thank you. Sorry, I
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      couldn't find unmute.
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                      MADAME CHAIR HOSETH: That's okay.
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                     MS. CHERNOFF: This is Coral, I'll be
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    no there.
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                     MADAME CHAIR HOSETH: Okay, Coral. I'd
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    be happy to be no there. And Patty.
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                     MS. SCHWALENBERG: Yes.
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                     MADAME CHAIR HOSETH: Not to add more
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     to your -- not to add more, but maybe you as well.
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                     MS. SCHWALENBERG: Sure.
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                     MADAME CHAIR HOSETH: I think it would
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    be good topics that we could talk about in there. I
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     don't know if, Ryan, if you wanted to be a part of that
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     or somebody -- or we got Lillian.
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                     MR. SCOTT: I think I'm pretty
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     committed to various other committees at this point.
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                     MADAME CHAIR HOSETH: Okay. Any
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     further discussion or anybody that wanted to join.
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                     MS. PLETNIKOFF: Madame Chair, this is
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    Karen. I'll confer with our representative, Peter
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     Devine, on
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    whether or not we want to be on there but it sounds
     like this also might have some of the discussion about
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     things impacting those endangered species that could be
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     valuable so we might.
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                     Thanks.
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                     MADAME CHAIR HOSETH: Yeah, I think you
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     would be a great addition to that committee. Brian, is
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     that a hand that you wanted to be a part of that.
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                     MR. DANIELS: Yeah, that's correct.
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    mean I feel like someone from the Yukon Delta should be
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      present too to have ideas as well given our status of
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      importance for waterfowl.
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                      MADAME CHAIR HOSETH: Okay.
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                      MR. DEVINE: I'll raise my hand, Madame
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      Chair.
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                      MADAME CHAIR HOSETH: Okay, great,
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    Peter, thank you.
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                     MR. DEVINE: And I think anybody with
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     eelgrass and bumblebees should be on there.
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                     MADAME CHAIR HOSETH: Okay. If there's
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    no other discussion with the motion on the floor all
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    those in favor of the formation of the committee that
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    we'll come up with a name at another time, signify by
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     saying aye.
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                     IN UNISON: Aye.
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                     MADAME CHAIR HOSETH:
                                           Those opposed
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     same sign.
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                     (No opposing votes)
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                     MADAME CHAIR HOSETH: The motion
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     carries and maybe we can meet sometime in -- I don't
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    know before the end of the year to have discussions. I
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     know we're in busy meeting season so.
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                     MS. SCHWALENBERG: Yeah, and if anyone
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     else is interested from other regions or other partners
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     just send me an email and I'll add you to the list.
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                     MADAME CHAIR HOSETH: Okay.
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     thank you, John, for that update and the formation of
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     the committee from your report.
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                     MR. PEARCE: You're welcome, thanks
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     everyone.
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                     MADAME CHAIR HOSETH: Yeah. Next we
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    have Robb Kaler with U.S. Fish and Wildlife Service the
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     seabird die-off update.
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                     MR. KALER: Hello. Good afternoon --
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    actually good morning still. Yep, Robb Kaler, let me
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pull up my screen that I hope to share. All right, how does that look, can you see my opening slide 2022 Alaska Seabird Update.

## MADAME CHAIR HOSETH: Yes.

MR. KALER: All right, great. Yep, Robb Kaler, so I'm with U.S. Fish and Wildlife Service based here in Anchorage on Den'ina lands and I am in the seabird program. Liz Labunski is also on the call here and this slide is just highlighting — the information I get to share today is based on a lot of collaboration and contributed, you know, very little — a lot of my time but very little in being able to actually get this information so these are the partners that have contributed immensely. And so I also want to highlight that the AMBCC regional representatives, as well as Patty, our Executive Director, has also helped immensely with the communication of this information.

And so as I mentioned, this is a huge collaboration between all the partners including Coastal communities, tribes, State and Federal agencies and so without that I'd have very -- Liz and I would have very little information to share today so Quyana.

I'll just quickly kind of focus on the seabird die-off. So historically seabird die-off events in Alaska were typically associated with either strong ElNino events where we get a pulse of warm water into Alaska and/or with Avian disease events. So this timeline and apologies to those that are on the phone and can't see this, but I'll try to describe it, it's basically a timeline breaking down since the 1970s moving across, left to right, and showing some circles and indicating the species that had been affected during those die-offs. Prior to 2015, the majority of those species or the main species affected were murres, common murres and thick-billed murres. However, since 2015, I think as all of us know on this -- during this Council meeting, we've had a very large amount of dieoffs. 2015/2016 a you can see, the large circle, the Gulf of Alaska where almost one million birds, and particular murres were affected and died and those were largely murres. And then since 2017, these events have mostly occurred in the Bering Sea and up into the Chuckchi and throughout the Aleutians as well and Bristol Bay. So this figure is just kind of a quick summary, kind of illustrating that annually, since

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1 2015/16 we've had seabird die-off reports in Alaska.

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And so working with our partners as I mention, across the Coastal communities, the State and other Federal partners, along with our partners at Coastal Observation and Seabird Survey Team based in University of Washington COSST, this figure is a combination of maps and, again, apologies to the folks that are just on the phone, but going back to 2017 in the upper left and then down to this year, 2022, in the lower right, and, again, information, these are data provided by communities, the tribes, the State and Federal partners and then COSST. So COSST does beach surveys using costters, they're COSST participants and so augmenting some of the opportunistic reports that we receive from the communities. So the upper left corner of each map you can see the year of the map, what it's indicating and then the lower right of each of those maps shows the total number of carcasses reported. So I'll emphasize that by the time we get a report of a carcass washed up on a beach and that the tide hasn't switched and then erase the beach of any indication of a die-off so these are very minimal numbers. But you see that the large number of birds across certain years but you also see that the size of the circles indicate that the magnitude of those die-offs, of those reports, and then the duration of the event is also indicated by color. So it's kind of a complicated figure but, you know, I will share this with Patty so that she can share it out with everybody so you can kind of mull over what I'm trying to describe here. But the main thing is trying to capture the duration of these events, often beginning -- we get reports sometime in May or June and then the duration going into August, September and sometimes October. And then that geographic extent, the cover that we're seeing. many years we see it from the Bering -- or sorry, the Northern Bering south into the Aleutians and into the Bristol Bay area so the color of those circles indicate the month the report was received.

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So in 2022, here it says the total reports were about 200, since I made that figure -- or since I was coordinating with our partners at COSST to make this figure we've gotten additional, so we're about 250 seabird carcasses that have been reported this year in 2022. And the majority of those being murres and gulls as well as kittiwakes.

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So in addition to the reports that we get for carcasses we're also coordinating with our partners to collect carcasses for sending to the USGS National Wildlife Health Center and then also coordinate with the USGS Alaska Science Center who does -- looking at the saxitoxin, so this table -- oops, sorry -- this table summarizes the results and I just want to -- you know, I'll walk you through this and, again, apologies to the folks on the phone that can't see this, but across the top are the years and here I've got 2017 to 2021 and as you all know the last three years have been especially challenging going through a global Covid pandemic limiting our abilities to conduct full necropsies on carcasses and then, you know, ultimately determine the cause of death and then in 2022 highly pathogenic avian influenza in terms of guidance on how to handle, who should handle and what to do with those carcasses. I know that was brought up during the regional reports yesterday and some of the confusion.

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So the next row below that, total reports. Again, as I emphasized by the time we get a report of a carcass, these are minimum numbers that we've received. So in a year like 2020 where we had about 330 reports to a maximum 2019 where we had 9,000 or more reports and that was a large die-off of shearwaters.

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And, again, the next row shows the number National Wildlife Health Center, those are the carcasses that we were able to get from our partners, frozen and then shipped to Anchorage, and from Anchorage shipping those to Madison, in Madison they collect tissues that come back to Anchorage to the Alaska Science Center to test for saxitoxin and demoac acid. So at the Health Center they're also testing for avian influenza and I just want to point out that as of 2021 very few cases of avian influenza had been detected and the primary cause of death, cause of mortality was emaciation and starvation so there are some reports of harmful algae bloom concentrations that were positive but in typical -- in general, and Caroline, I think she had to drop off actually -- but anyways, working with Caroline VanHemert at the USGS Alaska Science Center, currently below detection levels for saxitoxins.

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We continue to try to identify disease

because when birds are compromised because of lack of food they can become more susceptible to disease.

And then you see in the other line, the other, that's indicating some of these birds that we got, we didn't know that they had died of predation but that's one -- and also birds that have succumbed to poor body condition are probably more susceptible to predation.

So, I don't know, should I pause for questions on that or should I just keep plowing forward.

MADAME CHAIR HOSETH: Does anybody have any questions before Robb moves on.

(No comments)

MR. KALER: I know this is a lot of information but I just wanted to make sure.

 $$\operatorname{\textsc{MADAME}}$$  CHAIR HOSETH: Oh, Ryan has one. Ryan has one.

MR. SCOTT: Hey, Robb, looking at the text, it says tested positive for AIH1096 but isn't it -- is that the low path AI?

MR. KALER: Yes, exactly. I should have empha -- yeah, so H10N6 is a low path and this is like one of the points that I think John -- JP, John Pearce, had just touched on was they came out with a review paper just before the 2022 HPAI but, yes, that is a low path. In fact that's a great suggestion Ryan to just update that and emphasize that, that is a low path, not a highly pathogenic avian influenza.

MR. SCOTT: Thank you, sir.

MR. KALER: And, sorry, this figure is a little -- sorry I should update this figure to indicate that more -- but, yeah, making clear that what I'm talking about there, the hits have been a low path avian. And when we say low path, we're speaking -- a low pathogenic ability and I'm sure somebody else on the call could put this more articulately but we consider highly pathogenic is it's highly pathogenic poultry farms and other, you know, concerns for

0149 1 commercial farms. So, yeah, thanks for that question. 2 3 Yeah, any other questions on that 4 before I move on. 5 6 MADAME CHAIR HOSETH: Dave, go ahead. 7 8 MR. SAFINE: Thanks, Robb. Just a 9 quick question, I'm just curious about the role -- or 10 your thoughts about the role -- in 2019 we had that big 11 heatwave in Alaska and I noticed, you know, an elevated 12 number of birds reported, any links with that or is 13 that just pure coincidence? 14 15 MR. KALER: No. Great segway, I did --16 so, you know, I've got a slide stack and I'm trying to 17 keep this real specific but that's a great question. 18 Yeah, 20 -- so we had a marine heatwave in the Gulf of 19 Alaska, 2014, 2016, that was one of the reasons..... 20 21 (Teleconference interference -22 background noise - participants not muted) 23 24 MR. KALER: I'm hearing an echo. But 25 yeah great question. Yes, there was another heatwave 26 up in the Bering and that definitely linked to this 27 die-off of shearwaters, absolutely. I do have a figure for that so Liz Labunski -- Cathy Kulitz has recently 28 29 retired but they are still working on papers compiling 30 that and that's putting observers on vessels off shore 31 at sea counting pelagic birds, complimenting other, you 32 know, marine studies and absolutely there was another 33

smaller, not as big as what was titled as the Blob, 2014/2016, but, yes. And I do have a figure -- but, yeah, you saw -- you could see a decrease in numbers of birds in the Southern Bering and actually moving further north, probably tracking the colder and more productive waters so, yeah, thanks for that question, Dave. And maybe next time I'll include that. In fact, I think in the spring I had that slide showing Liz and Cathy's results of kind of the distribution of seabirds and the population numbers.

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Okay. So this time last year, I'll remind everybody, and what I'll say is that only to concerns regarding Alaska seabird populations, and, in particular, seabird die-offs, during the fall AMBCC

meeting last year, there was a motion to create a seabird subcommittee. I volunteered to temporarily or act as Chair for that committee and I know many of us wear a lot of hats and some of our hats fit and some of us, we leave our hats in our closest and we forget, so I promise to do better and be better at all of this.

So what I've listed here is who I believe are the AMBCC regional representatives that stepped up and expressed interest in joining a seabird subcommittee. I've talked -- you know, I've emailed with some of you, I've spoken with some of you, but I'll just kind of quickly pause here. If you see your name on the screen, and apologies again to the folks that are on the phone and can't see the screen, Robb Kaler, he's the acting Chair, and he's not done great but, you know, he's doing what he can.

We've got Gayla from the Bristol Bay.

 $$\operatorname{\textsc{We}}'\operatorname{\textsc{ve}}$$  got Jack and Brandon from the Bering Strait/Norton Sound.

Coral from Kodiak.

Cyrus, I don't know if you know, but from Northwest.

And then, Jennifer.

And I'm wondering first anybody who I've just called out if you'd like not to be involved or -- and then secondly, the folks that might be interested in joining that so I can jot that down. That was one of my challenges after the fall 2021 meeting was not remember exactly who offered to join this subcommittee.

(No comments)

MR. KALER: Okay, so this is all captured in the notes. So moving forward on that. We, of course, have the Alaska -- U.S. Fish and Wildlife Service Alaska Maritime, they do intensive monitoring at about eight sites across Alaska for seabirds and that's monitoring at colonies. And the idea in, you know, the late '80s was, you know, let's put some of our eggs in certain baskets and try to represent seabird reproduction, populations, and feeding across

the, you know, an expansive range as Alaska, of course. And so some of the -- some of those sites have been reduced in past years due to the lack of funding but we're also getting some reports so Brandon, for example, reported to -- emailed Eric Taylor and myself regarding his observations in early June from Sledge Island so that's west of Nome, and he had reported -and Brandon, thanks very much for that report, too -the numbers of seabirds, and I think particularly murre numbers were poor. And, Brandon, of course, his family and Brandon have been egging that island for many years and so that knowledge is really helpful. The island itself is part of the Alaska Maritime National Wildlife Refuge but it's not a site that they monitor so information -- opportunistic information and all the reports are really important so I -- basically I've --I've recorded that as poor. You know I think Brandon said 10 percent of birds that they'd typically had seen. And this, of course -- you know, Brandon has said that the last two or three years.

Hi Brandon, I see your hand up. I'll call on you. Through the Chair -- Madame Chair.

MR. AHMASUK: Yeah, thank you, Madame Chair. Thank you, Robb. You mentioned Sledge Island, it is part of the Aleutian -- Bering Sea/Aleutian National Maritime Wildlife Refuge but you also mentioned that it's not monitored. Is there plans going forward to have it monitored on a regular basis? So I mean it is -- I mean you spoke a little bit of my family's involvement, you know, I'm going to add more to it so I mean it's not just several years, it's multi-generational, you know, five, six generations of my family that has been out there, possibly even more, you know, but I mean just what I'm aware of. But, anyway, is there going to be suggestions, attempts, to have it monitored on a regular basis?

MR. KALER: Yeah, thanks for the question, Brandon. No, is my immediate response. And that's something that perhaps we can work on maybe through a tribal wildlife grant. But right now Alaska Maritime National Wildlife Refuge, their sites — they used to monitor annually nine sites, they're down to — I think it might even be down to seven where they annually get a field crew out there for, you know, 90 days. Other sites were infrequently, so once every five years. We do have an Alaska Seabird Conservation

Plan that highlights the -- you know, intent to focus our resources on monitoring, even if infrequently, once every five years, we have not had the resources to do that and so, yeah, if you -- I know you're spread very thin, Brandon, you wear more hats than I do, but maybe something that we can work on is that tribal wildlife grant looking for ways and really empower the local folks to help, you know, support -- I guess not help, but to support that effort. But, yeah, in the foreseeable future, no,I don't see Alaska Maritime having the resources as they're dropping other field sites unfortunately due to -- I know it's a broken record -- but lack of funding. So we are seeking out other opportunities but I appreciate that question.

MR. AHMASUK: Thank you for that. It is concerning, I guess, Sledge Island it's not huge, it's only -- what is it, four or five miles long, maybe seven, eight miles in circumference, you know, it's not huge, it's fairly small, it is troubling to know that when it does get hit it gets hit hard. You know so we do have a seabird colony east of Nome here, Bluff area, you know, between here and Golovin, the conversations I had with Jack earlier this spring, that particular colony seemed to be doing quite well. But how many miles, I guess, or how much cliff area -- I'm guessing there's way more cliff area than Sledge Island. Lawrence Island, Diomede, this last spring, you know, their colonies seemed to be -- at least the reports I got, they seemed to be doing okay. But, again, Sledge Island, I don't know why -- I haven't heard reports in particular from King Island, you know, it's just another one of our islands out here. But, again, Sledge Island seems to get hit really hard, you know, with the seabird die-off but it would be nice to know if there's going to be attempts to monitor it, more on a regular basis. The way I look at it, I guess, it's an indicator, you know, for other seabird colonies, is it going to be happening -- so, anyway, thank you.

 $$\operatorname{MR}.$$  KALER: Yeah, thanks. I see Liz, you have your hand up, through the Chair.

LIZ: Yes, thank you. I just wanted to add -- I just want to let folks know that although we're not actively going to the colonies to look at the overall abundance of birds on shore, we have been conducting off shore marine bird surveys in that region. I was actually just out on a ship about two

weeks ago. So we have a survey that started near Nunivak Island and we went north as far as King Island. So I actually was off shore King Island, like I mentioned, about two weeks ago, and I was really surprised there was a lot of birds that are out there. I saw murres flying to the island carrying fish so that, you know, indicated that they still have chicks that were on the cliffs at that time. So I just did want folks to be aware that we have been doing those surveys and this has been in cooperation with the NOAA fisheries program that's going out and they're looking at small juvenile fish in the region and also looking at plankton and the oceanography, water temperature, salinity and those types of things.

So we hope to continue that work in the future. I just did want to let folks know there is some other work being done in the region.

MR. KALER: Yeah, thanks, Liz. And, yeah, I should have included at least one slide on the At Sea Program. Sorry for that. But, yeah, any questions for Liz on that, I mean the At Sea work. Of course it's in collaboration with the larger vessels. I'll just have a quick pause there.

## (No comments)

MR. KALER: All right. So, yeah, as Brandon mentioned, yeah, so Bluff, that's a large colony and it is much larger. I think if you look at the -- there's a seabird colony register managed by U.S. Fish and Wildlife Service, the numbers of murres in particular from Sledge are about 5,000 historically and the counts are old, we have not updated those counts. And I think from Bluff, the colony that Brandon mentioned that's to the east of Nome is substantially larger, larger cliffs. And then what I've written here in bold is good, and that was based on information that Brandon had gotten from Jack and others. So that was positive, that was kind of No. especially after Brandon reported that Sledge Island was not good, that it was poor, as I've indicated here, Bluff was good so that's great.

And then talking with Heather Renner, normal -- normal from St. Paul and St. George Island. So that's where they do have a long-term monitoring camp. And I don't know if Peter Devine's on the call

and wants to address any of that. But currently based on reports from Heather it seemed like breeding and population counts were normal.

Peter, are you interested in commenting on that, through the Chair.

 $$\operatorname{MR.}$  DEVINE: No, I have nothing to comment on.

MR. KALER: All right, thanks. Thanks Peter. And, Brandon, has also mentioned St. Lawrence Island, I don't have a note here from Diomede. But I mean those are two really important sites particularly for auklets, least and crested auklets. I know those are subsistence foods and, yeah, I rely heavily on Brandon for that -- for getting those reports.

So as I mentioned, tribal wildlife grants, maybe that's something that we can help coordinate to get people on the ground and collect information on the reproductive success or population numbers, particularly from St. Lawrence Island and Diomede on the auklet populations that have historically numbered in the millions, very large colonies.

Cape Lisburne, that's a site managed by -- or monitored by Alaska -- sorry, Alaska Maritime National Wildlife Refuge. They have downsized their Staff, again, broken record, talking about how we have fewer funding -- fund opportunities in Fish and Wildlife Service. So they went up there to Cape Lisburne and put time lapse cameras, unfortunately some very carefully placed cameras got knocked over by bears. So this year I don't think they have much information on the reproductive success or the population of murres, mostly murres but there's also kittiwakes at Cape Lisburne.

And then following up, this came up yesterday, Jack Fagerstrom, he had commented about the concern about the number of pink salmon and how pink salmon -- so there is a long running discussion, at least among the marine and seabird researchers about how augmenting pink salmon populations through hatcheries is going to impact the predator/prey relationship, essentially a top down, or a bottom up impact to the birds and to the marine mammals and then

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1 to the fish. So in Alaska, hatchery salmon, which are mostly pink and chum and full disclosure I'm not a fisheries biologist, but they are released at later life stages and I think that's what Jack was emphasizing, in later life stages, so in the Lower 48 they're released as smolt and in Alaska, and this is according to some of the information from Prince William Sound Aquaculture Corporation, they call it salmon ranching but those -- the salmon are released at a later life stage and I think what Jack was reading about, perhaps in Popular Mechanic, was that they're 12 going to be consuming more because when they're 13 released they are larger. So, again, not a fisheries 14 biologist but I'll emphasize that I think in addition to, you know, that competition you've got this rapidly 16 changing marine ecosystem, you know, warming 17 temperatures, most rapidly increasing in the Northern 18 Bering which is coupled with reduced sea ice extent and 19 the duration of that sea ice and that results in a 20 decrease in that biom -- the sea ice algae, the lipid 21 rich sea ice algae associated with the sea ice. So you 22 got a quickly changing food web.

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And then I do have -- yeah, Shishmaref on Sarichef Island, the, you know, recent -- I think we've already talked about it so I won't go on, but, yeah, 30 September a social media post on the, you know, a lot of bird food, a lot of fish food being washed up on that beach there and then kind of looking at that timewise, you know, Typhoon Merbok made landfall on the 17th and then it looked like this report was on the 30th. So, NOAA, Stephanie Zador, with NOAA Fisheries, you know, she's interested in that and Liz has also elevated this report or this observation to some of the crews that are at sea right now.

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Hi, Brandon, I see your hand up, through the Chair.

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MR. AHMASUK: Yeah, thank you. So talking about the seabird die-offs, the plankton and what not and then you also mentioned auklets, I did want to mention that our bird rep from Savoonga, he noted when they were trying to harvest auklets, you know, after they catch them they're gutting them and what not, but he noticed that whatever it is that they normally eat wasn't present and that they were eating something different. I don't think that he noted that

the body condition of the auklets was different, maybe they're a little as -- not as fat maybe but just noting that they weren't eating -- at least from their, you know, traditional knowledge, that years and years of harvesting these birds they weren't eating the same resource. So, anyway, thank you.

MR. KALER: Yeah, thanks. And that's really -- you know, that's the type of information that I think is most informative with regard to these changes in the food web, you know, what are the shifts and, you know, maybe that's something, again, that we can focus on as we do a tribal wildlife grant and really paying, you know, paying people for their service and observations and I think that's an important step so thanks for that, for sharing that.

I know I'm taking up a lot of everybody's time and this is -- you know, Brandon, you had brought up yesterday concerns about seabird bycatch, I didn't mean to punt to the NOAA seabird folks but -- and then that's really kind of Liz' -- one of Liz' specialties too so I just went in, this is a 2007 to 2015 report. I'll let Liz talk more about it but the point here emphasizing that it's really the Northern fulmers, if you can see on -- if you see my arrow, and, again, apologies to the people on the phone but, yeah, almost 4,000 Northern fulmers taken annual average, so that's pretty substantial. And then murres -- so on the left side of this figure is the bycatch from halibut, you know, from the groundfish and halibut fishery and then on the far right is the hook and line fishery. So I will punt that to Liz, if you want to.

MS. LABUNSKI: Yeah, I can speak to this really quickly. And my apologies for not being on the call yesterday, Robb and I had concurrent meetings so we're dividing and conquering. So I can speak a little bit to the general topic of seabird bycatch and our participation as Fish and Wildlife Service.

So I serve on a joint committee that's headed by NOAA and it has partners from U.S. Fish and Wildlife Service and also the State of Alaska and the State of Washington where annually we meet to discuss seabird bycatch and all the Federal fisheries. So this would include the groundfish fisheries that Robb mentioned, which would be hook and line, longline fisheries, any pot fisheries and also trawl fisheries.

So those are the fisheries that are managed by a Federal entity, and that being NOAA. And so we meet annually to discuss the annual bycatch rates, the data that's been collected annually on these vessels, and so these two tables that Robb put up summarize some of the recent results by species. And what we look to see is if there's any specific concerns that we have, you know, for a species bycatch that's happening or sometimes there could be specific events that cause spikes in bycatch, but generally speaking as Robb mentioned, Northern fulmers and shearwaters, in particular, those are the birds that you typically see get caught in these off shore fisheries. And I think -- and just to explain these tables a little bit more, the total numbers that we're seeing, these are the extrapolated numbers that from the data that is collected annually on fishing boats. So NOAA has a sampling strategy where they know how many vessels are actively fishing and they can statistically figure out how many boats need to be sampled to get an accurate estimate where they can extrapolate the numbers as to the amount of birds that may be taken annually by species.

And so the link that Robb has put up here is a NOAA bycatch site where these reports are annually published and information is available to the public. And if anybody is interested on this topic, you know, I'm happy to talk about it more perhaps in the April meeting, or if anybody has any specific questions. I see Brandon's hand's up, I can hopefully answer the question.

MR. AHMASUK: No, not so much a question -- well, a question, yes, Robb, Liz, thank you for this graph, you know, very helpful, but just so I'm understanding fully, this is on the U.S. waters side, correct?

 $$\operatorname{MS.}$  LABUNSKI: Correct. This is all U.S. waters, correct.

MR. AHMASUK: Okay. Again, very useful, thank you for the information. Yesterday I mentioned the bycatch of, you know, our seabirds, again, I knew this was years ago, I do not recall where I read the information, maybe it was on the Russian side or maybe it was worldwide about how many murres were caught as bycatch. It was in the millions. But,

anyway, but this is very helpful for our region. But another thing that got brought -- I mean it just -- it reminded me when you mentioned shearwaters and fulmers, so if I can add this to my regional report.

At least to the Nome area and I think other areas, we're having a lot more shearwaters in our area, something that we never used to see and it's, again, climate change, warming waters, species moving north, it is something that we're seeing more and more out here. So, anyway, thank you.

MS. LABUNSKI: Yeah, thank you, Brandon, for mentioning that. And I'll just let you know for information on shearwaters, we have been working with researchers from Australia and New Zealand where shearwaters go to breed so they come -- so shearwaters come to Alaska during their winter period to feed and then they return back home to the Southern Hemisphere. So we have been actually working with researchers that tag the shearwaters in Australia and New Zealand and they've been following the birds this year, in particular, with satellite transmitters, so if I find out any information on where the birds went, perhaps movements that have been different than the researchers have seen in the past I'd be happy to share that information also with the group next year.

And I'm just going to mention really quickly on the topic of bycatch.

The bycatch tables that we're seeing here, those are for the Federally-controlled fisheries, and so mention what fisheries they included, but I just wanted folks to know that this does not include -- this estimated seabird bycatch mortality associated with gillnets. So those would be, you know, set nets that are used to catch salmon, those are near shore fisheries that fall under the State of Alaska's management and there have been few studies that have actually looked at the seabird bycatch rates in these gillnet near shore fisheries. But one of the things that we were working on, just last year we received a NFWF grant to pull together all the available data that we have in the State of Alaska on marine bird bycatch associated with gillnet fisheries. So we have been working cooperatively with NOAA who has all this seabird bycatch data to pull all the information together for regions in Southeast Alaska, Yakutat,

Kodiak, I think Lower Cook Inlet and also there is some data from Unimak Pass. So our goal is, with this grant, is to compile all this information and potentially identify regions where there might be a higher risk of seabird mortality or marine bird mortality and also potentially identify risk factors. So that is something that we are actively working on and hopefully we'll have some preliminary information available next year.

So I'll stop talking but thank you for all your time.

MR. KALER: Yeah, thanks, Liz. Are there any other questions about everything that we just spoke about with regard to bycatch?

(No comments)

MR. KALER: Otherwise I'll -- I know people are getting hungry, almost lunchtime.

And I only have not very much more.

So wrapping up.

Additional concerns for seabirds, the rapidly changing marine ecosystem includes vessel traffic, including the amount of sea ice that is allowed for increasing shipping of liquid natural gas, which I mentioned yesterday but also the fishing fleets that are also moving further north. And I think as Brandon kind of highlighted -- pointed out, what we're talking about is the Alaska side. We don't have much information from the other side of the Bering. And so with the migration of commercially valued fish like Pacific cod, walleye, pollock, we're seeing catcher/processor boats remaining further north than previously had been able to due to sea ice so the U.S. is required to remain south of the Diomede Islands, little Diomede, but fishing fleets on the other side of the Bering are not.

Additional concerns, pollution, plastics and contaminants, including bio-toxins, like saxitoxins have also increased. Touched on how some of the recent cruises have found high levels of potentially the cyst-causing saxitoxins associated with paralytic shellfish poisoning increasing further north.

There's been some really great Bering -- Gay Sheffield with Alaska Sea Grant has been doing some really neat science, straight science presentations, getting some awesome presenters who have talked about that so there's a lot of information if folks are interested. And then invasive species associated with warming conditions as well, also of concern. And then lastly, of course, climate change, and the loss of sea ice.

So with that, here are Liz and I's email addresses. I put up my cell phone there too, if people have questions. And, yeah, thank you for your time, Quyana.

MADAME CHAIR HOSETH: Thank you, Robb. Is there any additional questions, that was a great presentation. We always enjoy your section of the agenda.

(No comments)

 $\ensuremath{\mathsf{MADAME}}$  CHAIR HOSETH: Is there any other questions for Robb or Liz.

MR. DEVINE: Madame Chair.

MADAME CHAIR HOSETH: Go ahead, Peter.

MR. DEVINE: Yeah, I don't have a question but I was getting on this LEO conference probably about 10 days ago and there was a person from NOAA Fisheries on and they said that when Merbok came through it formed -- or reformed 230 miles away from Atka. And the reason that it formed -- or reformed and intensified was the Bering Sea in the middle was seven degrees warmer than the year before.

MADAME CHAIR HOSETH: That's

interesting.

MR. KALER: Yeah, I'll just quickly add that, yes, it's the warm water, you know, that's the -- the warm water that we're seeing in the Bering, that's why it's reforming, I believe. And I'm not an oceanographer, but, yeah, thank you, Peter, I think that's a great point. That warmer water is why these typhoons might rebuild and why we're seeing the storms. So I think Brandon can attest, I think there's another storm building up -- Merbok was a 948 millibar low,

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      which is an amazing -- you know, that's a low, low
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      pressure and I think right now there's a 958 or a 968,
      I forget, but, anyways, yeah.
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                      Thanks Peter.
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                      MADAME CHAIR HOSETH: Anything else.
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                      (No comments)
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                     MADAME CHAIR HOSETH: Well, it's just
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     now 12:00 o'clock, we could take a lunch. We don't
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     really have much left on our agenda. I know that we'll
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    probably spend quite a bit of time with Angela with her
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    present -- she's next on the agenda and then we have
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    public comments and our Council and Staff comments.
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    did you guys want an hour lunch and come back at 1:00
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     today.
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                     IN UNISON: Yes.
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                     MADAME CHAIR HOSETH: Okay. Angela,
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     you had something.
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                     MS. MATZ: Hi, Madame Chair, thank you,
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     yes. Would be happy to present after lunch. I wanted
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     to add that Mike Brooke from ANTHC is also going to be
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     presenting with me on the data visualizations that they
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    did after avian influenza so it'll be two of us
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    presenting during the avian influenza section.
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                     MADAME CHAIR HOSETH: Okay, great. So
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    we'll start up right at 1:00 o'clock with your
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    presentation and we'll take an hour lunch today. Patty
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     said that she's going to leave the meeting link open
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     during lunch and we'll see you guys back here in an
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                     (Off record)
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                     (On record)
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                     MADAME CHAIR HOSETH: Is everybody back
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     from lunch.
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                     (No comments)
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                     (Pause)
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                      MADAME CHAIR HOSETH: Are you sitting
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      in now Julian for Wendy, or is Wendy still on?
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                      MR. FISCHER: Madame Chair, I am on the
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      job. Wendy is on an aircraft right now returning to
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      Alaska.
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                      MADAME CHAIR HOSETH: Okay. Okay,
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      thank you.
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                     (Pause)
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                     MADAME CHAIR HOSETH: Patty, are you
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     back?
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                     MS. SCHWALENBERG: Yes, ma'am.
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                     MADAME CHAIR HOSETH:
                                           Okay.
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                     MS. SCHWALENBERG: Here's the rest of
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     our agenda.
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                     MADAME CHAIR HOSETH: So it looks like
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     we have the avian influenza update, public comments and
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     then our roundtable Council and Staff comments and I'll
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     transfer the gavel to Ryan and we should get done here
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     within a couple of hours, I would think.
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                     MS. SCHWALENBERG: Yep.
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                     MADAME CHAIR HOSETH: Okay. Well,
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     we'll go ahead and start. Angela, are you ready for
     your presentation?
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                     MS. MATZ: Yes. Yep, we sure are. I
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     think Mike Brooke from ANTHC is also on. I just wanted
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     to say hello to everyone again and thank you, Madame
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     Chair, and members of the Council for asking for this
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     information and allowing us to provide it. My name is
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     Angela Matz, in case I didn't meet with you yesterday.
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     I am the Oil Spill Response Coordinator for U.S. Fish
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     and Wildlife Service in Alaska. And it's under that
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     job that I became affiliated with our avian influenza
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     response this summer.
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                     Mike Brooke is also on. Mike, do you
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     want to take a moment and introduce yourself, please.
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                     MR. BROOKE: Sure. Thanks, Angela. Hi
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everybody. My name is Mike Brooke. I'm with Alaska Native Tribal Health Consortium. Among other things I work on the LEO Network. A lot of you, I think, are probably familiar with that but I was able to collaborate a bit with U.S. Fish and Wildlife Service through the HPAI outbreak which we'll be able to talk about and go a little bit deeper into today. So, thank you, it's a pleasure to be here today.

MS. MATZ: Thanks, Mike. So I am going to turn off my video because I have poor connectivity and we also just had that earthquake, did everybody else feel it and I don't want things to start shaking again but I do have poor connectivity. I'm going to stop my video but share my screen. So I would like everybody to let me know when they can see it.

MR. FISCHER: I can see it Angela.

MS. MATZ: Okay, thank you, Julian. So I want to give you an update on highly pathogenic avian influenza or HPAI, on the efforts that the Fish and Wildlife Service and other agencies took this year to deal with HPAI in Alaska. I have, myself, and Eric Taylor, on this slide, that's because we've traded off giving this presentation to different management groups but there are plenty of other people who helped with the response who could also be listed on this slide, primarily Dr. Bob Gerlach, who's the Alaska State Veterinarian. He and Eric Taylor were really the driving forces behind the response that we were able to mount in Alaska this year.

So what I want to do is first of all talk about what is avian influenza, this is a pretty high level talk and discussion but there are plenty of other people on here who could help us get into more details if we needed. I'll talk about the outbreak history both across North America and Alaska, talked about how we tracked it and some of the resulting geographic distributions of HPAI in Alaska. Look a little more in-depth at the migratory bird species and groups affected. I do want to talk about risk to humans but I want to caveat that by saying that U.S. Fish and Wildlife Service is not a Human Health Agency and the information that I will present to you comes from Centers for Disease Control, as well as the State Department of Health, the Alaska State Department of Health. We'll also talk a little bit about risk to

pets and other mammals. And then our expectations for fall and winter, which that's a little bit of a black box, so that'll be a good segway into Mike's presentation where he took some of the information that was collected this year and mapped it for us. And so he'll head straight into that after we're finished.

So what is HPAI/H5N1.

All flu viruses, including avian influenza, avian influenza is either a disease or the virus avian influenza. This virus infects poultry and wild birds. And avian influenza, we know that flu viruses mutate, they change over time, pretty rapidly which is why we're encouraged to get a flu shot every year because the human flu season, the genetics are different from year to year. So they're -- the different genetics result in different types of avian influenza viruses and here are a couple of the ways that they are classified -- the major ways that they are classified.

 $\,$  And I see that we're not there yet -- there we go.

So the first way that they're classified is with the protein groups that are on them. There are two different main protein groups, the hemagglutinin, and the (indiscernible) which results in the H and the N numbers. And then they're also classified by pathogenicity, which is -- Robb mentioned this earlier, it's the ability to produce disease in domestic chickens and that's a combination of both how transmissible the virus is and then how bad it is for the chickens, so a highly transmissible and fatal avian influenza, that's true in chicken, then it's called highly pathogenic. Otherwise it's low pathogen, or low pathogenicity AI, we often don't 'even use the low pathogenicity AI, we just call it AI if it is not distinguishable -- if it is -- if we are trying to distinguish it from HPAI.

Many avian influenza viruses occur naturally in wild birds without causing illness. And you saw in Robb's presentation that some of the seabirds that have been submitted for necropsy over the past several years did detections of avian influenza, these were low path variants.

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A further way to characterize avian influenza viruses is where they're thought to originate, or where they're thought to come from. So we might have European strain, North American strain, Asian strain, Eurasian strain, but what the important point is for that is -- the important points for those is that we can -- there's some tracking of maybe the origination of the current strain of the virus.

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So, again, I want to repeat that the HP, the highly pathogenic, is determined by its ability to produce disease in chickens and the current global outbreak of HPAI is -- started as a European strain and so it was called EAHPAI and it's an H5N1 virus.

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So for this outbreak history, the current outbreak happened -- well, it began in 2020. And we had -- we all remember previous global outbreaks of HPAI, particularly in 2004 and 2014 and 2016. In 2004 that one was of concern for humans as well as many species of birds. This current outbreak was first detected in North America in December of '21 and it was in Eastern Canada. It spread westward across the continent in both domestic and commercial poultry flocks and also in wild birds. We knew it was coming. We had our first detections in Alaska with birds that were migrating to the state in late April in 2022 and then also in domestic mixed poultry flock in the Mat-Su Valley. Many of the chicks that come up to Alaska are for people who have backyard flocks of chickens do come from the Lower 48. But we also had a lot of migratory birds arriving at that time. So those were the first two detections in late April. We had more detections over the summer with 79 confirmed cases in wild birds and tested in many more, over 300 wild birds have been tested. So what Fish and Wildlife Service did was work with an interagency group comprised of State and Federal agencies and Alaska Native Tribal Health Consortium to address HPAI in coordinating carcass collection. Our goals in this, which we developed these goals understanding that our resources were extremely limited. We received no extra funding to conduct this work this year in spite of the immense concerns we had for wild birds in Alaska. But our goals were to track the spread, geographically, and track species affected by it usually affected means killed by it and then also to provide information to subsistence hunters and that information was developed in full partnership with Human Health agencies.

So the collaboration that occurred included these agencies and all of the organizations and all of them have different missions and brought different expertise to the response. So, for example, as I mentioned before, the Human Health agencies were the Alaska Native Tribal Health Consortium and the Alaska Department of Health. At USGS, Dr. Andy Ramie is an expert in Avian flu genetics and he kept us up to date on the different ways that the virus might be anticipated to change, in the ways, in fact, that it did change, and then many, many other folks brought their individual and agency expertise to this group.

I want to reiterate our goals here were to track the spread geographically, track which species it affected and to provide information to subsistence hunters.

So the way that this worked, or didn't, depending on where you were was to take -- to try to centralize reporting. We'd already had a sick and dead bird hotline set up under the U.S. Fish and Wildlife Service Migratory Birds Program. That was used in 2014, '16 for that avian influenza outbreak. It hadn't been staffed as much as we staffed it this summer, since then. But we did bring it up -- we had one person detailing full-time into an avian influenza response position. That was (Indiscernible). She coordinated calls from the hotline as well as carcass collection efforts across the state. We then -- and then that addresses Item No. 2 there, we coordinated a lot of cargo shipments from across the state, everywhere from Southeast up to Utqiagvik for testing. Whether or not we could collect carcasses depended on how many birds, the carcass conditions, the carcass has to be in very good condition in order for it to support swabbing for avian influenza and because -- we'll talk about the risk to humans, which is pretty low, but because we were working in a little bit of uncertainty, we wanted to be very precautionary and proactive and not ask anybody besides agency personnel to collect carcasses for us.

When we have those carcasses collected, we dropped them at the Office of the State
Veterinarian, which is actually in the Department of
Environmental Conservation. They took samples, sent
them off and posted confirm cases on their website.

In the past we probably would have — well, we definitely would have coordinated more with the National Wildlife Health Center, which is the place where Robb was able to send many of the seabird carcasses in the past for avian influenza testing. But they had a couple of situations that led us to work more directly with the State Office of the State Veterinarian to get more timely results back. It still took about two or three weeks. But National Wildlife Health Center had a main necropsy room go down and they also were overwhelmed with avian influenza testing from the Lower 48 as well. So we were really lucky that the Office of the State Veterinarian, Bob Gerlach, in particular, was able to take on almost the entirety of testing for the state of Alaska.

So I just looked at the State website yest -- well, two days ago and these are the species affected to-date. There's a couple of caveats with this slide. What it doesn't show is the total amount of birds affected. There's no way that we could do that -- that we could say this is only an index of the birds that were affected, instead what we use it for is to look at what species, or species groups have been affected the most. So even though it says 77 birds were affected, that, out of 300 plus carcasses tested, it does -- that's always an under estimate, just like the mortality estimates that Robb presented, it's always an under estimate. These are good carcasses that we were able to get in and get tested and that came back positive, and by good I mean in good condition, that were not scavenged or not dehydrated that were suitable for testing.

So what we see here is that there are a wide variety of birds that were affected. Bald Eagles as elsewhere in North America were hit particularly hard and we know that this is a vast under estimate of the number of Bald Eagles affected, particularly on the Aleutians, in Kenai, many, many, many Bald Eagles were dying from HPAI so many got -- at several points we could not accept any more for testing. There was a Snowy Owl from the North Slope, water birds. Of course we know that avian influenza tends to affect waterfowl in particular and that was the case here in Alaska. We did have ravens affected, one crane tested positive, and then also gulls, terns and yeagers tend to be affected as well. So in the domestic category that's 84 birds compromised into four flocks. Three of those

flocks, I think, from the road system here in Anchorage and north, and one was from Aniak. And then interestingly we did have two red foxes carcasses test positive for this virus and that was the assigned cause of death.

So the total to-date, and remember these are confirmed cases, total wild birds to-date is 77 but we all know that that is an under estimate of -- and we don't have an accurate estimate for the true number of animals that were affected.

So Mike will get more into this, specifically for Alaska, but this is a map that's put out by the USGS, their surveillance website, the link on there is still active. I checked it on Monday. And you can see the cases across North America, both in commercial flocks and non-commercial poultry flocks, in wild birds and the in wild mammals. If you look up at that blue diamond here in Interior Alaska, that is actually not from there, it should be further west, that is an error that hasn't been corrected for several weeks so I'm going to send them an email after this to make sure they correct the location of that mammal.

So we did see a wave kind of come up from the Southwest and Southeast and kind of follow up along the Coast and up through Interior as the migratory front of birds passed. This map does not show you that timeline but that's where the -- that's how the detection's kind of rolled out. And it definitely was related to the migratory front of birds as they got further and further north.

So I want to talk about risk to humans, because, of course, it's something that we're very concerned about but, again, I need to tell you that U.S. Fish and Wildlife is not a Human Health agency and the information I'm presenting to you comes from both the CDC avian influenza website, which hasn't been updated since April 28th, the same information is on there as of Monday as was on there as of last April. And the CDC considers this — the risk to humans to be very low. This is a different H5N1 virus, avian influenza virus, than was seen in earlier outbreaks and particularly in the 2004 and 2014 outbreaks. And there are only two reported cases in the world, one case reported in the U.S., and both of these people had very mild symptoms. This is what we understand from the CDC

but at the beginning of this I emphasized that there was great uncertainty and actually a lot of fear about whether this flu could be of more risk to humans than the CDC was saying, and for that reason we took a very precautionary approach to collecting carcasses. We did not want members of the public -- we did not want to ask members of the public to collect carcasses for us. And while that probably reduced the number of carcasses that we tested it was also prudent -- we considered that a very prudent way to go about meeting our goals for the response.

 So we took this information and when I say, we, I mean the Human Health folks on the interagency group and developed hunter information for subsistence hunters. This information was shared with as Brandon indicated in the spring, and, in particular, we wanted to let people know that the risk was low but you should still exercise caution. Not -- you know, and these are good steps, not just for avian influenza, but for other potential, as you know, it's good game handling. Nobody that I've ever talked to is excited to harvest game that appears to be sick or is found dead, unless one is starving.

Wearing gloves is useful and I recognize it's not always possible in rural situations. Washing hands and cleaning your equipment is always good game handling procedure, as is not eating, drinking or smoking while you're handling game and the most important thing, in particular, for this virus and other viruses is that it can be killed with heat. So guidance was to cook game nd then eggs, thoroughly, to an internal temperature of 165 degrees. And the eggs part only came in later in the summer when we received results of some studies showing that the avian influenza could survive on the outside of eggshells.

This was the handout that was sent out to AMBCC members. You all should have seen this in the spring, and that was developed by the interagency group of folks that is represented here. The State of Alaska, the Alaska Native Tribal Health Consortium, all of those folks contributed to this.

We also shared the information on this flier via an email to the over 200 tribes in Alaska. It was shared on State and Federal agency websites through Alaska Native Tribal Health Consortium, Bird

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TLC, I think, which is a rehabber here in Anchorage shared that, the State Troopers shared it. We shared the information, versions of it through — also through newspaper and radio interviews, particularly Dr. Gerlach spent a lot of his time this summer on the radio answering interview questions, and then we've also shared the information in presentations like this to a number of management groups.

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So talking about risks to other animals. Many people are concerned about pet dogs in areas of the state where people depend on subsistence and are more attuned to their entire ecosystem. are concerns about other mammals. And so it's true that multiple species of scavenger mammals have been infected during this outbreak and so it's been detected, infections in red fox, infections leading to death in red fox, raccoons, stripped skunks, possums, bobcats, coyotes, harbor seals, grey seals and mink. It, so far, hasn't been detected in any dogs in North America, but if your dog is a scavenger and consumes an infected bird that is a risk. It has not been detected in marine mammals in Alaska. Although avian influenza viruses can be found in marine mammals in both the low path and high path. And this version of HPAI was detected in seals in Maine. In fact, NMFS called an unusual mortality event for seals in Maine because of the high levels of the current HPAI found in seals that were associated with a die-off. So in Alaska, what the National Marine Fisheries Service has done is earlier in the summer they were testing for it, those people in the stranding network were collecting samples for HPAI, what they're currently doing because it hasn't been found, what they're currently doing is archiving samples from each stranding event and that could be, you know, one animal, and they're monitoring. So if they see a mortality event that has large number of animals of the same species associated together in a small window of space and time, then they will send samples for HPAI assessment. So they're in a little bit of a holding pattern right now because they didn't detect it from the more active sampling earlier in the summer.

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One question that people really want to know is how long can this survive in the environment.

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 $$\operatorname{Flu}$  viruses can be removed, can be disinfected with detergents, disinfectants like a 10

percent bleach solution and then heating and drying will also inactivate them. That's true for many viruses. But avian influenza viruses can persist in -- especially in cool and wet conditions that, you know, that are throughout Alaska, like for instance, soil, feces and pond water, they can persist on feathers for varying amounts of time. So while we can take steps to disinfect our clothing, ourselves by washing our hands, our equipment that we use to harvest game and in our case to collect samples, we can disinfect all of that, but this virus can persist in the environment.

So our expectations for fall and winter 2022/2023 it's not -- we don't know what is going to happen and we don't have indications except that this will likely not go away by next summer and this is based on what they've seen in multiple migration cycles in Europe where this current outbreak is thought to have originated.

We have seen additional mortality throughout the staging and migratory -- fall migration period. We have seen, but nothing like the numbers that we saw when birds were first returning to Alaska in June and July. There are additional mortalities and some additional detections.

One concern is that for birds that winter in California and, Julian, I thought you had a really great description of where -- of where all of our bird species winter, but for those that go to California, for example, they were going to be concentrating in the few remaining wetlands and that may result in additional mortality. We don't know. We do not know what the effect of this years outbreak on migratory bird populations that nest in Alaska is. And when you combine it with things that are going on in the Bering Sea, for that region, when you combine it with additional ship strikes and oil spills in Southcentral and Southeast Alaska, and with all of the habitat losses in the Lower 48 and worldwide where migratory birds -- where migratory birds that nest -winter -- you know, it's -- we have to put it in the category of another hardship for migratory birds in North America.

I don't think we're going to be able parse out specifically the effect -- a specific effect of HPAI from this season on species. And while we

would love to have that, I guess what I would say is that the people on this call are -- including our partners from USGS and the folks in Migratory Birds and U.S. Fish and Wildlife Service are the people to be able to do that.

So this slide is thick with words and what I wanted to do is be able to provide you a lot of resources. I sent the PDF of the slide show in and that can be shared. The links should be active in the PDF if it's shared electronically to you. I shared it with Patty so I'll put my email in the chat and if these links aren't active for you I can definitely send them again and I can answer any other questions you might have. If I can't answer them, I can try to direct you to someone who can. Again, my role in this was to help coordinate the response. Moving forward I probably won't be nearly as involved because we're moving in to more of a long-term issue than an emergency response.

So that is all I have.

Madame Chair, I wonder if you want to take questions now. I think it might be very useful to see what Mike has to present before we take questions but I want to leave it up to you and the Council to let me know what you'd like.

MADAME CHAIR HOSETH: Well, I see Brandon has his hand up and this is, of course, a concern that we have across the state of Alaska and the world, basically with this avian influenza. Brandon, did you want to wait for your question or do you want to ask Angela now?

MR. AHMASUK: I prefer to ask Angela

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MADAME CHAIR HOSETH: Okay.

 $\,$  MS. MATZ: Okay. What I'm trying to do is end the slide show so hold on one second, Brandon, please. There we go, okay.

Brandon, yes, please, go ahead.

48 MR. AHMASUK: Okay. So thank you, 49 Angela, for all of that. It is appreciated. So my

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question, you know, in the essence of preventative measures. So fully understanding, you know, the agencies don't want just anybody picking up dead birds, you know, to help prevent spreading it, you know, especially amongst people, but I'm wondering going forward, as a preventative measure, is there going to be training offered to individuals in the villages to, you know, when birds show up dead in the villages to go out and pick them up, dispose of them and/or get them out for testing. So this last spring, more or less that's what happened, is, you know, we had birds of all kinds, not just waterfowl, not just seabirds but, you know, shorebirds, the little songbirds, what not, you know, showing up in the village but then, you know, kids are curious, you know, they're wanting to pick them up or bring them to mom and dad and say, hey, look what I found and/or, you know, dogs possibly picking them up, eating them and what not, so, anyway, as a preventative measure going forward, is there going to be like training offered to individuals, supplies given to them, you know, possibly even some kind of compensation to, you know, just even for reporting, getting a better idea, at least within the village level of what they're seeing? Anyway, thank you.

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MS. MATZ: Brandon, thank you. I need to tell you that all of those ideas are not new and I very much respect you and thank you for bringing them up here in this meeting. I need to emphasize two things and as Robb said, it's a bit of a broken record, it's where we're coming from. First of all no agency in the state with the exception of USDA has received additional funding to support any response for HPAI this year. We did this all out of existing funds and it did take funds away -- funds and time away from other priorities that were previously budgeted for. And the reason -- this is my opinion, but I have watched things played out, and I think the reason is because it is of such low risk to humans. We saw much greater inputs of money and resources, even in 2014 when the particular variant of HPAI was of more risk to humans. So that being said I don't think that there is a mechanism forward -- there isn't a mechanism currently to do what you're asking. We don't anticipate receiving funds to support this unless the risk to humans change.

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What we can do, and I would urge the Council to ask for what you've just asked for. There

1 are other things that cause bird die-offs. I think if the risk to humans doesn't change one of the things 2 moving forward is to make sure that the COSST surveys 4 and the way that the seabird carcasses are collected 5 for the seabird die-off in the Bering Strait, those 6 protocols, supplies and procedures can easily be 7 expanded statewide to address other concerns. So there 8 are a number of ways to do this. I think it's more powerful coming as a request from the AMBCC and perhaps 9 10 the Native Caucus than it is -- as long as the human 11 health evidence points to it continuing to be very low 12 risk for humans, I think that's the way to do it. Food 13 security. Regime change in the Bering Sea. All of 14 these things were brought up in conversations this 15 summer and continue to be brought up. These are issues for all of rural Alaska, although I think in the Bering 16 17 Strait region it's particularly keen and particularly 18 bad because of the regime shifts and the bad weather 19 you guys are getting slammed with, so that kind of 20 information can be provided but right now we don't have 21 resources to provide that except on a very limited 22 scale. We did send out carcass collection kits to 23 Raphaela Stimmelmayr in the North Slope Borough and she 24 was able to coordinate carcass collections. We sent a 25 carcass collection kit to Gay Sheffield and she was 26 able to send in a few carcasses as well. But in 27 general I think you're always going to find agency 28 folks who -- unless we have a training program and 29 people spending time training, and then being in a 30 documented position to do the collection we're not 31 going to ask members of the public, including tribal 32 members, to collect sick and dead birds. That is not 33 prudent and I don't believe that we could ask to do 34 that.

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However, a training program is something that I believe that the AMBCC should ask for.

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MR. AHMASUK: Okay, thank you.

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MS. MATZ: Thank you.

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MADAME CHAIR HOSETH: If I can, with that training, how many years ago there was going to be a training for us to learn how to properly collect birds and that was when Eric was there and I don't know, Julian, if you are familiar with that program with U.S. Fish and Wildlife Service but there was a -- there was a training that was set up -- I don't know if

anybody signed up for it, but I remember getting email notices. I think I was going to sign up and then something fell through. I don't know if it happened or if it did happen; do you know of anything like that within U.S. Fish and Wildlife Service?

MR. FISCHER: Madame Chair. I do recall discussions within the AMBCC about interest in training and this was at the point that -- it might have been back in like 2006 or '08, when we had an interagency monitoring plan for detecting avian influenza. When that particular outbreak passed, there may have been loss of momentum on the training program but honestly I shouldn't speak any more on this because I don't have direct knowledge on that. But that's my vague recollection.

MADAME CHAIR HOSETH: Maybe if we could have it as a follow up item because I know that there was, at one point, we were going to be trained within our regions of how to collect birds within the regions.

Go ahead, Angela.

MS. MATZ: I also wanted to emphasize that in addition to training as to how collect birds we need to be cognizant of the agency capacity to accept those. So I'm not sure what the response for next summer is going to look like. If the risk to humans remains pretty low we are going to be working very much with a shoestring budget and I hope the National Wildlife Health Center will be able to support us more and towards the end of this summer they were able to support us more so that we weren't, you know, filling Bob Gerlach's funnel with only avian influenza cases. He has a lot of other work to do besides avian influenza. But in addition to being able to properly collect the birds we have to make sure that the other end is available, where those birds are flowing in, what are they being tested for, and that is a function of agency capacity as well.

 If I may, I would like to have Mike go. I think he has -- he provides a really good picture that's Alaska specific, and this might spark more questions on behalf of the Council. So, Madame Chair, if that's okay to transition to Mike, I would suggest that.

MADAME CHAIR HOSETH: All right, thank you, Angela, and thank you for your good overview on your presentation. Go ahead, Mike.

MR. BROOKE: All right, hi, again, everybody. I'm Mike Brooke with ANTHC. Thanks for the opportunity today. What I was going to touch on today is what I've been referring to as opportunistic surveillance for HPAI. So basically everything that we've kind of done has been under the umbrella of opportunistic surveillance so I wanted to kind of walk through some of the things that we did and some of the ways that we visualize data.

During this summer's outbreak, this is how you can get in touch with me if you want to reach out.

One of the things I do over at ANTHC is the LEO Network, the Local Environmental Observer Network. I'm sure a lot of you know about it. If you don't, you can -- this it here, this is LEO Network.org. You can go out there and check it out. Again, it's the Local Environmental Observer Network. This is something that's not Alaska only but it's very concentrated in Alaska, it's something that we started at ANTHC.

What this is, if you don't know, is a place for people to share observations of unusual environmental events. So unusual is the key thing. These are things that people have not been expecting. So, for example, just in the last week we've got reports of dead otters near Seldovia, we've got a landslide in Juneau, we've got oyster and mussel harvesting changes on the East Coast of Canada, a potential invasive dandelion in Nuniviut in Canada, another landslide in Yukon and then we're into a lot of reports about the storm in Western Alaska, so Merbok.

So as you'd expect, observations of unusual bird behavior was something that we got a lot of in the spring. So the first one that we got was this one. So Gay Sheffield was not the observer but somebody related this to her and she reported it in to us. Incredibly this was observed from a plane. So that is very unusual for us to have an observation from an airplane. But somebody was flying in a small plane, probably a thousand, or 2,000 feet up and saw five or

six swans floating in a strange way in a pond and this is something that this person had never seen before. We don't know if they were dead. We don't know if they had HPAI because we didn't go and collect them, you know, and that kind of stuff. But it was, you know, the first unusual sort of signal of strange bird behavior that hit the LEO Network. So this was May 5th. So that pretty much hits with when it was starting to pop everywhere else.

Now, this is a LEO post, this is a LEO And LEO is a first signal kind of a observation. system. This is the type of thing where, again, it's that whole bit about being unusual. And so once something is kind of known and it's out there it doesn't tend to get reported into LEO, so consequently -- you know, this is -- this is something where somebody observed something and we go and we often have photos and we maybe have videos and we have -- we get subject matter experts involved, in this case Angela and Andy, we link it to other things and we reference all kinds of support materials and that kind of stuff. It becomes a mini publication. But to call -- it's not the type of surveillance you would want to do for something that's ongoing and so that's when we have to lean on other information sources and that's really what we did. But just to finish up with LEO, what we got over the rest of the summer was observations of what were probably HPAI, some confirmed, some not, from elsewhere in Alaska and other parts of the North and various other places. These are in wild birds. And so we had this ability to sort of understand first signals that were popping in other places, but you can tell, this is definitely not the way you would understand the full scope of an outbreak like that. You need something else for that. And that's where the U.S. Fish and Wildlife hotline came in.

So Angela already showed this one.

This is the AMBCC handout, it touts the hotline number and the email address. This is a very similar handout that was specific to the Bering Straits. I don't know if Gay Sheffield put this together or somebody else there but, again, touting the hotline, so pointing people at the hotline. So in the spring, I think Eric was answering the hotline, it started to -- the hotline started to light up and people were starting to report these things. So you

1 can see there's a big difference between surveillance and LEO, which is sort of -- if something's unusual tell us, it doesn't really matter what it is versus this, which is, here's a thing that's going on, we want 5 to know about it and here's specifically how to report 6 it. So what ended up happening was a lot of calls to 7 the hotline and that got reflected in very much an operational data set and I'm only showing it -- this is 9 a the spreadsheet from Fish and Wildlife that was 10 shared with me. The only reason I'm showing it is to 11 remind everybody what real world data looks like. It's 12 something that you might have to some work to get your 13 head around and it's not something that you can glance 14 at and think, okay, now I get it, now I see what's 15 going on here. So what we did was we decided that we 16 wanted to be able to understand this data set a little bit better. Ideally we'd like to be able to map 17 18 things, we'd like to be able to graph things and that 19 kind of stuff. So that's what we tried to do. We 20 tried to understand this by really upping our ability 21 to geocode these types of locations, the ability to 22 understand, of course, time, and the ability to 23 understand species groups. And so we did that and that 24 allows us to do all kinds of interesting things. So 25 this is a map of that spreadsheet. And there's 26 actually a lot more dots than it looks like on here 27 because they tend to be reported in clusters, and so 28 there's a lot of stacked up dots. Sometimes you have 29 to go in pretty deep to start to see them 30 differentiated. This is Golovin, for example, four 31 dots, but once you're zoomed out it's hard to see. But 32 what we have the ability to do is now map these, our 33 geocoding capability is quite reliable. I think it's about 95 percent for that data set that I showed you 34 35 which is better than I thought we'd be able to do. A 36 lot of those are not even community names, they're 37 names of camps, they're names of rivers, they're names 38 of things like that. So being able to geocode those 39 was a challenge. But what this allows us to do is to 40 go and, for example, filter this in a lot of different 41 ways and we can look at, for example, we can look by 42 species group. So this is going to be really a fruit 43 salad of colors here. But what you can see is these 44 are the groups that we have in this data set and we are 45 able to go and tease out where they are if we really 46 want to. This is a useful thing for us to do. One of 47 the things that is probably even more useful is that 48 we're able to filter by species and bird condition but 49 in the tribal health system we have a very important 50

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thing that we find ourselves needing to do very often, which is to understand what tribal health regional partner is at play, so who is the regional health provider in a given place. And we're able to do that because we know what communities, what THOs. And so we're able to do things like that and filter by that. We're able to do the same thing with boroughs and census areas, which is another way of grouping things geographically. We use less in the tribal health system but it's used all over the place in State and Federal agencies. We're able to filter by date and other things like that. So given that, we're able to look at this in a number of different ways. Here's what our raw data looked like. We are able to -- let's see, we're able to look at, for example, details behind any of these things, you can see they all get geocoded. We're able to, for example, look at an equivalent plot to what Angela showed earlier, which is, these are the species that have been reported through this system. This is a few hundred calls to the hotline that have been vetted insofar as what you can do over the phone. These are not confirmed cases, by any stretch. Some may have been confirmed after the fact, but that is not a criterion for inclusion in this data set, it is only plausible HPAI as can be ascertained over the phone. So very much, again, an opportunistic -- opportunistic data set, but one that I think you can get your head around a lot better when you see it in a form like this. That's what I've found when I have shown this to various people.

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Now, there's a third data stream and that's the confirmed cases. So we talked about that. This is Dr. Gerlach's office. Those are being tracked on this website so here are the confirmed cases, I think Angela said 79 -- I think that's the number as of right now. We've got species, we've got where and that kind of stuff. So, again, we wanted to be able to see -- look at these things somewhat equivalently with the rest of those -- with those other data streams. And when you're dealing with geospacial data like this and a couple different geospacial data sets it's tempting to combine them and we decided not to do that. We thought that the criteria for inclusion in this data set versus the other one are so radically different and the way that things find their way into each one, you would not want to combine them. You gain nothing by doing that. And I think that you confuse people. So we prepared a separate visualization of that. That's

1 what this is. So this is taking Dr. Gerlach's data set and showing it in ways that had value for our constituents. The ability to see how these things 4 light up on the map is useful right off. The fact that 5 as far as confirmed cases go -- this is the Bethel census area, you can see this bar is the longest, 6 7 that's the Bethel census area. But interestingly, there's also a time component to this. When did things 8 9 hit this data set and we do try to look at that a 10 little bit. The Bethel census area has not been kind 11 of the main focus of these positive cases the whole 12 time, it was a bit of a latecomer. And so you can see, 13 for example, North Slope and Bethel come in about 14 halfway through, or two-thirds of the way through this 15 sort of timeline of cases. Now, why is that? Is that because the birds weren't there or is it because the 16 17 response to this outbreak wasn't looking there at the 18 time. Well, I think it's probably both. But what's 19 interesting about that is it sheds light on not only 20 the movement of the birds, but also the way that the 21 response looks in various places and the way, for 22 example, more populated places are going to tend to 23 have these things tested much faster or, and I think 24 Angela brought this up, places that have a U.S. Fish 25 and Wildlife Service camp nearby where they can get a 26 good carcass. They're going to have the positive test 27 results. So these are all biases built into all of these data sets. And, you know, on some level it 28 29 becomes discouraging. It's sort of like, well, of 30 course, we don't have randomly sampled data, we don't have exhaustively sampled data, we have a ton of biases 31 32 built into this and is it -- is there any hope. But I 33 think that there is actually. I think that the ability 34 to take some of this stuff and to get it into a 35 glanceable format, something like this, I have found 36 great value in that. So that's kind of -- to me that's 37 one of the takeaways. One of the lessons learned from 38 going through this exercise and collaborating a little 39 bit with a Federal agency and a State agency and then 40 sort of shopping this around within ANTHC, on various 41 webinars, I've kind of shown this around quite a few 42 times. And some of those lessons that I've learned. 43 One is that even if you have just a small amount of 44 data, it's worth it to aggregate it into some --45 visualize it and aggregate it in some way that makes it 46 easier digest, glanceable, so that might mean a map, 47 that might mean one of these charts. If we're talking 48 about species, we can look at this, this is going to be 49 consistent with what Angela already showed, the Bald 50

Eagle. Did this thing hit the Bald Eagle harder, probably a little bit, but probably largely it's that when somebody sees a dead Bald Eagle they notice, it's not a miss-able bird. And so, you know, interesting things like that.

It's great to have that in a digestible form. And it almost doesn't matter how little data you have you get benefit from doing that.

The other lesson that I learned from this is that this idea of opportunistic, maybe it's an Alaska thing, but people expect opportunistic data. They don't get thrown by it. As a matter of fact, this idea that just because you don't have a dot right there on the map means nothing happened, people don't assume that, they assume, okay, well, you know, there's biases, you know, this is Alaska, you can't possibly cover everywhere. And so I think people get that. There's an intuition to that and that was what I found. When I would show this I would go into a big song and dance about the biases inherent in this thing and people didn't need to hear it they got it immediately. That was just my experience. It may not be like that everywhere. We took great pains to talk about what this was not, and I found that a lot of people got that already.

And then the last takeaway I would say before I stop, is just that this opportunity to kind of be a little bit transparent about data and show it in a way that's sort of very digestible is a great awareness raising tool. So it gives you -- every time I show something like this it's an opportunity to talk about other aspects of this. For example, the hotline. For example, safe handling of birds. The things that Angela already went over. Data literacy are huge. People -- helping people interpret something like this and having it be a little bit of an opportunity to get to talk through this idea of biases and negatives versus knows and all that kind of stuff is huge it's a great opportunity to do that and it's been rewarding to get to do it.

 So I want to thank U.S. Fish and Wildlife and the State Vet of Alaska for allowing us to collaborate a little bit on this. I think it's been really useful for us. I think it's a blueprint for, you know, the next time we have something like this. I

0182 1 think there's a lot of opportunities between everywhere from the LEO Network to things that are lot more formal than that to be able to do this kind of opportunistic surveillance and to do it in a way that has some value 5 to people that live in the community. 6 7 So I'm going to stop right there, 8 thanks for your time today. 9 10 MADAME CHAIR HOSETH: Thank you, very 11 much, Mike, for that good overview. And when -- how 12 often does that LEO Network meet, is it monthly? 13 14 MR. BROOKE: So LEO Network, I mean 15 it's available online all the time but we do -- we have 16 a quarterly webinar. 17 18 MADAME CHAIR HOSETH: A quarterly, 19 okay. 20 21 MR. BROOKE: And if you join -- if 22 you're from Alaska and you join we automatically put 23 you on a list and send you emails about that. We had 24 our -- I think we had our last one about a week ago so 25 it's going to be a little while until the next one. 26 MADAME CHAIR HOSETH: Okay, thank you. 27 28 29 MR. BROOKE: I see a hand up. 30 31 MADAME CHAIR HOSETH: I see Julian, go 32 ahead Julian. 33 34 MR. FISCHER: Yeah, hi, thanks. Mike, 35 thanks for the presentation. I'm wondering if those 36 visualizations that you showed, are those available 37 online and, if so, are you tracking who's observing 38 them, where they're from and what questions they have. 39 I'm curious about -- the reason I ask that question, I'd like to know in your opinion what -- who's 40 41 benefitting from it and in what ways. You mentioned 42 having the conversations about data literacy but in 43 terms of them understanding maybe risks to their health 44 or their birds who's observ -- who's watching these 45 visualizations at this point? 46 47 MR. BROOKE: Yeah, so I mean it is 48

available online. Those visualizations are available online and we've made them available via -- we have a

quarterly one working group that I know some of you on this call also attend that. And these are available via that website, that was just the place that we decided to put them because that's kind of how this got going, this collaboration got going. So that's where they are, so they are available online. That's one group where we've shopped this around and kind of got this collaboration going. The LEO Network, the webinars, which were just mentioned is another place where we have presented this. So that's something where LEO members from Alaska get together online and we talk about this kind of stuff and have presentations of -- from various subject matter experts. The last one we talked all about the storm in Western Alaska but the one before that we talked about HPAI at length.

So I think that's a good opportunity, that's a good audience to get together.

Other groups within ANTHC that work on issues, for example, food security, we've looped them in on this kind of stuff.

I'm trying to think of other cases. We had an AdHoc HPAI kind of working group that spun out of that one health group -- a lot of overlapping people, some people that are on this call and that was a place that we used that kind of stuff.

I think that what I would like is if, you know, we were building this as we went and so I would hope that maybe -- if this happens again, maybe next summer, we would be better prepared and be able to have something that's a little bit more polished and a little bit more -- that we could sort of be tracking from the beginning as opposed to always playing catch up and perhaps be able to have something a little bit more present in the way that we would promote it is probably via the LEO Network.org website which gets quite a bit of traffic, has a lot of search engine presence and that kind of stuff. So that's kind of our way. That would be our way of getting the word out about that kind of thing.

MR. FISCHER: Okay, just a followup, Madame Chair, if I may. So you mentioned your preferred route would be through the LEO Network but earlier you mentioned that ongoing situations like an outbreak are not well suited for the LEO Network, did I

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MR. BROOKE: No, you're exactly right. I think that the reason I bring that up is largely because of the, essentially the search engine presence that the LEO Network has. And so like for example that observation that I showed with that Gay Sheffield had put in, that had the hotline mentioned in it two or three times in the body of the post, which means it shows up in searches and all that kind of stuff. And so I mean our philosophy is that those kind of anecdotal observations that are very media rich photos and videos of swans swimming in circles and these things that are like very sticky on social media, we kind of try to harvest that kind of stuff, and that's -- that makes for interesting reading but that's a teachable moment. You know that's a place to say, and this is where you report this is to the hotline. And so it's our way of kind of like using the presence that we have to try to push people into the official channels. That's our goal. Our goal -- especially for something like this and I think this is something I -- it's something that I try to say often with the LEO Network is our goal is not to be kind of a network that replaces other ones, it's to be someone that can be very much a first signal system but then push people out to things that are more specific and more suited for what it is that they're noticing, if it's COSST, if it's an official Fish and Wildlife hotline, if it's another observer network somewhere else, and we try to push them in that direction, because it's more specific and suited to what they're observing. So that's why I meant LEO. It's to augment, you know, essentially to push people into these other places, that would be the idea.

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MADAME CHAIR HOSETH: Any more questions for Mike or Angela. Oh, Angela.

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MS. MATZ: Yes, Madame Chair, I didn't want to interrupt. I did want to say that someone, and I forget who it was mentioned yesterday that elders had not been harvesting waterfowl because they were afraid of the avian flu. And I want to reiterate a couple of things, Number 1, that the disease is still considered low risk to humans as of the CDC's website checked on Monday. But that always, and especially having ANTHC involved and having them share information with the tribal health regional organizations, that people

should be reaching out to their health care providers if they have questions on it. I think that's really important to remember and I know the capacity for all things varies across the state, but I was particularly struck by that comment and I wanted to make sure that people did know that they should reach out to their health care provider if they have a question about the risks from avian influenza.

Thank you. And, thank you, everyone, for the time today. I don't mean to cut it off, I'm happy to take more questions but I also did want to say thank you.

MADAME CHAIR HOSETH: Thank you very much. Any more questions or feedback for Angela or Mike. Julian, you still have your hand up, are you -- do you have anything more to add?

 $$\operatorname{MR.}$  FISCHER: No, that's a remnant hand, I'll lower it. Thank you.

MADAME CHAIR HOSETH: Just wanted to make sure. Thank you guys very much for that good overview presentation. I hope you guys will -- are you guys planning on being at our spring meeting as well.

MS. MATZ: If requested, I feel certain that Migratory Birds will support a presentation there. I'm not sure who it would be from Fish and Wildlife Service but, again, that is something that if you want it you should definitely request it.

MADAME CHAIR HOSETH: Okay.

MS. MATZ: I think we....

 MADAME CHAIR HOSETH: I think it would be good for an update in the spring, if we're going to, you know, not knowing if it's going to go away or if it's going to get in -- if it's going to increase or not.

MS. MATZ: I agree. And is it also -you know we didn't see the first confirmed cases until
late April so depending on when the meeting is, is it
also okay to provide updates via email to the AMBCC
rather than.....

## MADAME CHAIR HOSETH: Yes.

MS. MATZ: Okay. Okay. So, Julian, that is something that Mike should also take into account, it's just we may not have information based on the migratory schedule and what we saw this year at the time of the scheduled spring meeting so I just wanted to make sure that an alternative way was sufficient. Okay.

 $$\operatorname{\textsc{MADAME}}$$  CHAIR HOSETH: No, that would be good and the information that you provide would match with that new committee that we just formed.

15 MS. MATZ: --

MADAME CHAIR HOSETH: Thank you.

MS. MATZ: Thank you.

MADAME CHAIR HOSETH: Thank you, Mike and Angela. Okay, that looks like we've completed new business. We're down to other business, and does anybody from the public have any comments.

(No comments)

MADAME CHAIR HOSETH: None. Okay. So now it's Council and Staff comments. Usually we do a roundtable kind of overview of the meeting. I'll start with you, Ryan.

MR. SCOTT: Thank you, Madame Chair. It was really good to see everybody again as was expressed many times I wish it could have been in person and am definitely looking forward to that as soon as we can. It's always an amazing amount of information that we learn both from people on the ground in the communities that they live and places that they practice subsistence lifestyles and all the way up through the agencies and then something like what we just heard tracking HPAI from all over Alaska and to the Lower 48.

Just very grateful and thank you to everybody for being able to join us and to Patty and Michael for putting it all together and want to -- I know she's not on here but I want to welcome Wendy once again as a new member and, yeah, looking forward to

0187 seeing folks this coming spring. 2 3 Thank you. 4 5 MADAME CHAIR HOSETH: Thank you, Ryan. 6 Julian, you just hopped in this seat a little over an 7 hour ago, did you want to give any closing comments for 8 U.S. Fish and Wildlife Service. 9 10 MR. FISCHER: Sure, I'll be brief. 11 Just on behalf of Wendy Loya and the Fish and Wildlife 12 Service, thanks everyone for participating in this. 13 I've been involved in these meetings for many years and 14 it's always clear to me that we all share a lot of 15 values regarding migratory birds and we're all in this with the same intent, for conservation of migratory 16 17 birds. So I love hearing the reports from the 18 different regions. It's always fascinating. I learn 19 something every time. Thanks also for ideas about 20 other information to present. That really helps focus 21 these meetings so appreciate it. 22 23 I also want to say on behalf of Eric 24 Taylor on his way out of Fish and Wildlife Service, he 25 has remarked numerous times to me how much he has loved 26 working with all of you. So I just -- it's unfortunate 27 he couldn't join us for this meeting this time, but he 28 holds a very deep warm place in his heart for all of 29 you. 30 31 And with that I guess I'll just end 32 there, look forward to seeing you all in person next 33 time we meet. 34 35 Thanks. 36 37 MADAME CHAIR HOSETH: Thank you. 38 if you do keep in touch with Eric, if you could let him 39 know that we missed him at our meeting today. 40 41 We'll cut into our roundtable 42 closeouts, Peter, do you have any closing comments. 43 44 MR. DEVINE: Yes, thank you, Madame 45 Chair. Thank you everybody for all the great input and 46 all the information we got and look forward to seeing 47 everybody in the spring meeting. 48

MADAME CHAIR HOSETH: Thank you, Peter.

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0188 1 I'm glad you were on with us today and looking forward 2 to seeing everybody in the spring as well. 3 4 Jennifer, or is it Martin. 5 6 MR. ANDREW: Yeah, Martin here. 7 very glad that I got to join today. You know I always 8 look forward to these meetings because, you know, I'm 9 always learning something new and, you know, just 10 always looking forward to these types of meetings and 11 looking forward to seeing everybody in the spring. 12 13 Thank you, Madame Chair. 14 15 MADAME CHAIR HOSETH: Thank you. 16 glad you were able to join us today as well. 17 18 Priscilla. 19 20 MS. EVANS: Camai. 21 22 MADAME CHAIR HOSETH: Hi. 23 24 MS. EVANS: Hi. 25 26 MADAME CHAIR HOSETH: Did you -- if you 27 had.... 28 29 MS. EVANS: Oh. 30 31 MADAME CHAIR HOSETH: .....any closing 32 comments for our couple day meeting that we had or..... 33 34 MS. EVANS: No. I just can't wait to 35 sit with everybody this spring. Thank you for all the 36 information and hope everybody has a good fall on their 37 hunts. 38 39 MADAME CHAIR HOSETH: Thank you. 40 Gloria. 41 42 MS. STICKWAN: I just want to say thank 43 you for the information and it's always good to listen 44 and hope to see all in the spring. And I just wondered if we could do something, get a small gift for Eric. 45 46 47 MADAME CHAIR HOSETH: Yeah, that would 48 be nice but we could have the email thing that goes on 49 after the meeting.

0189 1 Brandon. 2 3 MR. AHMASUK: Yeah, thanks everybody. 4 Thanks for the information. As always it would be better to be face to face but, you know, the situation, 5 you know, can't get together right now but, yeah, 6 7 hopefully this next storm is not anywhere near as the 8 last one. As always what I tell people in our region, you know, for the other regions, anything out of the 9 10 ordinary, report it, you know, as the best we can do. 11 I did like what Julian said about, you know, we're all 12 here, we all love the resource. You know this meeting, it is one of the meetings that I do enjoy coming to, 13 14 the other one is the (Indiscernible) Committee. So 15 anyway, thanks. 16 17 MADAME CHAIR HOSETH: Thank you. 18 Cyrus, are you still on, or did you -- I know that you 19 had a meeting, I don't know if you're still here. 20 21 MR. HARRIS: I am. My meeting starts 22 at 3:00 so the timing is just right. But, thank you, 23 Madame Chair. Just as well as everybody, I really 24 enjoy these migratory bird meetings. I pretty much 25 like to thank, you know, all the players within the 26 AMBCC, the Fish and Wildlife Service, Alaska Department 27 of Fish and Game and Native Caucus. Great information shared this past couple of days. Great information 28 29 shared within the new business. Great topics to 30 discuss, interesting topics, of course, the avian 31 influenza and how it's handled, taken care of. Will 32 Lacey with the budgets, kind of give us some 33 clarification in some areas, not all the way fully, 34 but, I guess, you know, he's -- it's always -- it's 35 good to know that he's with us and he's willing to help 36 our regions wherever questions may arise. 37 38 But, yeah, will be looking forward for the spring meeting here and go from there and be 39 interesting to get together again. 40 41 42 All right, that's it. Thank you. 43 44 MADAME CHAIR HOSETH: Thank you, Cyrus. 45 46 Taqulik. 47 48 MS. HEPA: Hi. I just wanted to say, 49 again, thank you. Lots of good information. As

everyone else said, it's difficult sometimes to do Zoom meetings especially when you have people in our office or around us wanting our attention and we're trying to double-task. I do look forward to meeting everyone this spring and I wish you all a good winter.

Thank you.

MADAME CHAIR HOSETH: Thank you.

Coral.

MS. CHERNOFF: Yeah, I just want to say thank you to everyone who attended the meetings yesterday and today and came to share with us. Thank you for that. And I wish everyone a healthy fall. See you in the spring.

MADAME CHAIR HOSETH: Thank you, Coral.

Randy.

MR. MAYO: Thank you. Yeah, I'd just like to thank everybody all the way around that put all the hard work into this effort of migratory bird conservation that we all depend on and we want to see for the future generations. And it's good to hear information on what's going on outside of our region that can affect us with our fish and birds and what's going on out there in the sea there, you know, it has affects on us in the Interior. There was a lot of good discussion and a lot of good information that I'll be able to bring back to my management body and carry on the work.

So thank you everyone.

MADAME CHAIR HOSETH: Thank you. And my comments are, thank you to everybody with all the prep, gathering everybody together, really great presentations. We had great committee reports. I think it was helpful at our spring meeting when we went through our committees and actually set meetings and we had a lot of committee meetings. I know emperor goose committee takes up a lot of our -- a lot of our time and really important issues that we're working on within each committee. I do like Robb's comment that we all have hats and some of ours are in the closet and we forget sometimes the hats that we have, that was a

fun comment that he had to share.

I do want to say that I think one of the highlights of AMBCC that we did have this year was attending the Pacific Flyway Council meeting in Juneau and giving that overview and being able to let the Pacific Flyway Council know how important AMBCC is and how important us, as stewards of our lands, keeper of the birds, as our (Indiscernible) Council here in Dillingham is what our Council name is. And as we sit at this meeting as a co-management Council to bring our added information of what we have, from our elders and from our Council meetings and from the people who live in each individual region, the concerns, the comments, the issues, the good and the bad of -- as we are all in these regulatory cycles, this is just one of many that we work with, I think this is one of the -- this is one of my favorite Councils as well to be on, just with the history that we have with everybody and the relationships that we are building are really, really important. And AMBCC is looked at, throughout the state of Alaska, as a model for co-management, and we need to have more co-management on different resources within the state of Alaska. So I think that that is also really important.

I just wanted to thank everybody.

Thank you, Patty, for all your hard work that you've done to hold us together, you know, during these times, especially with everything -- what everybody's going through, so I just wanted to extend my gratitude and thank you, to you, especially.

With that, thank you guys, and I'll call on you, Patty, if you had any Staff comments.

MS. SCHWALENBERG: Thank you. Not too many. Just echoing what everyone else said and I really appreciate everyone sending me their presentations so we could put them in the packet and thank you to the presenters. I know it's a lot of work to put something together and present it to a group via Zoom so I appreciate that and I'd also like to thank the guests that stuck with us for the last two days and those people that are new to the AMBCC as well. So looking forward to the spring meeting.

MADAME CHAIR HOSETH: Thank you. And I

think that we'll have a celebration potluck, hopefully, when we're all together in the spring, I think that that potluck that we had the last time was really good so we could plan something with that.

 $$\operatorname{\textsc{Do}}$  we have any more Staff comments, if anybody wanted to say anything. I know Michael is a part of our team now.

MR. OPHEIM: Which Michael?

MADAME CHAIR HOSETH: You.

MR. OPHEIM: I saw a couple and I was -- no, it's been great. I love the education, hearing everybody talk, especially from the communities that are seeing all these things first hand so this is great. I've really appreciated the time.

MADAME CHAIR HOSETH: Thank you. Well, now is the time, Ryan, if you want to put out your right hand -- there you go, I'm transferring the gavel to you.

CHAIRMAN SCOTT: All right, perfect. Thank you, Gayla. Thank you. I thank you for your leadership over the last year and we do miss Eric as well. But let's talk about what we're doing next.

So I think the only thing we have to left to do is to start talking about when we want to get together in the spring. And I'm just going to go out on a limb but it sure sounds like we should plan for an in-person meeting, I think I heard that overwhelmingly and I would concur with that. And, Patty, you can correct me if I'm wrong, but don't generally we get together in April?

MS. SCHWALENBERG: Yep, it's usually the first week in April, on this calendar, for 2023 it looks like the week of the 3rd through the 7th.

CHAIRMAN SCOTT: Do people want to take a gander at their calendars real quick and see. Does anybody know if the Federal Subsistence Board has set their spring meeting date yet -- it's usually later in April so.

MR. FISCHER: From the perspective of

0193 1 Fish and Wildlife Service, I checked with Wendy before the break and her schedule's currently open. The participation of Migratory Bird Program, in general, is better in the early part of April if possible as things really start to ramp up with field work and planning 5 for other activities. So I'll just put that in there. 6 7 But maybe we could meet later if need be but early April has worked well in the past. It's usually right 8 9 around the time we're celebrating the opening of the 10 current year's hunt too. 11 12 CHAIRMAN SCOTT: That's great, thank 13 you, Julian. Well, how about April -- I assume we want 14 to plan for a two day meeting so April 4th and 5th or 15 5th and 6th. Anybody have any preference. 16 17 UNIDENTIFIED VOICE: 4th and 5th will 18 work for me. 19 20 CHAIRMAN SCOTT: Great. 21 22 MS. SCHWALENBERG: Me, too. 23 24 CHAIRMAN SCOTT: Gayla, go ahead. 25 26 MS. HOSETH: Yeah, Mr. Chair, that would be good, on the 4th and 5th. I don't know if we 27 28 wanted to have in-person committee meetings like we 29 have in the past if we wanted to have committee 30 meetings maybe on the 4th and then the meeting on the 31 5th and the 6th. 32 33 CHAIRMAN SCOTT: What's 'the will of 34 the Council, that seems pretty reasonable to me. 35 got everybody in one spot. 36 37 MR. FISCHER: Good. 38 39 MS. EVANS: That'll work for me. 40 41 MR. DEVINE: That works for me. 42 43 CHAIRMAN SCOTT: Great, thank you, 44 Peter. Thank you, Priscilla. Okay, well, let's plan for that, committee meetings on the 4th AMBCC Council 45 46 on the 5th and 6th, and Committee chairs that gives

you, you know, gives you a little time to get things

ready to go and start putting that all together and we

can check in as we get a little bit closer and see how

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      that's coming together as well.
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                      Okay, I better make a note of that
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      though.
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 6
                      Okay, great, well, does anybody have
 7
      any other comments or anything for the good of the
 8
      whole.
 9
10
                     (No comments)
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12
                     CHAIRMAN SCOTT: Not hearing any.....
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                     MR. DEVINE: Yea, Mr. Chair.
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                     CHAIRMAN SCOTT: Go ahead, Peter.
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                     MR. DEVINE: I think I come up with a
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    name for our new committee, AMBCC Environmental Impact
20
    Committee.
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22
                     CHAIRMAN SCOTT: There you go. So
23
    ordered.
24
25
                     All right, well, thank you again
26
    everybody for being here for the last couple of days
27
     and to all the folks that did join us, guests, and for
28
     the information provided, Patty and Michael and Gayla
29
     for getting things organized and having it up and
30
     running for us. I wish you the best fall. I know the
31
    West Coast and Northwest Coast is looking at another
32
     one, another storm coming, and thinking about you all.
33
     I hope things go well and that you're able to get out
34
     and enjoy the land that we're all so privileged to live
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37
                     Thank you, again, for your time, be
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     safe and good luck out there this fall.
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                     I will take a motion to adjourn.
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                     MR. HARRIS: So moved.
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                     CHAIRMAN SCOTT: Cyrus.....
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                     MS. HEPA: Second.
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                     MR. AHMASUK: Second.
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1	CHAIRMAN SCOTT: All right, it's been
2	moved and seconded. All in favor
3	
4	MS. SCHWALENBERG: Who made a motion,
5	sorry I couldn't it got garbled.
6	
7	CHAIRMAN SCOTT: Cyrus made the motion,
8	and I don't know who I can't remember who seconded.
9	
10	MS. SCHWALENBERG: Who seconded?
11	
12	MS. HEPA: Taqulik.
13	
14	MS. SCHWALENBERG: Okay, thanks.
15	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1
16	CHAIRMAN SCOTT: All those in favor say
17	aye.
18	<i>ω<sub>1</sub></i> ο .
19	IN UNISON: Aye.
20	
21	CHAIRMAN SCOTT: Any opposed, anybody
	else want to hang out on Zoom, I could be here for a
23	bit.
24	
25	(No opposing votes)
26	(and afficulty)
27	(Laughter)
28	( 5 7
29	CHAIRMAN SCOTT: All right, no opposed,
30	so we're adjourned. Thank you again everybody, have a
31	great afternoon and enjoy your fall.
32	g
33	(Off record)
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35	(END OF PROCEEDINGS)
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1 2	CERTIFICATE
3	UNITED STATES OF AMERICA)
4	) SS.
5	STATE OF ALASKA )
6	,
7	I, Salena A. Hile, Notary Public in and
8	for the state of Alaska and reporter for Computer
9	Matrix Court Reporters, LLC, do hereby certify:
10	
11	THAT the foregoing pages numbered 02
12 13	through contain a full, true and correct Transcript of the ALASKA MIGRATORY BIRD CO-MANAGEMENT
14	COUNCIL MEETING recorded via Zoom;
15	COONCIL IMPLIES ICCOLAGE VIA BOOM,
16	THAT the transcript is a true and
17	correct transcript requested to be transcribed and
18	thereafter transcribed by under my direction and
19	reduced to print to the best of our knowledge and
20	ability;
21 22	
23	THAT I am not an employee, attorney, or party interested in any way in this action.
24	party interested in any way in this action.
25	DATED at Anchorage, Alaska, this 12th
26	day of January 2023.
27	
28	
29 30	
31	Salena A. Hile Notary Public, State of Alaska
32	My Commission Expires: 9/16/2026
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