SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

HABITAT AND ECOSYSTEM ADVISORY PANEL

Webinar

January 28-29, 2026

Transcript

Habitat and Ecosystem Advisory Panel

Stacie Crowe, Chair	Steve Miller
Paul Medders, Vice Chair	Simen Kaalstad
Anne Deaton	Dr. Laurent Cherubin
Dr. Matthew Kenworthy	Dr. Matt Johnson
Gregg Bodnar	Scott Kathey
Dr. Brenden Runde	Laura Busch
Cameron Luck	Kevin Spanik
Benjamin Thepaut	Thomas Jones
Paula Kenner	Dr. Wilson Laney
David Whitaker	Rua Mordecai
David Webb	Stephen Morrison

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Observers and Participants

Other observers and participants attached.

The Habitat and Ecosystem Advisory Panel of the South Atlantic Fishery Management Council convened via webinar on January 28, 2026, and was called to order by Chairman Stacie Crowe.

MS. CROWE: Okay. I believe I have unmuted everyone that is on the advisory panel. If not, just a quick little rundown for everyone on what you should be seeing. You should be seeing the very top of the agenda. Stacie Crowe is, of course, our chair. She is going to be leading. We also have Trish Murphey on here, who is our committee council chair, and then Paul Medders is our vice chair, and so welcome, everyone.

On the right hand side of your screen, there should be the unmute button. Make certain to keep it muted unless you are speaking. That way, we can get rid of -- Make sure that we don't have too much background noise, as well as, on the right-hand side of your screen, you should see a little button that looks like a curved line with four lines on top, like a little child's hand turkey. That is actually how you raise your hand.

If I have not unmuted you, and you are on the advisory panel, please go ahead and click that, and I will make certain to unmute you. Sometimes names get a little bit funky. We're only waiting on like three people, and so I'm not overly concerned, but I think we're good.

Okay, and so with that, then, Stacie, since you're calling in from the web, unfortunately, I cannot make you an organizer, and so we're just going to have to have a little bit more communication skills, and that's fine, but I'm going to hand it off to you, except we have one hand raised. Anne, I your hand is raised.

MS. DEATON: Because it looked like I wasn't unmuted, but now I am. Thanks. I guess I'm good.

MS. HOWINGTON: Yes. You're good, and I'm going to put your hand down for you. Okay, and so, just to run everyone through how this is going to be going on, of course, on the screen, you see the presentation. We have our agenda. We have our five presentations for today. These two are actually one together, and that's the flow policy. If, for some reason, we need to have a long discussion, and hands get raised, I will lift up this right here, and I will start putting down names. Stacie, of course, you can call on whomever you like.

Again, this is going to be for advisory panel only. If you are a member of the public, there is a public comment form at the beginning of this meeting, and at the end, and, if you would like to just send in a chat, or a question, you may do so. Again, go to the right-hand side of your screen. There should be a chat or a questions box. You can click on those, type it in, and I will do my best to get to you. I'm going to be running the screen, and so it might take me a second. Please have some patience with me. I appreciate it. So with that, then, Stacie, Madam Chair, it's all yours.

MS. CROWE: Okay. Thank you, Kathleen, and welcome, everyone, to our first annual January meeting of the Habitat and Ecosystem Advisory Panel. I am Stacie Crowe, with the South Carolina DNR, and serving as your chair for the panel. Usually at this point, we go around the room and introduce ourselves. Kathleen, do you want to do that, or would you rather people put it in the chat, their name and affiliation?

MS. HOWINGTON: We can go around and introduce ourselves, and so what I'll do is I'll actually call on the first name of the person, and then they can say who they are, and, of course, their affiliation, and if you want to do something fun, we can do that too, but name and affiliation, at the minimum, and so we can do something like favorite animal, if you want to break the ice with that, Stacie.

MS. CROWE: Okay. Oh, gee, you put me on the spot. Favorite animal. Well, right now, I'm just going to say my Labrador retriever, because he actually brings me a lot of joy throughout the day.

MS. HOWINGTON: Fantastic. Gregg, and don't forget affiliation as well, Stacie Crowe of SC DNR. Gregg. I just got you. What is going on? I see you're unmuted on my end. I cannot hear you. Okay. I cannot hear Greg, and so we're going to have to come back. Brenden, name and affiliation, please.

DR. RUNDE: Hi. Brenden Runde, with the Nature Conservancy. Favorite animal, Macracanthorhynchus boraginaceous.

MS. HOWINGTON: All right. Cameron. Cameron Luck, I have unmuted you on my end. Go ahead and check your audio.

MR. LUCK: There we are. Can you hear me?

MS. HOWINGTON: Yes, I can.

MR. LUCK: Great. Cameron Luck, at large, North Carolina. Favorite animal, I might copy Stacie and say my hound, Mango. She also brings me quite a lot of joy.

MS. HOWINGTON: Perfect. Benjamin.

MR. THEPAUT: Good afternoon, everyone. This is Benjamin Thepaut. I'm with the South Carolina Department of Environmental Services, in the Bureau of Coastal Management, and I'm the division director of the Coastal Zone Consistency Division, and my favorite animal is an orca, and that may be stemming from *Free Willy* as a young child, but I've never seen one in person, but orca is my spirit animal.

MS. HOWINGTON: It was a very impactful movie for a lot of us. All right. Paula.

MS. KEENER: Hi, everyone. Paula Keener, retired NOAA Marine Advisory Committee for the South Carolina Department of Natural Resources, and my favorite animal is Mycteroperca microlepis, the gag grouper.

MS. HOWINGTON: David Whitiker.

MR. WHITIKER: David Whitiker. I'm retired from the South Carolina Department of Natural Resources, and a former council member also. I guess my favorite animal is the Boykin spaniel.

MS. HOWINGTON: Paul Medders.

MR. MEDDERS: I'm Paul Medders, with the Georgia Department of Natural Resources, and I'm going to copy that trend. I've got a GST named Doughboy that brings me a whole lot of joy.

MS. HOWINGTON: Thomas Jones. Thomas, you need to enter your PIN, and so I have sent you a PIN. If you want to type that in, we'll come back to you, after we go back to Gregg. We're going to move on to Stephen Morrison.

MR. MORRISON: Hi. Stephen Morrison. I 'm on the advisory panel, a citizen member from Georgia. My dad is a commercial fisherman, primarily shrimp, off the coast of Savannah, and my favorite animal is the octopus, and, because I wanted to fit in, I looked up the Latin name, and it's octopus vulgaris, which is the common octopus, which is the one that I played with as a kid off the coast of Savannah.

MS. HOWINGTON: Matthew Kenworthy. Please make sure to mute yourself on your end, by the way, everyone.

MR. KENWORTHY: Hi, everybody. Matt Kenworthy, with Florida Fish and Wildlife Conservation, Florida's representative to the HEAP, and I'll go with cuttlefish.

MS. HOWINGTON: Awesome. Paul, make sure to mute yourself on your end, please. Steve Miller.

MR. MILLER: Hi. My name is Steve Miller. I'm at St. John's River Water Management District, and my favorite animal is the American shad.

MS. HOWINGTON: David Webb.

MR. WEBB: David Webb, in Florida, recreational angler, Board of Directors for the West Palm Beach Fishing Club. Bernedoodle, Maisie Mae.

MS. HOWINGTON: Anne Deaton.

MS. DEATON: Hello, everybody. My name is Anne Deaton. I'm with NOAA Fisheries, based at the Beaufort Lab, and I've been thinking about my favorite animal, and I love a lot of animals, but I'm just going to say I really like the octopus, too. It's amazing, but I'm going to say sea otters. I mean, who doesn't like a sea otter?

MS. HOWINGTON: Noah Claflin.

MR. CLAFLIN: Hi there. Noah Clarflin. I'm filling in for Matt Johnson, representing the NOAA National Marine Fisheries Service, the Galveston Lab, the Habitat Ecology Branch, and I'm partial to queen conch, strombus gigas.

MS. HOWINGTON: Scott Kathey.

MR. KATHEY: Did you say Scott?

MS. HOWINGTON: I did.

MR. KATHEY: Good morning. I'm Scott Kathey. I represent NOAA Office of National Marine Sanctuaries, specifically Monitor National Marine Sanctuary off North Carolina, Gray's Reef Marine Sanctuary off of Georgia, and Florida Keys National Marine Sanctuary. My favorite marine animal would be the sea otter.

MS. HOWINGTON: Laura Busch.

MS. BUSCH: Hello, everyone. My name is Laura Busch. I'm the Natural Resources Program Manager for the U.S. Navy in Norfolk, Virginia. I'm going to be a little bit different right now and say my not favorite animal is the polar bear, because I'm having trouble getting a permit for an exercise happening up in the Arctic right now.

MS. HOWINGTON: I love that. Laurent.

DR. CHERUBIN: Hi. I'm Laurent Cherubin, at Florida Atlantic University Harbor Branch Oceanographic Institute, and my favorite animal is Megalops atlanticus, and I just want to give a shout out to Cameron. Long time no see, buddy.

MS. HOWINGTON: Kevin Spanik.

MR. SPANIK: Hi, everyone. Kevin Spanik, representing South Carolina DNR and the Reef Fish Survey. For my favorite animal, I'll go with one my daughter talks a lot about right now, that's fun to say, and that's the axolotl.

MS. HOWINGTON: Wilson.

DR. LANEY: Yes, ma'am. Thank you. Good morning. Wilson Laney. At large, or something along those lines, and I'm representing North Carolina State University Department of Applied Ecology, and one of my favorite animals is the Atlantic sturgeon, Acipenser oxyrhynchus.

MS. HOWINGTON: Rua.

MR. MORDECAI: Hi, everyone. Rua Mordecai, U.S. Fish and Wildlife Service, coordinator of the Southeast Conservation Blueprint. Favorite marine animal, I'll go with --

MS. HOWINGTON: Thank you, Rua. All right. Thomas Jones, I have you unmuted.

MR. JONES: Can you hear me?

MS. HOWINGTON: We can.

MR. JONES: Fantastic. Tom Jones, Georgia recreational fisherman, and I'm on the board of the Georgia Wildlife Federation. My favorite animal is the African kudu.

MS. HOWINGTON: All right, and then Gregg Bodnar. Are you there?

MR. BODNAR: Yes, and can you all hear me yet?

MS. HOWINGTON: There we go.

MR. BODNAR: I will let you all know that the app on the phone does not work very well. I don't know what I did, but I kept pushing buttons, and now it works, and so you all can hear me, right?

MS. HOWINGTON: Yes, we can.

MR. BODNAR: My name is Gregg Bodnar. I am the Major Permit Coordinator for the North Carolina Division of Coastal Management, and I will buck the trend, and I will not say my new four-month-old puppy, but I will go back way to my childhood and say that my favorite animal is the coelacanth. I was that kind of kid growing up.

MS. HOWINGTON: Well, you're in good company. All right. Daniel Royster, your first and last Habitat AP. Welcome, Daniel. Congratulations on your promotion.

MR. ROYSTER: Thank you. Can you guys hear me?

MS. HOWINGTON: We can.

MR. ROYSTER: Okay. Thanks. Sorry I'm late, but, like Kathleen said, my first and last, and so sorry to be here for such a short period of time, but I'm with the North Carolina Division of Marine Fisheries, and I am the Fisheries Resource Specialist out of the Washington regional office, and so I cover most of the northern counties in North Carolina, and I guess we're naming favorite animals, and so the only thing I can think of, off the top of my head, is a red drum. That is my favorite fish to catch, and so thanks for having me.

MS. HOWINGTON: You're welcome, and then, of course, me, my name is Kathleen Howington. I am the Habitat and Ecosystem Scientist for the South Atlantic Fishery Management Council. I'm hoping you all know that, but that is more for the people who are going to transcribe this, and my favorite animal -- I have plenty of marine animals, but my favorite land animal is the potoo, because it is weird looking. Have fun Googling that, and so, with that, Stacie, our welcome and introductions are complete.

MS. CROWE: Great. Thank you, and so, with that finished, what we normally do next, as Kathleen mentioned earlier, is we do open the floor for public comment, and so I don't know if we have any additional folks on the line, but if we do, and anyone wants to make public comment, we can take that at this time, and then we'll also open it again at the end of the meeting. Hearing nothing, I'm going to guess we're not having any public comment now, and we will ask that again at the end, and so we'll go ahead and get started with our agenda.

MS. HOWINGTON: One moment, Stacie.

MS. CROWE: Go ahead.

MS. HOWINGTON: On the screen, there's one written-in comment. I'm assuming that this is regarding Coral 11/Shrimp 12, but it is on the screen for everyone to be able to see, and it's on the record.

MS. CROWE: Okay. All right, and so let's go ahead and approve our agenda for the meeting. We normally do that by a show of hands, and so we'll just have to use our hand button on the webinar, and so, anyone who approves the agenda, go ahead and raise your hand. Kathleen, are you going to be able to keep track of that?

MS. HOWINGTON: I'm looking at it right now, and making certain that none of our AP members don't -- It might be easier if we say, anyone who has an issue with the agenda, please raise your hand, and doing the opposite, but -- So, anyone who has a problem with the agenda, has an edit for the agenda, please keep your hand up. Everyone who approves the agenda, please keep your hand down.

MS. CROWE: This is the joy of virtual meetings here.

MS. HOWINGTON: I apologize. I would have clarified that. All right, and so we still have three hands up. David Whitaker, do you have an edit to the agenda, or an addition?

MR. WHITAKER: No, I don't. Sorry.

MS. HOWINGTON: Okay. Steven Miller, I still see your hand raised. Do you have any edits or additions? Steven. He is not unmuting himself. Steven, if you have any additions to the agenda, please shoot me a chat on the webinar, and so I'm going to say that the agenda was approved, unless I get a chat or an email from Steven.

MS. CROWE: Okay, and so let's go ahead and move forward then. Kathleen provided everyone with the briefing book, which hopefully we all took a look at, and so the next thing we do is approve the meeting minutes from our previous meeting, which was held in July. I guess we'll handle that the same way. If anyone has a concern or a correction to those meetings, go ahead and raise your hand at this time.

MS. HOWINGTON: Brenden.

DR. RUNDE: My first name is spelled wrong. It's also spelled wrong on the website.

MS. HOWINGTON: I keep changing that. I will get that fixed. I don't know when that edit happened, and it is systemic for some reason.

DR. RUNDE: That's okay. I mean, I can talk with my parents, and we can just we can just change it.

MS. HOWINGTON: No, and I'm putting it in my notes right now. I apologize again.

MS. CROWE: Okay, and so other than Brenden's name change, that we'll look forward to next time, it doesn't look like anyone else has a comment, and so, Kathleen, I think it's safe to say we have approval for the meeting minutes.

MS. HOWINGTON: Agreed.

MS. CROWE: Next up, are we going to have comments from Trish? I think I got out of order with the public comment.

MS. HOWINGTON: That's all right. Trish, are you there?

MS. MURPHEY: Yes, I'm here, and so I guess everyone can hear me.

MS. HOWINGTON: Yes, ma'am.

MS. CROWE: Yes.

MS. MURPHEY: Okay. Cool. Well, thanks, everyone, for being here. You know, again, we always appreciate all our advisory panels, and so thanks for taking the time to participate on this, and so I'm Trish Murphey, with North Carolina Division of Marine Fisheries, and habitat chair, Habitat Committee chair, and council chair, and so I just figured I would go through what had been happening for since your last meeting in July.

Since then, we had public hearings for the Coral 11/Shrimp 12 Amendments. We had one that was virtual, and we also had one in-person. The in-person one was held August 7 in St. Augustine, and the virtual was August 5, and the public could also provide online comment to the council website from July 22 to August 12, and so we got lots of comments, comments supporting the no action alternative. In other words, no change to the HAPC there, the coral HAPC.

There were concerns of structural damage to the coral, sedimentation risk, loss of habitats for snappers and groupers, and it would be a limited economic benefit to the rock shrimp fishery, and then comments that supported Action 1 and 2, which was different levels of opening that area. Those comments supporting that were about the historical use of those areas by rock shrimpers, you know, early on, before Amendment 8. There was no coral present in the area, based on mapping studies that had been done.

Shrimpers said they can avoid the coral. They also have VMS monitoring, and it would support their livelihoods to have this area open. It also supported the presidential executive order restoring American seafood competitiveness, and, you know, when this area is open, it's very beneficial to the fishery when there is low harvest in other areas, and so that was the public comment during the public hearings.

In September, and we met in September jointly, the Habitat and Shrimp Committees, and we reviewed all those public comments, and also edits have been made to the draft amendments, like the addition of the VMS heatmap. This was a map of the area before Coral 8 and after Coral 8, and there were updates to several chapters in the amendments, and also the addition of the bycatch practicability analysis.

The committees jointly approved the amendments for final review for the December meeting. Also at that meeting, the council received the report, your Habitat, your HEAP report, and it was agreed

to all the HEAP's recommendations, which included investigating the space program impacts, the food web integration plan, and the workplan, and then holding informational webinars.

Then, at the December meeting, we reviewed the update edits to the Coral 11 and Shrimp 12, and we had the intention to vote to submit those two amendments to the Department of Commerce. However, our lawyers advised us that we needed to hold off approving the amendment until after the economic and social environment sections were updated. I mean, they had only been updated through 2019, and they needed to be updated up through 2023 or 2024.

It was because of the government shutdown, and the loss of staff, and the agency just got behind on the updates and so, because of that delay, we actually had a special council meeting last week, January 23, via webinar, to view and approve the updated social and economic sections. We also had another opportunity for public comment, and then we did vote, nine to one, to send the amendments with Option 2 to the Department of Commerce, and that's pretty much it, in a nutshell, since July. Do you have any questions?

MS. CROWE: This is Stacie, and I have a question for Trish, and So what will happen next?

MS. MURPHEY: So it will go back, and Kathleen can help me with this, but it will go back to the IPT to start making all the final edits and, you know, cleaning it up, and then it will actually come to me for editing, and then it will be submitted to the Department of Commerce, and they will put it out for public comment as well, and I'm not sure how long -- Is that sixty days usually, Kathleen?

MS. HOWINGTON: Right, and so the process is the IPT leads will take one last look, and so that's me, Allie Iberle, and Karla Gore. After that, then we're going to send it to NOAA GC, to get one more look, and so that's going to be Anne, the new lawyer that has been hired, and Shep, as well as Myra, and one other person, to make certain that we're meeting all the NEPA requirements.

Then it's going to go to Trish. Then we're going to package it up, and send it off, and they're going to then release it for public comment for sixty days. After that, when public comment is closed, then I believe there's a response period, and then then that goes to the Secretary of Commerce, I believe. That's where it starts getting a little bit fuzzy for me, because, after that, it's out of my hands.

MS. CROWE: Okay. Thanks, and so it's a while then before anything actually happens.

MS. HOWINGTON: Yes. According to the December -- During the December council meeting, the Science Center representatives let us know that, even if the council approves this in January, it is most likely not going to be finalized, or we're going to get a final approval or disapproval, until mid-year, at the earliest.

MS. CROWE: Okay. Thank you. It looks like -- Did I see Wilson? Wilson has his hand up. Wilson, go ahead.

DR. LANEY: Yes, ma'am. Thank you. I just wondered, Kathleen or Trish, if there had been any more surveys done, you know, more recent surveys done, in the area that is proposed for opening.

MS. MURPHEY: The most recent survey was -- The most recent survey was -- What was the name of the research vessel?

DR. RUNDE: The Nancy Foster.

MS. HOWINGTON: The Nancy Foster.

MS. MURPHEY: Yes, and the Nancy Foster did a survey, and it was more it was -- It was like hydrographic, and, I mean, it wasn't just towing through. I think it was a little bit more thorough, but I'm not sure when that was last --

MS. HOWINGTON: I think that was 2025. Give me one moment to pull it up. I have everything here. If anyone is interested how to get to our briefing book archive, that's how. That's December. That wilk work. Excuse me for the scrolling, everyone. I want to make certain that I'm saying the right things. That's 2022. Here you go. This is the most recent mapping results from 2025, and this was from the Nancy Foster, and so you can see the topographic. They scanned this red area right there.

DR. LANEY: Okay. Thank you, and so nothing since then, right?

MS. HOWINGTON: No.

MS. CROWE: Anyone else have any questions for Trish? Okay. It doesn't look like any further questions. Thank you, Trish, for the update. Appreciate that, and so it looks like, next, we will move on to our first presentation, which is Kathleen, and she is going to talk about the integration of revised food webs and connectivity policy information into the EFH designations.

MS. HOWINGTON: Sorry, there's going to be a lot of me presentations during this meeting. It turns out it's difficult to get people over Christmas break to agree to present. Duly noted for next year, and so I hope everyone is seeing my screen. I'm just going to give you an update on the food web policy group.

Again, to remind you all where we were, in July of 2025, the food web policy group brought forth this plan of how to integrate prey information into EFH definitions. The goal was to identify very different life history wise species and then identify information of importance of each of those species, and so this was supposed to be like a test idea, to be able to try and get some results to integrate into the user guide and see how we can develop our best practices and our lessons learned.

We picked these test species, that the council agreed with, and they thought it had good variety. There was some debate on a few, but, ultimately, they agreed. The food web working group then met after the September council meeting, after these species were approved, and we had a little bit of a snag.

The working group expressed concerns about standardizing the process, because we are trying to integrate this predator-prey information from the Ecopath Ecosim model, and sometimes that grouping is just really broad, and so it's difficult to try and get specialists, even if we're only looking at these specific species.

Since that meeting where this, you know, complication was identified, me, Kevin Spanik, and Lauren Gentry were able to meet, and we think we have a way forward on how to at least identify habitats that are used by prey using these broad groupings. Lauren is working on that. That meeting occurred after this briefing book was due, and so that was actually not last week, but the week before.

It might -- Basically, this is going to be a little bit more difficult. Lauren is going to have to do a big lift for us, and, considering she's not even on our advisory panel, I am extremely grateful for everything FWC is doing, and all the work they're doing. Lauren Gentry is awesome. As soon as Spanik and Lauren Gentry and I come up with a game plan, we're going to get the food web group to come back together and try and tackle this again, and hopefully we'll be able to give you a better report in July.

Now for something fun that I discovered. During a review of ecosystem indicators for a completely separate project, for the resilient fisheries projects that the South Atlantic Council is doing, it was discovered that the food web working group that updated the 2016 version of the food web policy, and so this was for our last five-year EFH review, and they were looking at the 2016 version, and this was before I was hired, in my defense.

I don't know how this happened, but somehow there was a 2018 version that the Habitat and Ecosystem Advisory Panel updated, approved, sent to the council, and got approved, and then somehow was forgotten, and that gave me just a lot of heartburn, and so I went back and looked up how this could possibly have occurred.

Shoutout to the Wayback Machine for helping me figure this out, but, in June of 2021, this is what the Habitat and Ecosystem Advisory Panel's webpage looked like, and so you'll see you that have your HAPCs, you have your user guide, we've got our FMPs, and then we have our policy statements, and I'm highlighting right here this December 2016 policy statement, okay, and so this is 2021. It says December 2016.

However, if you dig into the website, again, 2021. If you then click on the fishery ecosystem plan button, the food web policy from March 2018 is here, but so is the food web policy from December 2016, and, if you click on this, it's not a PDF. It's just these words. I'm not sure what happened, why this was not PDF, why this 2016 version was not updated, why this 2016 version was not updated, but the 2018 version existed, and then, when the South Atlantic Fishery Management Council moved to our new websites, the 2018 version was not moved over, because it was not in that policy grouping. It was hidden underneath the FEP II updates.

So now, this is October 2023, and so this is when I first got hired. This is what we were working on, and so this is not any of our fault, because we had the Habitat AP get restructured, and this was what the working group was working on.

Somehow that 2018 one just got missed, and now we have this 2025 one right here. This is what our website looks like today, and that 2018 one was copied and pasted and put into this FEP II, because, if no one else remembers, the FEP II was supposed to be a series of living webpages that constantly changed, and were updated, and that's a great idea in theory, but not great for workload or staff time management or anything of the above.

When the website transition occurred, those webpages just got lost, and so one of the things that I actually did, first thing, was I just went and copied and pasted everything, and put it into a PDF, so we didn't lose it any more than it had already been lost. There was no Word version. There was no PDF of this. I created it, and, in here, there's a 2018 and a 2016 food web version. That duplication, I also copied it , and just missed it, and so here's the solution that I am bringing to you, Stacie, and to the group.

I would recommend, since the food web working group can't work on the predator-prey stuff until Lauren Gentry and Kevin Spanik kind of figure that out, that the working group review that 2018 version and determine what needs to be integrated in the 2025 version and merge the two together, to make certain that we're as up-to-date as possible, and so I'm going to pause here and see, again, Stacie, I hand it to you how we should, you know, move forward.

MS. CROWE: Okay. I'm going to go ahead and open the floor for any questions that anyone has on Kathleen's discovery, or comments, and I see Wilson can go first, and then Matt Kenworthy.

DR. LANEY: Okay. Thank you, Stacie, and so, Kathleen, thanks a lot. I think we're going to have to start calling you Sherlock Holmes. I appreciate all the history on that, and uncovering what had happened, and so I think the recommendation is a good one. It makes imminent sense to me. I wanted to ask you if you, by any chance, had compared the text of 2016 version with the 2018 version, to see if any of the changes that we had made to the 2016 version could just be carried over to the 2018 version. Obviously, that will be part of the review, but I thought I would go ahead and ask it anyway.

MS. HOWINGTON: Yes. The 2018 version has a lot more information on habitats, food webs, and it actually has ecosystem indicators that we've approved, or the previous Habitat AP approved, and so I think it would be pretty easy to integrate the two. The changes that we made from 2016 to 2018, we updated food web, we updated policy, but all those sections still exist in the 2018 version, and so I think we could take the 2025 version that we've updated, that this group approved, and take the 2018 sections and update them pretty easily. I would still want the group to look at it, and make certain that they didn't feel like it was too much information, because it's a lot.

DR. LANEY: Okay. Thanks.

MS. CROWE: Matt, do you want to go ahead?

MR. KENWORTHY: Wilson basically asked the same question I was going to ask, and you guys covered it, and so I think it sounds like a good idea. I support the action, and I'm just curious to see what the updates are in the comparison between the documents.

MS. CROWE: Okay. Thanks, Matt. Anyone else have a comment, or a question? I don't see anything, and so, Kathleen, I think -- Well, wait a second. We have Scott Kathey, and go ahead, and then Kevin.

MR. KATHEY: This is Scott Kathey with the National Marine Sanctuaries, and I was wondering, when you put together that document for the panel's review, could you do basically a word tracked document on that, so we can see, you know, what's been edited?

MS. HOWINGTON: Of course.

MR. KATHEY: Thank you.

MS. CROWE: Thanks, Scott. Sorry we keep mispronouncing your name. Kevin Spanik had his hand up.

MR. SPANIK: Hi, everyone. I just had one comment, kind of for the greater good relative to the food webs exercise. Kind of one of the end goals of that is to be able to determine EFH for those prey species that we determine, and so we had discussed, in our meeting with Lauren and Kathleen, that it would be helpful to get some feedback from the HEAP as to kind of what granularity of EFH is manageable for consideration, and so that would kind of help us on what we can really say about those prey and what habitat they use.

MS. CROWE: Scott, go ahead.

MR. KATHEY: I'm sorry. I must have hit that by mistake.

MS. CROWE: Okay. Kathleen, it doesn't -- Well, sorry. Matt, go ahead.

MR. KENWORTHY: I was wondering if Kevin could provide a little bit more context, and maybe some example, or a little bit more guidance, for the thought process on this, but, also, I was wondering if you guys could dig a little bit deeper into the next step that Lauren is working on. It sounds like you're still kind of exploring that, and teasing out the right approach, but I don't know if you guys are able to dig into that a little bit more, and provide any more context, and I was curious about that.

MR. SPANIK: Sure, and I can take that. I think, right now, where Lauren is at is looking into kind of the literature that we have, and the studies that we have for these different predators that we've defined that we wanted to look into. There are some differences among those in various levels, and so different levels of taxonomy, different areas, and so we're kind of trying to figure out how to best combine those, so that we can answer several questions, including like identifying individual species, but then what layers to lump them, to where they all kind of are associated with the same habitat.

Then kind of what I was just messaging, or talking about, was what granularity of that habitat can we really work with? Do we want to say, you know, we need to conserve certain species of corals, or biota, or just kind of habitat areas, like hardbottom, and just some feedback on what we can really work with. Was that helpful?

MR. KENWORTHY: Yes, and that helps. I appreciate that.

MR. SPANIK: Sure.

MS. CROWE: Any other questions? Kathleen, I'm going to turn it back over to you. Never mind. Wilson has got a question.

DR. LANEY: Well, just real quickly, and so, just to make sure that I heard what Kathleen said early on, and so Kathleen will be meeting again with Kevin and Lauren to refine their thinking on the approach forward, and then they'll get the whole group back together again to discuss that, right?

MS. HOWINGTON: Yes.

MR. SPANIK: I think we'll have some guidance, and then we have five or six species, predator species, that we decided upon, and we'll probably try and divvy those up, once we have that kind of recommendations, or how to pursue that.

DR. LANEY: Yes, and that sounds good to me, Kevin, and I know one of them -- You know, I think we did finally put gray triggerfish in there, I think, and that one that strikes me as kind of an outlier from the rest of them, given its benthic nesting habitat for reproduction, and so, yes, it will be an interesting discussion, and I'll look forward to that.

MS. CROWE: Thanks, Wilson. Kathleen, anything else you want to add?

MS. HOWINGTON: Yes, I do. On a separate, but completely related note, when I discovered that there was a hidden forgotten 2018 policy, I then went and double-checked. There is also a hidden forgotten March 2018 climate policy. This, of course, says that staff will change the online policy to reflect the 2018 update. I have already done that.

If you would like a version of the 2016 and the 2018 versions, please reach out to me. I have both, but, since we had not updated the 2016 one, and the 2018 one had been approved and updated, I just went ahead and put that online. Again, this happened between the briefing book and now, and so, to update this, staff has changed it online.

It is now the most recent version. It, again, just seems like a beefed up version of this 2016 one. It just has a little bit more information, a lot of the same policy recommendations, but just keeping everyone in the loop. You know, we can pat ourselves on the shoulder that we just updated the 2016 version of this now.

Then, timeline-wise, again, data processing with FWC staff and Kevin Spanik, and so that's SC DNR staff, and we're working on that. That's the subset of the workgroup, and then the large workgroup, since you all approved, will work on how to handle the 2018 policy. In the next six months to a year, I'm hoping to get the whole workgroup together to, again, find that important information for each test species, and develop best practices, and hopefully, in July, we'll be able to report out and give you guys a we've at least looked at half these species.

The next two years, the game plan is to create pathways to update all of the FMP EFH definitions, and then the goal is to finish all of this work by December 2029, and so that will be in time for our next five-year EFH review. We will have integrated this, and we'll be meeting the Magnuson-Stevens requirement of having predator-prey information in our EFH definitions. It was fun little discovery.

MS. CROWE: I think it's safe to say you're kind of dangerous with the Wayback Machine.

MS. HOWINGTON: I really need to give them money, just because they have been very helpful this last couple of weeks.

MS. CROWE: Okay, and so it looks like we have a path forward on that, and so we'll go ahead and move on to our second presentation, which is also Kathleen, and she is going to talk about the flow policy. The subcommittee has had a couple of meetings on that, been working on edits, and Kathleen is going to give us an update on that.

MS. HOWINGTON: You should have received, and this was not in the briefing book, the track changes document. That is not a public document. That is for the AP only, because it is a mess, but, on the briefing book, we do have what I believe is the ready-to-send-out document, and so I'll review a little bit on what we've done since July.

Again, to remind everyone, the council approved our update of the flow policy after we received some input from not just a council member, but also from some Florida representatives, that the Indian River Lagoon was having some issues, and Lake Okeechobee, and so, in response, we added this to the workplan, and the council approved that.

We have now met a total of six times in the last year. Before July, we added in all of this information. We, of course, updated and reorganized, updated state-specific rules. We organized the policy section, to increase efficiency, and we removed anadromous and diadromous, because that is not the council's purview.

Since then, we've also added in some more water quality details. We've specified some details about dykes, tidal gates, roadway, concrete road, weirs, culvert, and, of course, irrigation, and so we added in specific policies for each one of these problems that were not identified in the previous policy. Then, Stacie, if it's okay with you, I would like to pause and just ask if anyone has any feedback on this, before we then move on to our next step.

MS. CROWE: Sure. Is there anyone that took a look at the document and has -- Wilson, go ahead.

DR. LANEY: Well, Kathleen knows I'm going to say this. It gives me a little heartburn to say that at least anadromous species aren't under the council's purview. They technically are, but, for the catch-22 of the fact that there is no federal management plan for anadromous species, they're all under ASMFC management plans.

I get it, you know, for the sake of brevity, and for the fact that these things are interjurisdictional species, that are under a tremendously complicated management scenario, because most of them are managed on a river-by-river basis, and so you have, you know, fifteen east coast states, plus the Atlantic States Marine Fisheries Commission, plus NMFS, technically, and I will note that both the Mid-Atlantic and New England Fishery Management Council have undertaken management measures specifically trying to address bycatch of American shad and both river herring species in fisheries that are under their jurisdiction.

I'm not going to hammer too much on the issue, except to say that, when I read back over the thing again, I still think there should be at least some mention of it, of those species, and the fact that it's a technicality that the council doesn't have a management plan in effect.

That doesn't mean that the council is not at all concerned about diadromous species. I think they are. I think they recognize that they do play a significant ecological role in the marine ecosystem when they are offshore, and so I would be interested in hearing what other folks have to say about it. I don't think we need to put -- If we -- Again, I think we just need to mention them at least, somewhere in the document, and, you know, not expend a whole lot of time and energy on it, but I do think that they deserve mention, at least.

MS. CROWE: Thanks, Wilson. Anyone else have any comments specifically to -- Brenden, go ahead.

DR. RUNDE: I just want to chime-in with agreement to what Wilson said, and not only have the two councils to our north in the past talked about anadromous or diadromous species, but there's an ongoing analysis about river herring, and river herring bycatch, at the Mid-Atlantic Council, and so they're getting a presentation in a couple of weeks, at their February meeting, about river herring, and so, such that other councils are discussing diadromous fish, I think that, if we could find a way to include mention of them here, as Wilson suggests, that would be a good thing.

MS. CROWE: Thanks, Brenden. Kathleen, do you have the -- They were mentioned in the original document. Do you have the blurb about that handy?

MS. HOWINGTON: They were mentioned in -- So there was no anadromous and diadromous species policy. They were just mentioned throughout the policy, and so we still have all of those sentences in there. I just removed the specificity. So, for instance, if we were talking about estuarine species, including anadromous and diadromous, and then the sentence would move on. I just got rid of the including part, and it just says for estuarine species, and so there was no like paragraph for anadromous and diadromous. They were just consistently specified in the policy, which felt strange, but Anne and Matt have their hands raised, and so maybe I'm wrong.

MS. CROWE: Anne, go ahead, please.

MS. DEATON: I think that -- I mean, the title is still Alterations to Riverine, Estuarine, and Inshore Flow Policies to Address Impact from Freshwater Discharges and Impediments to River Flow, and so that is all very relevant to our anadromous species. It's also relevant to our estuarine species, because, if the salinity regimes are going to move upstream with sea level rise, they're going to have more impediments as they go inland.

I think it's just such a continuum, from upstream to the ocean, that they surely should be mentioned, and it sounds like they are, and so I think it's okay, as long as, you know -- I don't know, and I guess it sounded a little worse when we described it, but I think it's fine, as long as they're kept in there, because, you know, they are part of a system, and the system moves.

MS. CROWE: We had taken it out, and so what I'm hearing is that Anne thinks put it back in. Is that correct?

MS. DEATON: I think it should be included with the discussion.

MS. CROWE: Okay.

MS. DEATON: The species and effect on that is left in. I think it's just part of the big ecosystem puzzle.

MS. CROWE: Okay. Matt Kenworthy.

MR. KENWORTHY: You guys can proceed on. I'll hold my question until we get through the next section.

MS. CROWE: Okay. Anyone else? Go ahead, Kathleen.

MS. HOWINGTON: One suggestion could be, just in this very beginning part, the SAFMC finds, and we could add one more underneath this list, which does have, you know, summer flounder and stuff like that in it, and so we could add in a sub-bullet of anadromous and diadromous species, and specify.

Then I'll add in a sentence, you know, clarifying the management concern and confusion, and then that would mean that this policy would apply to that, because, I mean, some of these are from Mid-Atlantic. Some of them are, you know, North Carolina, and so I think adding them right here -- We could add in one sentence about anadromous and diadromous species, and this policy applies to it. You know, I'll probably ping Wilson to get the exact wording for who is in charge of managing them, and how that works, but would that be acceptable to the group?

MS. CROWE: I see Anne has a comment, and then Wilson.

MS. DEATON: I think I didn't take my hand down. Sorry, but that does sound -- That sounds okay. They use EFH. They use HAPC. That's why I think they should be included.

DR. LANEY: It sounds okay to me, Kathleen, and I'll be happy to help you write it.

MS. CROWE: Kathleen, I don't see any other hands raised, and so do you want to go ahead?

Ms. HOWINGTON: So then, if no other hands are raised, after adding in that small little blurb, the AP's plan is to send out this policy to water quality experts, the people who would be using the policy, to get their final review of does this have all the information you need.

I have asked the group, and a few others, and, as you can see here, we have some recommendations. Right now, this is the group. These are the groups that I'm going to be contacting, and cold calling, and hoping that they are interested in reviewing. Do we have any others that the group thinks would be a good idea to send it out to?

MS. CROWE: Brenden, go ahead.

DR. RUNDE: What about the South Florida Water Management District? Is that -- I'm not quite familiar with the overlap. I see St. John's River is on here.

AP MEMBER: If we've got water management districts on there, we should add them.

MS. CROWE: We have Matt Kenworthy, then Wilson, then Scott.

Mr. KENWORTHY: It's kind of a comment and a question. You know, Kathleen, you mentioned we want to get this out for people to review that are going to be end users, which I totally support that. My mindset on this was also trying to broaden it out to, you know, just what other experts out there on policy, ecology, you know, in multiple, you know, different disciplines that could shed some light on do these make sense, and are we missing things, and are there other considerations, when writing this into a policy?

I mean, ultimately, the people who are going to be using this to critique projects are going to be a very important component in this review process, but I also am trying to encourage a broader, you know, group of reviewers, like the water management districts, or like the estuary program, and they might not be a user of this. They might not be using it to judge projects or whatnot, but they're very knowledgeable about the systems.

They're very knowledgeable about the challenges, you know, what might and might not make sense, as far as policy, and so I want to make sure those kinds of recommendations are on the right track, and then encourage others to think a little bit broader to provide additional recommendations.

MS. CROWE: Thanks. Wilson, do you want to go ahead?

DR. LANEY: Yes, and thank you, Stacie, and so, along the lines of what Matt was suggesting, what about EPA, you know, somebody in the southeast region of EPA, and I know we have a liaison in Atlanta to the Albemarle-Pamlico National Estuary Partnership, and we have the National Estuary Program on there, but it probably would be good to have somebody at EPA take a look at it as well, and I don't know who, and I can't remember that person's name at the moment, but I can get it if you all think that's a good idea.

MS. HOWINGTON: I don't see why not. Stacie, are you there? You're muted on your end. Everyone, one moment, please. Stacie's audio has stopped working for some reason, and so we are going to take a five-minute technical break, until we can get that fixed, and everyone please wait one moment. Paul Medders, you're our vice chair. You might have to start being chair if we can't get it fixed.

MR. MEDDERS: I've been in the bullpen warming up all morning, Coach.

DR. LANEY: Kathleen, this is Wilson, and I think I heard that there's no objection to including EPA in the review loop, and so I'll -- If that is in fact correct, I'll get that name.

MS. HOWINGTON: Sounds good. Thank you. To keep everyone in the loop, Stacie Crowe has lost internet, and is hopefully going to figure out a way to get it back. She is trying to sign-on right now, but go ahead and take a bathroom break, everyone. You've got three minutes, but it might take longer.

(Whereupon, a recess was taken.)

MS. HOWINGTON: Stacie, are you there?

MS. CROWE: Yes, I'm here.

MS. HOWINGTON: There you go. Okay.

MS. CROWE: I'm not sure what I missed right there at the end.

MS. HOWINGTON: Right, and so Wilson recommended adding somebody from the EPA Southeast region. He does actually have a contact that sits on one of the boards he's on, and so he's going to go get that name. Nobody seemed to be against the idea. I mean, worst case, I email it and the person says, I don't have time for this, and so it can't hurt.

MS. CROWE: Correct. Okay, and so I see that we had Scott with his hand raised. Did Scott get a chance to comment?

MS. HOWINGTON: Not yet.

MS. CROWE: Okay.

MS. HOWINGTON: Scott, are you back?

MR. KATHEY: Yes, I am, and so I was going to also suggest an EPA addition to the list, and what about the U.S. Army Corps of Engineers? They get involved in a lot of these types of issues, and particularly if you've got any kind of construction projects. You know, they're going to usually get passed by the Army Corps as well. I don't have a suggested point of contact for that, but, you know, someone might --

MS. CROWE: That was going to be my question, is if anyone has somebody specific. There are just so many people, and I guess if somebody has anyone specific that they could suggest.

MR. KATHEY: Maybe somebody in their Section 404 or 401, you know, permitting section. That's what I'm thinking. If anybody wants -- You know, anyone who has to get an Army Corps permit for dredging or anything like that.

MS. CROWE: Right. There are also people in the various districts too, and I don't know, if we went that route, if we would do just all of the districts, or I don't know, if anyone else has any thoughts on that, but I see Paul has his hand up. Paul, if you want to go ahead.

MR. MEDDERS: Thank you, Madam Chairman. I was just going to suggest, and I just looked at the list. Georgia is not on the list, or no one from Georgia is on the list, and so I think probably our -- She works -- It's Kelly Moore, and she works with the -- We call her our federal consistency coordinator. She covers a lot of stuff, and, if it hits her desk, she will know who to get it to in our agency, and so I think she would be a good -- I can provide the email address, or whatever, if you don't know, Kelly.

MS. CROWE: Thanks, Paul. Cameron.

MR. LUCK: I was just going to add that either Greg Potter or myself could provide a contact from the Corps that we work with from a regulatory standpoint, and so if we can dig and bring a name back that we think would be good.

MS. CROWE: Thanks. I guess I guess maybe we should consider the different districts too, and so maybe somebody in each district. I might be able to come up with somebody from the Charleston district. Benjamin, did you have a comment?

MS. HOWINGTON: Ben, I see you're muted on your end. Make sure to unmute.

MR. THEPAUT: Thank you, and so I'm looking at the list, and I see SC DES listed twice, and so the water quality division is our 401 department. Karen Skipper is going to be a great point of contact for that. You know, she's the director, and Chuck Hightower is the manager, Stacie. In addition, I'm happy to provide the Corps South Atlantic Charleston district's best point of contact. I'm thinking, you know, Steven, that we met at the Parris Island workshop the other week, Stacie, and so I'll put that in the email and send it over to you guys.

MS. CROWE: That sounds good. Kathleen, I think I had given you Karen Skipper's information, and Chuck Hightower. Gregg, did you have your hand up? Sorry, and it looks like Paul.

MS. HOWINGTON: Paul, you have your hand raised. If that's from before, please just -- It went down.

MS. CROWE: I think Gregg still has his hand up. Gregg, if you had a comment.

MR. BODNAR: Yes, I was just going to offer too, if you need some points of contact for the 401 in North Carolina, just let me know, and we can get you those contacts. Can you all hear me?

MS. CROWE: Yes, and thank you.

MR. BODNAR: I'm always concerned now if you all can hear me, and so, if you need any contact information on the, like I said, on NC's 401 side, just let me know.

MS. CROWE: Steven Miller, go ahead.

MR. MILLER: For St. John's, you can just send that to me, and I'll send it through all the lagoon people that are up here, and the water quality experts, and there may be some additional people they can recommend that might want to review it that are associated with the lagoon.

MS. CROWE: Thank you. Anne, go ahead.

MS. DEATON: I was just going to mention the list is pretty much very like state agency regulatory, and I wonder -- There's a lot of -- For example, TNC has been doing a lot of work on ecological flows, and, in North Carolina, there was a big effort to do a policy on ecological flows. That was mostly university people, and I've been trying to think of who is involved. I haven't figured it out, and I can find out, but I feel like, if you're looking for water quality experts on this topic, you might want to just add -- See if there's a couple of researchers you could add.

MS. CROWE: That's a good idea. Does anybody have anyone to suggest?

MS. DEATON: I don't right now, but I'm going to think about it.

MS. CROWE: Okay. Steven.

MR. MILLER: Sorry. I forgot to take my hand down.

MS. CROWE: I see Matt's hand up.

MR. KENWORTHY: Yes, and it was regarding your question about TNC contacts, and we've got some down here in Florida that I think would find an interest in reviewing this, and would find an interest in contributing thoughts to it, and so I can help facilitate that, whether they're the right person or they get me to somebody else, but I'll do some legwork on that.

MS. CROWE: Great. Thank you. Anyone else with a suggestion or a comment? Matt, go ahead.

MR. KENWORTHY: Along the lines of TNC, I'll probably also do some inquiry with some Pew contacts that have a shared interest as well.

MS. CROWE: Great. Thank you. Kathleen, is there a timeline when you would like to have contact information by?

MS. HOWINGTON: I think we would like to be able to finalize this policy in the July meeting, or the summer meeting, whenever we decide it is, and so I'm probably going to, once the report is finalized -- Again, don't forget, everyone, you will get the draft report, and so all the notes I've just been taking, which are a mess right now, will be cleaned up, and sent out, and you'll be able to add in exact names there, and then, once that report is finalized, then I'll probably send out an email to everyone of like give me two weeks, and here's the final flow policy, and then, you know, give me two weeks for gathering names, and then I'll be able to try and send it out to the group, and so like give a month for review, if that sounds good to everyone.

I was going to probably ask the full policy working group their recommendations, but just throwing it out there, and then hopefully we can get feedback in a month for review, and then I'll be able to bring any recommendations in the summer, but I'll email the flow policy working group and double-check with them with all of that.

MS. CROWE: Okay. That sounds good. Any other follow-up on that? All right. Hearing nothing, Kathleen, I'm going to hand it back over to you.

MS. HOWINGTON: So, like I said, I've got that list. I'll put it together. I'll send out the report to, and you guys will have the ability to read the report and get any other names to me, or like clarify which names, or did I spell Brennen's name wrong again, and then I'll bring -- I'll send it out to that group, give them hopefully about a month's time for edits, and then bring any proposed revisions to the summer 2026 meeting, and hopefully we'll be finished with this policy, and we can then move on to other things, and so that is the end of that presentation for me, Madam Chair.

MS. CROWE: Great. Thank you. That sounds good. I hope we can get that finalized. I think you've done a lot of work on that, and the group as well, and it's cleaning up pretty well. Okay, and so you have, on the agenda, a break. Did you want to go ahead and do that next?

MS. HOWINGTON: We can. I'll leave it up to you. We did just technically have a like five-minute biological break, but you were doing tech support that whole time, and so, if you want to do ten or fifteen minutes, I think we're good. We're ahead of schedule, where I thought this was, and I figured this would be around 2:00, and so we're about forty minutes ahead, which is fantastic, and so up to you.

MS. CROWE: It's really -- I could take it or leave it, and so I'm going to let you -- I'm going to pass it back to you and let you make the call.

MS. HOWINGTON: Let's make Trish make the call. She's the council chair. No, and we can take --

MS. MURPHEY: We'll take a break.

MS. HOWINGTON: There you go. All right.

MS. MURPHEY: Do you want a ten-minute break? Is that good?

MS. HOWINGTON: A ten-minute break sounds good. We'll be back at 1:32 p.m.

MS. CROWE: Okay. Sounds good, and so we'll see everybody back in ten minutes.

(Whereupon, a recess was taken.)

MS. CROWE: Okay. It's 1:32. I really have no way of knowing who's back and who's not, one of the things I don't like about virtual meetings, but, if you're ready, we can go ahead and get started.

MS. HOWINGTON: So you can tell who at least is paying attention, kind of. If you go to the right-hand side, underneath the attendees, if they have a little exclamation point, it means that the webinar is up, but they have a different -- Their mouse is on something different, and so, like right now, my mouse is on my notes page, and so that little attention thing is right next to me. That does not mean that they are not paying attention to what's going on. They could be taking notes. They could just have their mouse on a different screen, but, if that makes you feel any better, go for it. It's not 100 percent.

MS. CROWE: I don't see exclamation points, but I see Chip has his hand up.

MS. HOWINGTON: That's right.

MS. CROWE: Now Chip doesn't have his hand up. Chip, did you have a comment?

DR. COLLIER: Some things only come up for the staff for the meeting. They won't show up for all the participants. The same thing with hand raised.

MS. CROWE: Okay. Alrighty. Well, we're just going to assume everybody is back and ready to roll. Next up, again, is Kathleen, and she is going to update us on space industry activities in the South Atlantic, and so I'm very curious to see what kind of information you came up with since we last met.

MS. HOWINGTON: Okay, and so, to remind everyone what's going on, the space industry is very active in Florida. There are a few main big players. You've got your SpaceX, Space Florida, and, of course, we've got NASA, and then we have Space Force.

As of right now, as of 2024, the projected re-entry and launch that you're seeing here, and this is actually a low projection of what they think is going to occur, and so the space industry is going to just increase, right now, the forecast high, and the forecast low, and this is our realistic 2024. I think now, if we updated, it would be closer to up here, given the most recent environmental assessments and EISs that are requesting additional launches with the new larger rockets, and so this is going to be impactful.

So, the Habitat AP met, and we discussed this, and y all requested that the council give permission for me to spend time data gathering, and then the Habitat AP made an initial list of recommendations of where we could go to gather this information. I did my best to follow that list and to go down a few different rabbit holes and find some information.

Following the list you gave me, I contacted two people from Fish and Wildlife Service, Florida Fish and Wildlife Service specifically, four people from Florida Fish and Wildlife Conservation Commission, eight people from Florida DEP, including one secretary who hung up on me once, because I kept getting sent back to her. I don't hold it against her, though.

NASA, I have contacted three different people, including two data requests, one of which I have not received feedback from, the other of which I got forwarded to HR and got a very polite, very clean no thank you. Brevard County, I've contacted two. Indian River Lagoon Council, I've contacted one. One reporter actually reached out to me, and so that was interesting, and then two people from Space Force.

I've also reached out, done research on, contacted Southern Environmental Law, Space Force Texas, Cumberland Island, Port Canaveral, Florida Atlantic University, and a few of these are also through our HEAP people, and so thank you all for your help.

The Wharf Study Project, I'm going to revisit that. I was able to find a lot of beginning information on it, but not any like final findings, and so I will go back to that later, and then, of course, the numerous environmental assessment impact studies and public comments that have been made.

I then put together these slides that summarize, as best as possible, all of that information. There are a lot of words on these slides. I am sorry about that, but that's what happens when you do data gathering and a lot of what you're finding is paper or public comments, and so, without further ado, Point Nemo.

One of the things that the Habitat AP recommended was looking into Point Nemo, and looking into why it was chosen, and what the legality of it was. This is specifically in regard to space

debris and how is it legal to be able to put things in the ocean at Point Nemo legally, and so Point Nemo is known as the oceanic pole of inaccessibility.

When you're at Point Nemo, the closest human beings to you are the people that are on the International Space Station, and so its remoteness is what makes it very preferred to be able to deorbit things. There have actually been 260 defunct spacecraft put into this area from multiple countries, and the International Space Station is slated to be deorbited there, I believe in three years, and so that's going to be interesting, if anybody wants to, you know, fund me getting to go watch that.

The surrounding waters are part of the South Pacific Gyre, and the area is considered to be extremely low biological productivity, because it is also very deep, and that's why it has become the chosen deorbiting area. I'll pause, because I see, Brenden, you have your hand raised.

DR. RUNDE: Just to clarify, deorbiting means they're letting them splash down there, and they're not recovering this material, correct?

MS. HOWINGTON: Yes. Deorbiting, when I'm using that term, I mean they are putting it in the water, and they're letting it stay in the water. There are certain rockets that can do return processes. Generally, the return areas in the South Atlantic are the Bahamas or, of course, Cape Canaveral, but I am not considering those deorbited, because then they are just reused, and so thank you for that clarification.

Okay, and so then how is it legal? Who is in charge? Who is in charge of this, and then, once I'm done with Point Nemo, I'll go to hands raised, and so, technically, there is international space law. There is also UNCLOS, which is the law of the sea, and those two are kind of the general guidelines, but there's no single binding international agreements, that everyone has just kind of verbally agreed that this is where we do it.

There's no one law that everyone got together and decided, at least not that I could find. I have tried, but, ultimately, it's the space guidelines and their debris guidelines set good practices, and liability, and then, of course, the law of the sea basically is about protecting the environment, but there's not one law saying this is where you can deorbit, this is what the impact needs to be, and this is the mitigation. It's those two kind of working hand-in-hand, and so, unfortunately, I didn't get anything clean cut that I thought we could use for our purposes of protecting EFH in the South Atlantic, and so I'm going to pause. I do see a hand raised, Stacie, with your permission, before we move on.

MS. CROWE: Yes. Go ahead.

MS. HOWINGTON: Okay. Wilson.

DR. LANEY: Yes, ma’am. Just like Brenden, a clarification here. There is a reference, and this is in the Atlantic Ocean, correct, because your previous slide had a reference to the South Pacific Gyre.

MS. HOWINGTON: So Point Nemo is in the Pacific.

DR. LANEY: It is in the Pacific? Okay.

MS. HOWINGTON: Yes. It is in the Pacific. That is how they're able -- It's dead middle Pacific, or southwest dead middle Pacific.

DR. LANEY: Okay, and so all this space junk is going into -- At least the stuff that's going to Point Nemo is going into the Pacific Ocean, and not into the Atlantic Ocean.

MS. HOWINGTON: No, but, when we were having the discussions on where to look, we were thinking hopefully we could find a United Nations agreement on this. I could not find anything like that. I mean, I guess UNCLOS is technically United Nations, because it's the law of the sea, but it was more about debris than space debris. Again, I don't think that this would be helpful, but that is the reason why I did a little bit of research on what this area is and how legally we are using it to be able to deorbit things.

DR. LANEY: Okay. Thank you. That makes sense. Thanks.

MS. HOWINGTON: All right, and so that was Point Nemo. Then I moved on to public comments on environmental impact statements and ecosystem assessments, and so these are the ones that have come up in the last few years. Specifically, I think I went to 2015, because it was 2025, and so I just went back ten years, and so these would be all the environmental assessments and the environmental impact statements from the Cape Canaveral area on the space program developments in that area specifically.

I did not look at the ones that are happening in Texas. I did not look at anything international. I just looked at the stuff that's happening over the last ten years off of Cape Canaveral, Florida, and, in those, we had some common themes of people being concerned. Of course, habitat disruption and species of concerns, the launch operations and landing boosters and associated infrastructure. Light disturbance and noise were constantly mentioned. A lot of people were talking about the dunes, and then erosion being an issue, and shifts of vegetation cover could be because of launch activity, specifically with, you know, submerged aquatic vegetation, and we're losing some of that.

Then, of course, there's the pollutants, and the chemical exposures, and so rocket launches and their exhaustive particulates, not to mention liquid propellant launches and any kind of other vegetative damage, and, again, noise, lights, vibrations, behavioral disruption, and then a lot of climate-related stressors. A lot of people are concerned about this, of the fire suppression has actually caused issues, and a lot of these shrubs and flatwoods need periodic burns. Suddenly, we're not able to do that.

Sea level rise is mentioned. There's an issue, when you're reading a lot of these, about causation and correlation, but a lot of people are mentioning sea level rise. This is right on the coast. All this development is new, and what's going to happen, and then regulatory constraints.

Biological opinions must be issued with all of these proposed actions, and then a lot of these environmental assessments include mitigation, but a lot of people are concerned about whether or not it's significant enough, and so that led me down to this rabbit hole, tradeoffs and mitigations.

NASA has actually been doing some stuff to rebuild dunes and replenish sand. They have been doing prescribed fire and fire management to try and help with those concerns. Supposedly, there's a limitation on location footprint specifically to not impact Florida scrub-jay and beach mouse, and then best practices suggest that they try to limit night launches, and limit booster returns, and they try to schedule launches during less harmful wildlife.

They can't always do that, and then, of course, a lot of, you know, the news reporters, or news outlets, you know, the recovery operations need to follow environmental best practices, that kind of thing, and so that's the information I got looking at all of those. Again, I'm going to pause here before I move on to the papers that I've reviewed. Stacie, with your permission, of course, I see a hand raised, but also, if anyone has any questions about that very quick summary of public comments.

MS. CROWE: I have one question for you, and then I see David Webb has his hand up, and so were they -- Were the comments you looked at just public comments, or did it include agency comments?

MS. HOWINGTON: So that included agency comments. My method for this was I realized how many of these EAs and EISs had existed, and so I did have to use some AI to help me out finding all of them, and then I was able to go onto the FRN website, pull those up, and then I also used AI to help me summarize.

I went back, and I did double-check behind my work. I recognize AI is not perfect, but I, as one human being, cannot go through every single public comment underneath every single EA and EIS in any kind of efficient time, and so that is what I had to do, but, if it was on the FRN website underneath here, the public comments that were submitted, that would include agency comments, and, if it wasn't in the FRN, then I did go to websites as well and pull those in.

MS. CROWE: Great. Thank you. I'm glad that you're very technologically savvy and able to minimize all that information. I see David has his hand up, and then I believe Scott. David, you can go ahead.

MR. WEBB: Thank you. David Webb. Kathleen, in your research, was there any indication of the potential for the creation of a Point Nemo in the Atlantic Ocean in the future, or are they just going to continue to use the existing?

MS. HOWINGTON: I believe they're just going to continue to use the existing one. I did not hear anything about a specific deorbiting area in the Atlantic Ocean.

Mr. WEBB: Okay, and you touched briefly on this. The booster returns in the Atlantic Ocean, obviously, are going to be as close to shore as possible, to cut down on the recovery time. Do we have any information about what kind of contaminants, if any, might be coming out of those boosters that are parachuting down into the ocean before recovery?

MS. HOWINGTON: Not necessarily the ones that are parachuting down, but I do have two papers that did look into contaminants and pollutants, and I'll review those next.

Mr. WEBB: Okay. All right, and just an observation. The difficulty that you're having getting appropriate agencies to respond, would there be any thought of asking either the council or NOAA to help get some assistance, to get some -- You know, to get some better communications going?

MS. HOWINGTON: The council has submitted a FOIA, and this was four years ago, to the Coast Guard, who has been keeping track of launches and any kind of debris. Unfortunately, I pulled out my best younger sister, Annoyance, and I was calling people, and emailing people, on a weekly basis, checking in with that, and kind of getting sent in circles.

I then went and contacted a few of our other AP members, with staff permission, of course, to contact their AP members, who I thought may be able to help, and they also were not able to help me. We could potentially submit another FOIA. We could -- I'm not saying it couldn't hurt. I am saying that you are going -- We all, as a group, are going to run into a bunch of red tape regarding national security, is where I keep running into, of they can't tell us where space debris is, or what it's made of, because they don't want to release that, or they're not tracking where it's released, or I'm not 100 percent sure, but I keep running into that.

MR. WEBB: Well, thank you for the effort, and I would certainly support our continuing efforts to try and get information. Thank you.

MS. CROWE: Thanks, David. Scott, you can go ahead with your question.

Mr. KATHEY: Thank you. I have a question about Slide Number 3, that graph that you have of number of launch operations. I'm wondering, and it looks like that may just be the launches from Cape Canaveral, and what about the adjacent Space Force Station, Cape Canaveral Space Force Station? Are those numbers included in here, or are these just from Kennedy Space Center launches?

MS. HOWINGTON: This would include that. This is from the FAA, but it does not include the proposed increase.

MR. KATHEY: It doesn't?

MS. HOWINGTON: No, and so this was made in 2024, and then we just got -- This year, the council has commented on two EAs and one EIS, regarding the newest SpaceX rocket, that is -- I believe it's called the Falcon launch, and that -- They are proposing a development that will increase their launches from this right here, where you're seeing 148, and they are proposing, in 2026, doing closer to 200.

MR. KATHEY: So this would include all launches from --

MS. HOWINGTON: 2024. It did not include anything in 2025.

MR. KATHEY: Right, but these are combined statistics for Kennedy Space Center and Cape Canaveral Space Force Station, because there's two different launch facilities, right?

MS. HOWINGTON: I believe so.

MR. KATHEY: So this is a total of both?

MS. HOWINGTON: I believe so. I would want to -- Before I say yes or no, I want to click on this link and read it, but --

MR. KATHEY: Yes, because I'm looking at the source is FAA, and I know FAA is involved in the Kennedy Space Center launches.

MS. HOWINGTON: Right. I believe, whenever you're going to launch, you have to put in your plan with the FAA, and so I would assume it's combined.

MR. KATHEY: Sometimes the Department of Defense -- They do their flight operations under a different authority, and so that's why I wasn't sure. That's why I was trying to clarify if this was just one of those launch facilities or both of them combined, because that's -- I mean, when you're looking at those out years, 2032, on that high arc, on the high forecast, that's a lot of launches.

MS. HOWINGTON: Again, this does not include the most recent EIS, and so, honestly, it's probably worse.

MR. KATHEY: Okay. Thank you.

MS. CROWE: Okay. I don't think I see any other hands, and so, Kathleen, if you want to go ahead.

MS. HOWINGTON: All right, and so that was the public comments, the EAs, the EISs, as many as I could get my hands on. Again, a caveat that I did have to use AI to help me out with this, and so I did my best to check behind myself, but just everyone keep that in mind, that sometimes computers are rude and wrong.

Now, then we get to our published works, and so I was able to find four papers, one of which was sent in by an advisory panel member, and thank you very much, and one of which was sent in by Florida DEP, and Florida Fish and Wildlife actually sent the other three, and so I think we got -- Or the same three, and so I think we actually got a pretty fair that these are the public, or the print, you know, peer-reviewed documents that you can look at.

This first one is the *Assessment of Coastal Water Resources and Watershed Conditions in and Adjacent to Canaveral National Seashore*. It's by the National Park Service in 2012. The idea was to try and create a baseline ecological health assessment for the Indian River Lagoon system. Ultimately, they found water quality was generally fair to good. Nitrogen and phosphorus were stable. There was, of course, low DO, which all of us are aware of, and then turbidity was a concern.

They looked into biological health, and they looked into barrier island ecosystems, and then they did identify some major threats, and so this report doesn't directly analyze the space launch pollution. The idea, again, was to create this baseline, and the conclusion was it's ecologically

functional in 2012, and but showed clear vulnerability, making this area highly sensitive to new pollution sources.

Then we have a hop, skip, and a jump to 2025, *Space Launches and Their Possible Impact on the Indian River Lagoon Marine Ecosystem*, and so 2012 was right, and the point of this paper was to examine the rocket launches near the Indian River Lagoon system. They did a systemic literature review. They found six relevant studies, and then they summarized all of them, which was great for us. Love that.

They did find these key pollutants, and so this is what I was saying of these pollutants are specifically around the Cape Canaveral area, and so these would not be boosters that are landing in the water offshore. These would be the boosters that are actually re-landing, and being re-caught in the Cape Canaveral area, as well as then rocket launches, as well as all of the construction equipment and the anthropogenic impact of the cars and the people and the developments.

This is supposed to be some sub-points. I apologize for that, and so we've got some acidification of surface waters, metal contamination, of course stress in marine life, potential links to algal blooms, and we've got some carbon composites, foam, rocket fabrics, some batteries. We are seeing some black carbon, and some hydrochloric acid, and then trace metals of mercury, aluminum, lithium, and vanadium, which I had not heard before and had to look up.

Then the findings, and there are spikes in acidity and trace metals, which align with launch effects. The direct cause technically is unproven, because of limited monitoring data, and then, unfortunately, because of the limited monitoring, because of the limited research, they could not come to a final these rocket launches definitely are impacting this environmental stress, but is a high plausibility, which is just depressing.

Moving on, I was then able to find a different paper. Now, this is actually in Brazilian. This is their space program. This was one of the few papers that I was able to find that looked into particulates specifically in marine species. They looked at coastal sharks, and were looking into the high levels of rubidium. They were able to find the highest concentration in a living organism.

This rubidium is, of course, used in fuels and bioaccumulates and magnifies. They were able to find rubidium in their apex predators, specifically coastal sharks, which indicates entire food web exposure, because of that bioaccumulation. They are very concerned about biodiversity. They're concerned about governance failures, and they're concerned about monitoring, and so they were able to find this, which is great. I was not able to find something in the South Atlantic area, but being able to see this is concerning, and, if anybody wants to do a paper on it, please, please do so.

Then, finally, I did find -- This was actually the paper that was sent in by the advisory panel member. This was in 2014, and I apologize that I didn't put the year in here, but a NASA technical memo that evaluates the ecological effects of the space shuttle program from forty years.

They did see direct and indirect ecological effects, with habitat loss and modification. They saw land use alternatives of habitat modification through the activities and regional developments. They, of course, saw water quality impacts, cultural eutrophication, and longstanding water quality issues. Again, NASA admitting this, which was nice.

Then atmospheric deposition. They were concerned about acid rain. They were not able to find this in the soil or vegetation with increased HCL and particulates, but there's a chance, with increased launches, that it might occur. They looked in the metal deposition from shuttle emissions. They did not see -- Again, in 2018, no acute environmental impacts were found, and, now that I'm reading through this, I should have put this before this 2025 one, because that has changed, since they were able to find trace metals, but, hey, that's okay.

Then positive environmental contributions. Of course, they have an environmental compliance infrastructure. This goes back to that mitigation I was mentioning. Hazardous waste management systems, stormwater infrastructure, and they're trying to minimize impacts. They do have remediation from past contamination sites that have been remediated, and then they do have some protected lands, and this is a direct quote from them, "due in part to NASA's ongoing stewardship of the protected Florida's east coast."

Then long-term monitoring that they, in 2014, said was occurring. They are still looking to climate change projected level sea rise. They're looking into habitat management associated with Kennedy Space Center, and then they're also looking into wetland and scrub management habitat health, and so, with that, I believe that ends -- Yes, and so here are my overall takeaways.

Metal contamination is now documented in marine predators. Space launches do introduce chemical and debris pollution into coastal systems. Acidification and toxic deposition are plausible stressors, but they are occurring. Baseline health of the Indian River Lagoon is fragile, and, unfortunately, I think we can maybe not directly conclude, but we can say it's probably getting worse, and then, regulation and monitoring, and I'm using strong language here. From what I'm reading, I feel like it's inadequate for space-related pollution, but, if you all disagree with me, please feel free, and I apologize, and this should say "for". I didn't catch that. Stacie, before I move on, if you want to do questions.

MS. CROWE: Yes, and thank you. That was a lot of good information you found. Let's see who has a question for you. Brenden, and then David Webb.

DR. RUNDE: Great. Thank you. Thanks, Kathleen. If it's any help, I'll try to absolve you of the use of AI. I think this was a good use of AI. It seems, to me, that, as far as actions for this AP, and by extension the council, or maybe even the Regional Office, it probably starts and stops with things related to EFH, and I wonder what sort of actions can this AP take to make sure that the information, that you did a great job of synthesizing in these slides, is considered in any future EFH consultations that have to do with space activity, launches, space debris. Then, while I'm talking, and thinking, I guess the other thing that the council maybe could do is like some sort of research recommendations in a document, and so I'll stop talking.

MS. CROWE: Kathleen, do you want to respond to Brendan first?

MS. HOWINGTON: So, regarding the EFH consultations, thankfully I draft most of those, and so all of this is in my head now, and so I'll make certain that it gets integrated into. Anytime that the council writes a comment letter, and it goes through me, generally it means that we are focusing on habitat EFH, and so I've become the space comment letter drafter, and so I will try to make certain that a lot of this information is integrated in, now that I have all these references and resources. That's a short-term, already-taken-care-of way of dealing with that. As for research

recommendations, and I highly recommend that. If you can come up with some language, I can add it into the habitat research and monitoring section.

MS. CROWE: Okay. That sounds good. I think next we had David Webb.

MR. WEBB: Thank you. Kathleen, this is wonderful work, with very limited support from the people that we're trying to evaluate, and I think, in our last HEAP meeting that we had discussions about this, the HEAP overall wanted to stress that we're not against space exploration, or the use of the Kennedy Space Center for the activities that they're conducting, and we support those things, especially when it comes to national security, but that we want to make sure that we can mitigate, wherever we can, unintentional negative impacts to the environment, and so your five takeaways look perfect.

You know, I think current regulation is inadequate for this, and, you know, a lot of the proof of that is you can't get any information from the agencies that are actually conducting these activities, and so maybe if we can get them more onboard, get them involved with some of the monitoring process as well, then we can make some progress, and so I support your five takeaways, and I would only ask that, at every opportunity when we're talking about this, just from a public relations aspect, we always emphasize we're not against space advancements, exploration, national defense. We just want to make sure that we know what kind of damage we're doing and try and mitigate it every time.

MS. CROWE: Thank you, David. Paula, you had your hand up.

MS. KEENER: Thank you. I think, earlier on in the presentation, someone mentioned including EPA. Is that correct? In the list of addition -- Or, in terms of our discussion of additional contacts, was EPA mentioned?

MS. HOWINGTON: That was for the water quality flow policy, and yes.

MS. KEENER: Okay. I'm sorry. Okay, and so EPA -- I'm reading right now, and it says EPA is increasing oversight of space launch activities, due to environmental concerns, and so that might be something we want to look into. They've actually fined SpaceX, and so they address wetlands and pollution, debris impact, regulatory conflict, atmospheric impact, and compliance action.

MS. HOWINGTON: Paula, you put your hand back up. Did you mean to put it down?

MS. KEENER: On my system, it's raised now, correct?

MS. HOWINGTON: No, and it is down now.

MS. KEENER: Well, okay. I'm going to -- Never mind. I'll leave it alone. I t's not raised on my end. Is down, on your end, red?

MS. HOWINGTON: Yes, and it is not raised on my end. You are good.

MS. KEENER: Okay. On my end, it's green, up. It's okay.

MS. CROWE: I don't see it either, and so --

MS. HOWINGTON: Green means down. I don't know why, but it does.

MS. CROWE: I don't see any other hands raised, and so if you want to go ahead.

MS. HOWINGTON: All right. Okay, and so, as I was calling lots of people, and emailing lots of people, to try and figure this out, one of the things that I kept running into was plenty of anecdotal information, and so, specifically talking with the Florida DEP people, I was getting a lot of them saying, oh, yes, there's debris out there. There's stuff, of course. I was like, okay, cool, and do you happen to have an Excel sheet, or GIS, just a list? Oh, no, no, no, and I mostly just know about it from my fishing buddies.

I started thinking, well, is there a way to try and gather this info? Could we potentially look into a citizen science project, and so I am currently talking with Florida FWC. There is back to the -- My brain is not working. There's -- I'm sorry. There's specific words that I need to say right now. Protection of our coastline, which, for some reason, I know the words for it, but it's not coming to me. National security. There you go.

Because of national security reasons, like I said before, I'm running into a lot of red tape. If there's somebody gathering this info, they either can't or will not share it, which means, if we started gathering the info, we may get in trouble. On top of that, the council can't technically send out, you know, a survey. We are not allowed, and so, both of those reasons, there's just some issues. Can you all hear me? Trish just sent me a message saying she can't hear me.

MS. CROWE: I can hear you.

MS. HOWINGTON: Okay.

MR. KATHEY: This is Scott. I can hear you too.

MS. HOWINGTON: Okay. Thank you. Chip, do you mind texting Trish and letting her know it's on her end?

DR. COLLIER: No problem.

MS. HOWINGTON: Thank you, and so I am exploring that, and trying to make certain that, with other staff members, and again with FWC, to try and figure out how we could potentially do that without getting all of us in trouble. That is currently just in the conversation stage, and I will report back to everyone once I figure out kind of the legal limitations and ramifications of maybe trying to gather some of this info on our own, and then, of course, here's my next context.

I'm not finished yet. The list you all gave me was pretty big. Two things that did come up with me is Wild Ocean and Seafood Atlantic are actually two fish houses that may already be gathering this data. I did not get these names until like the beginning of December, and so I didn't feel comfortable reaching out and asking for fishermen, you know, over the Christmas holidays to ask us for help, and so I'm going to reach out to those two fish houses and see, if they are gathering info, if they would be willing to share.

A couple of the groups that you all mentioned, or that I've kind of run into, the NOAA SERO HCD Branch Chief does consult with Space Force. I didn't want to have to go that high up, but, Anne, I might be contacting you to help mem and, you know, maybe get kicked up to that group. He might, or she might, be able to give me some information.

Of course, the Office of Protected Resources also consults with Space Force. I want to reach out to them, and then Air Force Center for Engineering Environment. I want to reach out to them. Anne, I see you unmuted.

MS. DEATON: I was just going to say the SERO HCD Branch Chief is Pace.

MS. HOWINGTON: Oh. Never mind. I will reach out to Pace.

MS. DEATON: So, you know, he's been copying you on letters, at least he has written a letter about that last space launch.

MS. HOWINGTON: No, and we CC each other on all of those, and so then it might be that he and I just get to have a fun phone call, because then I know what he has, but I'll reach out anyway. It can't hurt. Then, of course, we had EPA. You all mentioned that. Do we have anyone else that you all would recommend me reaching out to?

DR. LANEY: Kathleen, this is Wilson. With respect to the fish houses, and them having space debris locations, I'm wondering about the nautical chart people, and who is that? I guess that's -- Is that the Coast Guard, or is that the U.S. Coast and Geodetic Survey? Whoever is responsible for adding information about trawl hangs, you know, or other underwater obstructions, might be an additional good source of information, especially if the fish houses are reporting these space debris locations because they interfere with commercial fishing operations.

MS. CROWE: Thanks, Wilson. I see Laurent's hand up.

DR. CHERUBIN: Thank you, Madam Chair. I just want to mention that I know someone personally at NASA who is a biological scientist who does surveys and assessment of basically all the commercial and recreational species, and so, you know, the Banana River, and the protected area they have over there, but also along the coast. His name is Dr. Eric Reiter.

Maybe some of you know him, but I think he would be a good person to at least get an idea of what sort of studies and assessment is done, in terms of, you know, fish species and coastal species in the region, and so I can give you his name, and you can look at his work also online. I can share with you a link, if you guys want, but that's what I wanted to say. Thank you.

MS. CROWE: Thank you, Laurent. I see Brenden has his hand up next.

DR. RUNDE: I would like to yield to Chip, if he's going to talk about the nautical charts.

MS. CROWE: Sure. Chip, go ahead.

DR. COLLIER: Yes, and it will be difficult to get these new pieces put on the nautical charts, but what I would encourage Kathleen, when she's reaching out to these other areas, and how she describes it, I would just say new obstructions. That way, it's not saying it's space debris or anything like that. It is just a new obstruction. It won't get anybody in trouble. It's just what fishermen have reported.

MS. CROWE: Okay. Thanks, Chip. Scott, you can go ahead.

MR. KATHEY: I'm just wondering if an NGO, like Ocean Conservancy, may have looked into this, or has an interest in there, and there might be some information that's been gathered by a nonprofit organization, rather than a government organization. It might be worth touching base with one of those NGOs, and, if they haven't done that work, they may know of another NGO who has.

MS. CROWE: Thanks, Scott. Kathleen, there are no -- Wait. Brenden has his hand up again.

DR. RUNDE: Thank you. I like the suggestion of reaching out to NGOs, as an NGO employee. I don't know if OC has done anything. I was thinking about the same sort of line of inquiry, because especially, you know, the more litigious NGOs might be interested in the fact that we've been stiff-armed on FOIA for a while, and so I don't want to get council staff in trouble, but maybe I'll just poke around and see what OC and EDF and NRDC know about all this.

MS. CROWE: Thank you, Brenden. Wilson.

DR. RUNDE: Yes, and, Brenden, add National Wildlife Federation to that NGO list, and I can certainly check with the four South Atlantic national affiliates of the National Wildlife Federation, to see if they've done anything on it, in particular, Florida.

MS. CROWE: Thank you, Wilson. Kathleen, I don't see any other hands up, if you want to go ahead.

MS. HOWINGTON: All right, and so I believe this is my last slide. The alternative data sources, you all gave me a few of those, and so I thank you for that. Again, I'm reaching out to other people of would somebody be willing to host a data gathering webpage, and is this plausible, or is this legal, and I'm going to look into it. I'll let you all know.

Then going back to what Brenden said of how can the council further its goal of protecting EFH, considering this increased activity. Like we said during our comment letters, we can make certain to integrate all this information that I've found.

How else can we potentially do that? I'm still data gathering, and so we can have a longer conversation when we're in-person in July, but be thinking about that, of what can the council do to keep pushing forward and protect this area while, again, simultaneously, and I will reiterate, because I agree, letting the space program do the space program. There's a launch coming up where they're going to be going around the moon, and they're testing all kinds of new technology.

I'm super interested in that. That's really cool, but I also want to make certain that the Indian River Lagoon has enough dissolved oxygen in it for the animals to live, and so there we are. Thank you,

guys, for sitting through all of those words. Again, I apologize. It's a very long presentation, but you all gave me a lot of good contacts, and now you gave me more, and so I'm going to give you at least one more of these wordy presentations.

MS. CROWE: Thank you, Kathleen. I think that was a great summary, and I appreciate all the work that you put into that, and so, if no one has any more comments or questions for Kathleen, we will go ahead and move on to our next presentation, and that is not from Kathleen, and so, next up, we are going to have an update on the citizen science program from Julia Byrd.

MS. HOWINGTON: Before that, we do have one hand raised.

MS. CROWE: Okay. Man, they sneak up on me. Who do we have? Paul, go ahead.

MR. MEDDERS: Thank you. I was just sitting here thinking about Scott Kathey saying Space Force down there in the Canaveral area, and it seems to me that the Department of Defense does a good job of having people on staff at all these locations that do environmental-type work, and I don't know if -- I'm not actually sure what you call those people, but there's a military base there in Canaveral, and I think they're required to have those people, like Kings Bay has here, and Fort Stewart has here, and that that might be a ---They're usually civilians, and so there are people that might be a good time to contact as we as we reach out for a stretch a little. That's it.

MS. CROWE: Thanks, Paul. I think, in some of the military installations that I've dealt with here, they're just like a natural resources biology biologist, I think similar to what Laura's position is. Laura, do you want to speak to that at all?

MS. BUSCH: Yes, and this is Laura. Yes, that's correct. Almost all the military bases have some type of natural resources person. Sometimes they double as the NEPA person, and sometimes there's two different offices, or two different positions, but there's always an environmental readiness, or environmental division, within all the military bases, and so the Space Force base would have somebody responsible for that.

MS. CROWE: Great. Thanks, Laura. Myra.

MS. BROUWER: Hi, everybody. I just had a question for you all, and I apologize that I joined in a little bit late this afternoon. I wonder if the advisory panel has entertained the idea of potentially developing an EFH policy to address threats from space activities. Is this something that's come up? I don't quite recall.

MS. CROWE: Kathleen, I'll let you update Myra on our conversations.

MS. HOWINGTON: So we have discussed developing a policy. We wanted to do more of the data gathering before we develop it, just to make certain that there is enough data, and then we felt like a policy was the best step forward, and then, of course, we'll need to get permission from the council to create that, and so we're still in --

I would still say we're still in the data gathering, since I just got eight more contacts today, but I think, come July, we need to make a decision on what to do with this information, and how we as an AP can recommend to the council we should move forward best, but a policy has been tossed

around as an idea, as much as the data gathering website has been tossed around a few times. The citizen science project has been tossed around. We haven't landed on anything official yet, but we're brainstorming.

MS. BROUWER: Got it. Thanks for that update, Kathleen.

MS. CROWE: Thanks, Kathleen. Anything else on space activities? Okay. I'm not seeing any other hands come up. Wait. Anne, go ahead.

MS. DEATON: Sorry, and I was just looking on the council's site at the policies that we have. Could you incorporate any recommendations on space debris under energy exploration? We have that one. It's energy exploration, development, transportation, and hydropower relations, and so it's a lot of things. You might want a standalone, but it will depend on how involved if the committee feels we have a policy.

MS. CROWE: Thanks, Anne. Kathleen, did you want to comment on that?

MS. HOWINGTON: I don't hate the idea. I would want to relook over the policy, and see where I would put stuff in, but that would definitely be -- Maybe not a smaller lift, but I would want to look into it before I say yes or no.

MS. DEATON: Yes, and I haven't looked at it in a long time either, and so just a thought, just to look at it.

MS. CROWE: Okay. Anything else on space? Alrighty, and so let's go ahead with Julia and an update on the citizen science program. So, Julia, if you're ready, you can go ahead.

MS. HOWINGTON: Give me one moment. I am going to make her a presenter. So, Julia, you should have just gotten the prompt.

MS. BYRD: All right. Can you all hear me?

MS. HOWINGTON: We can, and we can see your screen. It looks like full screen PowerPoint. Thank you.

MS. BYRD: Awesome. Thanks, guys. Good afternoon, everyone, and so, for those of you I haven't had an opportunity to meet, my name is Julia Byrd, and I oversee the council's citizen science program. There are kind of two council staffers that are dedicated to the program, myself and Meg Withers, who is our Citizen Science Project Coordinator, and so I haven't provided an update on what's been happening in the citizen science program to the Habitat AP in a while, and so I really appreciate the opportunity to share some information with you guys on what has been happening over the past several months.

Today, what I was planning to do is share a little bit of information on our citizen science research priorities, give you guys a quick update on what's been happening in some of the projects we have underway right now, and then talk a little bit about our citizen science advisory panels. We have one advisory panel that's made up of representatives from many different council advisory panels, and we're actually interested in getting some habitat people involved in that AP, and so hopefully,

at the end of the presentation, we may be able to figure out if any of you guys are interested in getting involved in that additional advisory panel.

To kick things off, I'm going to talk a little bit about the council's citizen science specific research priorities, and so we basically have kind of a list of research priorities that are devoted to our citizen science program, and these priorities really guide the types of projects that the program kind of develops and supports, and so, you know, it helps narrow down the focus from all of the many data needs we have in the South Atlantic to ones that are important to our kind of fishermen, scientists, and managers, and ones that we think would work well with a citizen science approach.

Kind of how we use these research priorities is, you know, we really try to support projects that meet these research needs, and then we'll often also use them if there are other groups that reach out to us that are interested in collaborating with the program. We'll often initially kind of share this list of research priorities with them, to see if there are any kind of overlapping interests, or overlapping research questions, that we're both interested in as a way to start kind of a partnership or collaboration.

These research priorities are updated every two years, when the council kind of updates their overall research and monitoring plan, and the citizen science research priorities input is provided via our citizen science advisory panels, which are kind of a mix of fishermen, scientists, managers, outreach specialists, kind of a diverse group of folks, as well as the council members.

The council just kind of updated and adopted their citizen science specific research priorities back in December, and so there's just kind of a table on the screen of research priorities for the next two years. I did just want to highlight that there is one focused on trying to kind of characterize habitat. One thing I will say, going into this, is kind of this list of research priorities in some ways you can think of as a wish list.

If we had kind of all the resources in the world, we would love to develop projects under all of these research priorities, and so we don't have projects developed under all these priorities, but this is what kind of drives the development of projects under our program, and so I did want to just note that there is one research priority on kind of helping characterize habitats, in particular kind of essential fish habitat, kind of live bottom areas, with the idea that maybe some kind of information could be helpful in ground-truthing the symmetry data, and so there is one kind of habitat-focused research priority.

Then, right now, we have kind of three projects underway that are addressing kind of the three research priorities highlighted in green here on the screen, and I'll quickly give you an overview of kind of what's happening with those projects now.

First off is our SMILE project, and this is a project that's led by the Reef Environmental Education Foundation, and so some of you guys may be familiar with them, but that's a group that's been working with recreational divers on citizen science projects for decades, very successfully, and so we have partnered with them on the SMILE project. This is a kind of newer project to them, and it works with recreational divers to collect length information on some of our data-limited species.

It's done by divers using kind of a laser-mounted underwater kind of Olympus camera, and so what divers are doing is they'll kind of be on kind of a visual census survey. They will get the laser kind

of on a fish of interest, take a burst of photos, and then those photos are analyzed to get length information, and so, in addition to developing kind of the camera technology, and the methodology, the REEF crew is also leading efforts to develop kind of an AI workflow to kind of make the kind of process of analyzing those photos to get length information more efficient as the project continues to grow.

We just wrapped up a three-year pilot project, and we've secured an additional year of funding, and so additional work is underway now. This group did present on the SMILE methodology to the SSC at their April 2025 meeting. The SSC was really supportive, and provided a lot of good feedback to the REEF team, and so the project is kind of continuing this year.

In addition to kind of the work in developing the methodology and kind of data analysis, the REEF crew was able to work with social scientists, led by folks at Colorado State University, to do a survey to better understand kind of the motivations and barriers of recreational divers to participate in a project like this, which is going to be really informative as the project looks to grow in the future.

If you guys are interested in learning any more about kind of SMILE, and getting a kind of deeper dive into some of the results from the pilot project, the REEF crew did a wonderful presentation back at the October seminar series for the council, and there's a link to that that you can click on and watch that recording if you're interested.

The next project I wanted to provide you guys a quick update on is our FISHstory project, and so, again, this is a project that's using old historic fishing photos to learn more about the fish that were caught, and the size of the fish that were caught, back kind of in the 1940s, 1950s, 1960s, and 1970s, before we had catch monitoring programs in place for many of our fisheries.

This project kind of has three components, and so I figured I would just update you on the findings for the three components right now. The first component is we're trying to kind of archive these historic photos, and, so far, we've been able to archive over 2,300 photos through the project from the South Atlantic, kind of from the 1940s to the 1990s.

The majority of our photos right now are from Florida, both the Keys and from kind of the Daytona Beach/Ponce Inlet area, and so we're looking for more photos, in particular photos from the Carolinas, as we continue to grow the project to help make the data collected through these photos more representative, and then, once we archive those photos, we need to analyze them, and we do that using volunteers who are helping us identify and count fish in these photos using an online crowdsourcing platform called Zooniverse.

Zooniverse lets you kind of upload images, and then you develop tutorials and training materials so that members of the public can help you analyze those photos, and, to date in the project, we've had over 4,000 volunteers that have analyzed about 1,950 photos in Zooniverse, and then, to help groundtruth kind of our volunteer data, we have a validation team that's made up of fish ID experts. It's a mix of fishermen and scientists, and shoutout to Kevin Spanik, who is on the Habitat AP. He's one of our FISHstory validation team members.

They help review kind of a subset of those photos, and then Jie Cao, with NC State, is leading the analytical work for this project, and, to analyze the Zooniverse data, he has basically developed a

model that uses kind of all the volunteer and validation team project data kind of simultaneously. It accounts for kind of observer bias, and then kind of difficulty level of photos. Some photos are easier to kind of analyze than others, and it's really that validation team data that's helping kind of calibrate the overall Zooniverse volunteer data.

Then the third component of the project is we are kind of estimating size compositions for some of the key species found in the photos, and so, to date, all of the king mackerel and red snapper in the photos we have currently archived have been measured, and we've been able to produce length compositions for kind of both of those species.

The red snapper length compositions were kind of presented and recommended for use by the SEDAR 90 data workshop panel, which is the stock assessment for South Atlantic red snapper, and then the king mackerel length compositions will have been updated, and then they'll be presented at the next SEDAR stock assessment for South Atlantic king mackerel.

Just in case you are interested in seeing some of the red snapper length information that we presented at the data workshop, this is just a quick overview of our length compositions by decade, and this is in kind of fork length, and so, if you look at the 1950s, you can see the size most frequently found in the photos is kind of twelve to fourteen inches, but you can still see a large number of these larger-sized fish.

If you look at the 1960s, the kind of mode is still the same in the data, but you're starting to see less of these larger fish within the photos. Then, if you look at the 1970s, again you see the same kind of mode here, but fewer of these kind of larger fish within the photo archive we have in the projects, and, if you're interested in checking out kind of the paper that we provided for the SEDAR data workshop, there's kind of a link to that right there on the bottom-left-hand corner of the slide.

Now I'll update you on kind of the last project we have underway right now, and that's our SAFMC Release project, and so this is the project that we're working with recreational, for-hire, and commercial fishermen to collect information on released shallow-water grouper and red snapper, using a free app called SciFish, and so participants have been kind of continued reporting information in the project, and are doing so right now, too.

Again, the project is really focused on trying to learn more about the size of these fish that are being released, and then information that helps us better understand how many of those released fish will survive, and so looking at things like depth the fish was caught and information on whether the fish was treated for barotrauma before being released.

Meg Withers, who, again, is our project coordinator, is really the one leading the charge for this project. She's been continuing to do a lot of outreach events, kind of working with fishing clubs, and partnering with captains to do seminars on kind of this -- The captain will kind of share information on bottom fishing, and then she'll share information on Release, and we'll coordinate with our Sea Grant fellow, who is also able to share information on best fishing practices and descending device usage, and so she's been doing a ton of outreach, and has also been able to develop a lot of new content for our kind of project promotion, as well as new training videos for our participants.

Then I'll talk a little bit more kind of about our data summaries that are available, if you're interested in checking them out, and I also wanted to mention that data from our Release project was also presented at the SEDAR 90 data workshop, and the red snapper length information from the project was recommended for use by the SEDAR 90 data workshop panel as well.

Then the last thing I want to provide an update to you guys on, in a couple minutes, is a new initiative that we are lucky enough to partner with the Sea Grant, South Atlantic Sea Grants, last year, and we're working to do that again this year, and so, first off, just a little bit of information on the data summary. You guys may be thinking this is the 2024 data summary on the screen, but it's 2026, and why are we seeing data from kind of two years ago, and I'll say, right now, Meg is in the process of updating our 2025 data summary.

That data summary will be available in the upcoming weeks. It will initially be shared with our project participants. Once they've had a time to review it, and kind of ask questions, it will then be posted to our website, but I did want to give you guys an idea of the type of information that you can find in our data summaries. It includes information like Release submissions by state and fishing sector, the species that were submitted through the app, length compositions for some of our key species in the project.

We look at release treatment by depth. We look at things like shark depredation, and hook type and location, as well as kind of recognition from some of our 2024 participant recognition program milestones, and so, if you're interested in checking out this data summary, there's a link at the bottom of the screen.

Then the last thing I wanted to provide a quick update to you guys on was a collaboration that we were able to do with Sea Grant last year called the Sea Grant South Atlantic Release Rodeo, and this was an idea that the Sea Grant South Atlantic Reef Fish Fellow last year, Greyson Webb, came up with, and so it was a great partnership, and I wanted to share a little bit of information about it with you guys.

Sea Grant is really interested in getting best fishing practices gear into fishermen's hands, and, for the SAFMC Release, we're really interested in getting kind of more fishermen participating in the program, and, as they're submitting data, potentially getting more photos submitted with kind of data submissions, so that we're able to use those photos to help validate the information provided through the project.

Greyson had this great idea to come up with a Release Rodeo challenge, and how it worked was, from May to June in 2025, participants who submitted Release -- Who did Release submissions in the SciFish app, that included photos that could be used for validation, could get up to four entries per month in the Sea Grant giveaway, and then, if their photos were on a ruler, or something that could be used to provide length validation for fish within the photos, they could double their entries.

Then, each month, Sea Grant did a drawing, where they would kind of draw a name and give away some best fishing practices gear to those folks, and then, at the end of the three-month period, there was a grand prize drawing, where someone got to win some wonderful prizes that got donated to kind of the South Atlantic Sea Grants, and so we were really excited to kind of do this last year. It was really successful.

Some of what we found out was, when we were able to compare the Release submissions during those challenge months from May through July -- We compared what we got last year during the Release Rodeo to an average of what we got the previous two years, and we saw an increase in submissions by about 28 percent, and the number of submissions that had photos almost doubled, and the number of submissions with photos that could be used for length validation almost tripled.

Then, from the Sea Grant perspective, they were able to get best fishing practices gear into fishermen's hands in kind of a new, fun way. We got a lot of positive feedback from fishermen on the Release Rodeo challenge, and kind of the Sea Grant giveaways, and we were able to build some kind of meaningful relationships within kind of the fishing community through this effort, and we're really excited that Sea Grant is partnering with us on this South Atlantic Sea Grant Rodeo again in 2026, and so it will be kicking off again in May, and kind of information will be coming out about it in the upcoming months.

That's a little bit of information about the projects we have underway, and then the last thing I wanted to talk a little bit about was our citizen science advisory panels, and so our advisory panels are made up of members from other council APs or participants that are part of the council's citizen science kind of advisory panel pool, and so we have kind of two primary advisory panels.

The first one we call our Operations Advisory Panel, and it provides kind of more big picture, kind of programmatic-level guidance. They typically meet twice a year. Then we also have a Projects Advisory Panel, and this is a group that's made up of representatives of all of the other kind of council advisory panels. They typically meet once a year, via webinar, and they provide input on things like research priorities, and what are the different research priorities we have kind of across the APs, across the fishery management plan, kind of or in communication, or kind of Habitat APs.

They help us kind of come up and figure out kind of ways to better engage with our volunteers, and kind of recruitment and retention methods, and the tenure on this AP is dependent on kind of the individual's tenure on their specific advisory panel.

Then we also have kind of a third group of advisory panels. It's kind of ad hoc committee, and so, if a topic comes up, and we need kind of a small group to work on that topic, address that issue, we can put together these kind of time-limited ad hoc groups. We don't have any of those ad hoc groups right now.

One thing I was interested in kind of talking to you guys about is, right now, our Projects Advisory Committee doesn't have any representation from the Habitat AP, and I wanted to see if any of you guys might be interested in joining this AP. I don't think it's -- It’s not too heavy of a lift. There's generally kind of one webinar meeting a year. It's normally kind of a half-day meeting, and I think it's really important to have kind of the Habitat AP represented, because I think you guys will bring a lot to the table, as far as kind of research priorities for habitat-related issues that our program should be thinking about developing projects on.

So, with that, that's kind of a quick update on kind of the projects. I'm happy to take kind of any questions on kind of what we've had going on over the past several months, but then also interested in seeing if there's anyone who might be willing to serve as the Habitat AP representative on our projects advisory panel, and, with that, I'll turn it back over to you, Stacie.

MS. CROWE: Thank you, Julia. That was great. If there is anyone that is interested in serving on the Citizen Science AP, you can either raise your hand or reach out to Julia on the side. I do see Wilson has a question. Wilson, do you want to go ahead?

DR. LANEY: Thank you, Stacie, and so, Julia, great presentation. Thank you so much for giving us the update, and I will say, as someone who has been kicking around the council process for a long time, it is extremely gratifying to see something that sort of started out as a vision, I think maybe in John Carmichael's eye, and other eyes I'm sure, that has matured to the point where it's actually generating data that are useful for stock assessments, and so that's great.

I just wanted to share that with you, and thanks so much for the presentation, and the only question I have is where is the funding coming from? Are you all having a lot of success getting a sufficient amount of funding to provide for projects, and is there any way that those of us who are able to, without worrying about lobbying constraints, look for funding could help you out?

MS. BYRD: Wilson, first off, thanks so much for kind of your kind words. You know, there have been a lot of people who have been putting a lot of hard work into the program, and you're right that it was the vision of John Carmichael and, in particular, Ben Hartig and Michelle Duval, past council members, who helped kind of -- Who helped kind of advocate for the council to develop a program, and so a lot of hard work has been put into the program, by many, many different people and partners, and we're really excited to kind of reach the milestones where we have data that we're able to present for consideration kind of in assessment or management.

As far as funding goes, so the council funds my position, and then, any other funding, we have to get from, you know, grants, and so we've had some success in the past of kind of getting funding through kind of -- The council is limited in where we can receive funding, what grants we can apply to. We've been able to, thankfully, get grants from kind of the ACCSP, through the Coral Reef Conservation Fund, who has helped fund our SMILE project.

Then, you know, last year, or it was the end of 2024, we were able to get a kind of a memorandum of understanding with the Atlantic States Marine Fisheries Commission, and through kind of that MOU, and partnership with them, it can expand the type of funding and grants that we can kind of go for.

That being said, as everybody on the call probably knows, you know, grant funding has kind of become more uncertain, and kind of limited in the recent past, and kind of probably into the near future, and so, you know, funding is something that we're always kind of keeping in mind. I would certainly love to have -- If anyone is aware of additional funding sources, or can help kind of speak well about the program to folks, I think that would be kind of really beneficial and helpful.

DR. LANEY: Okay. Thanks. Yes, and I wonder about some of the larger recreational fishing organizations, and whether they might not be interested in funding, you know, some citizen science projects if there was something that they were -- You know, had a particular interest in. I'm thinking like the West Palm Beach Fishing Club, for example. Have you had any success in talking to any of them, and possibly securing funding from them for a project of interest?

MS. BYRD: What I will say is we talked to some, I mean kind of very informally, to some kind of fishing organizations, trying to figure out, you know, what areas of overlapping interest there may be. Specifically, with the West Palm Beach Fishing Club, they have donated a ton of photos to the FISHstory project.

They were wonderful, and let me come down there, and we went through their photo archive together, which is pretty incredible. They have photos from the 1920s, and 1930s, kind of through the 1950s and 1960s, and so we haven't had any kind of financial -- We haven't put together any kind of financial funding from groups like that, but we have been exploring, and talking kind of with different groups, building relationships and just trying to get a better understanding of where we might have overlapping interests, and so, I mean, that's kind of a roundabout way to answer the question, but I think that's kind of the best I can do right now.

DR. LANEY: Okay, thanks, and I was neglectful in not saying commercial fishing organizations as well. You know, like the -- Is it the South Atlantic, or Southeast, Shrimp Alliance maybe, and some of those groups, too. I think, you know, if there were projects of interest to them, it would certainly be worthwhile of, you know, asking them, to see if they were willing to partner in some of this stuff.

With respect to the photographs, I know that you all have been trying to get more historic photos from the Carolinas especially, and one of the things I had mentioned in the past is that I know there were photographers who were always taking photos of charter parties and their catches at places like the Oregon Inlet Fishing Center, and I'm wondering if some of those --

They usually, you know, provide you the information that they're going to keep the photos on file for a certain period of time, and I'm wondering if there might not be some archives of historical photos sitting around in some retired photographer's filing cabinet somewhere. I know that you all have made inquiries in the past, and, if I can come up with any names, I'll certainly pass those along.

MS. BYRD: Yes, Wilson, and that would be awesome, and I think you are one of the ones who suggested this kind of before, and so, thanks to kind of your idea, and then another kind of Mackerel AP member, who helped us figure out that there are a lot of files from Aycock Brown, who I think was one of the photographers working in kind of the Outer Banks area taking these photos.

A lot of his photo collection has been digitized through the library system in North Carolina, and then there's -- I'm going to get the name slightly wrong, but it's kind of like a history center that's in Manteo, the Outer Banks History Center, or something like that, and so we've made some connections there, and so we have been able to get some photos from them, and so thank you for those suggestions, and, if you think of other names, I would certainly be all ears.

DR. LANEY: Well, yes, and you just prompted me to think of one, and that's a historian at the University of North Carolina, and Dr. David Chichelsky is his name. David is intimately familiar with sources of historical photographs, and would definitely be worth contacting to ask if he knows of any large repositories of, you know, photos of anglers and their catches.

I'll ask him, and I'll copy you when I send him that message to ask him that question, and yes, Aycock Brown, and, I mean, he took tons of photos, and a lot of those are in maybe -- Have you contacted the state divisions of archives and history for the four South Atlantic states? I know North Carolina has a big archives and history section within state government, and I would think that might be a productive area of inquiry as well for South Carolina, Georgia and Florida, also.

MS. BYRD: I haven't done that, Wilson. That's a great idea, and I've added it on my list of things to look into, and then, yes, I really appreciate the contact at North Carolina, at UNC, and so thank you.

MS. CROWE: Okay. Thank you, Wilson, for all that information. I think Kevin has his hand up, or maybe not. I think you took it down. Anyone else have a comment or question?

MR. SPANIK: Sorry. I just had it up to offer to volunteer.

MS. BYRD: Yay.

MS. CROWE: Great. Thanks, Kevin.

MS. BYRD: Thanks so much, Kevin. I'll send you some more information kind of about the AP and that sort of thing, probably next week, just to give you a little bit more information, but I really appreciate you volunteering.

MR. SPANIK: Okay. Sounds good. I look forward to it.

MS. CROWE: Great. Thank you, Julia. If no one else has any more comments or questions, I'm going to pass it back to Kathleen to talk about what we're going to do next.

MS. HOWINGTON: Great, and so we have you guys until 4:00 today, which means we have an hour left, which is great that we're going ahead of time. It means that maybe tomorrow we get done a little early. I would recommend, Stace, with your approval, that we work on the annual habitat report.

As I said in my email to everyone, the more work we can get done ahead of time on this, the less work we have to spend during the AP meeting finishing it up, and then I received only two emails on it, and so we didn't get a lot of work done ahead of time, unfortunately, but, also, this will give everyone the opportunity to kind of think of things, and send me via email, and then I can try and combine them all tomorrow, and then we can, you know, finish it off tomorrow, and finalize it.

I know that the council does appreciate getting these. During the last March council meeting, I brought it up of do you read these, and do you like these, and, in fact, our council chair, Trish, emphasized that she enjoyed being able to look at this, and so, again, I was about to go into my talk. Stacie, with your permission, do you think we could do this next?

MS. CROWE: Yes, and I think that's a great idea.

MS. HOWINGTON: Fantastic. All right. So then, guys, a friendly reminder. What the annual report is, the annual report is meant to be made at the beginning of the year, to then report out to

the council about all the activities that have occurred in 2025, and so in the previous year, that were not in our habitat report.

Anything that we've discussed during the Habitat AP, that would go in the habitat report, and we don't need to add that in here, but we generally have, you know, these comments right here. I summarized some stuff, and I did get some stuff from Anne about some comment letters that they've written, some major regional projects that occurred. I got some here that I've tried to list out, if you all can think of any.

We also then have, you know, the Southeast Aquatic Partnership, and if there are any details on that, and then I've updated the policy statement, and so we don't need to go over that. Are there any future developing habitat issues? Are there any regional projects of issues, and so these are not state-specific. These are things that happen for the region, and so these would be the really, really big projects.

I did get some stuff from BOEM about some oil and gas and some leasing programs that may be occurring in the Mid-Atlantic, and then some coordination between regions. Is there anything that y'all have been working between regions with? Then, finally, funding projects and opportunities. Generally, this ends up being funding loss, which is always depressing to me, but, if you know of any, let me know, and then, of course, any outreach and communications that have occurred, or any other monitoring activities.

I'm going to go to the top. I'm going to zoom-in, and I'm going to just open this up to the group, and it might be that we just have a really small report this year, and that's okay. That's fine. 2025 was rough for habitat stuff, but, with that, then I see, Matt, your hand is raised.

MR. KENWORTHY: Looking at the potential future developing habitat issues or threats, we could probably include in there Halophila stipulacea, which is an invasive seagrass that has been identified currently down in Biscayne Bay, and some -- I don't know if they've been officially confirmed yet, but reports of it in the Indian River Lagoon. There are multiple groups working on this.

FWC has a group that is highly focused on it. We've got public information out about it, and they're exploring options for removal. They've got an alert out to collect information from the public on reporting identification of it out in the wild, but I can gather information from that group, to put a little blurb together and polish that off, but I think that's something that we can include in there.

Under emerging disease, the spinning fish topic has kind of not completely gone away, but it's not a major concern over the past couple of years. Since that big event happened a couple of years ago, there hasn't been any major recordings of it. Again there I can help try and get an update blurb, or a polished-off message, there.

MS. HOWINGTON: Thank you. Brenden.

DR. RUNDE: Thanks, Kathleen. I have two things, and I'm not sure -- I'm not confident that either belongs in this report, and so I'll list them. The first one is with respect to offshore wind, that this AP has talked about before. The various federal happenings, that haven't really touched

down in our region specifically, but the pause in construction of offshore wind, and I can't remember if in 2025 this happened, but the sale of that Kitty Hawk area to Dominion, the northern half of the Kitty Hawk area, and that's something that may be worth noting, and so that's one. I see you writing it there. That's great.

Then the other one is that the Mid-Atlantic Council is currently undergoing an EFH five-year review, and that, once again, in theory, doesn't really touch down in our region, yet some of their species do come into our region, like black sea bass, for example, and so I'm not sure if that should be in here. I don't know if - Are South Atlantic staff tracking that EFH review? Are you paying attention to that, Kathleen? It's kind of interesting, what they've done.

MS. HOWINGTON: Yes. Cursory, but not -- If you want to give us more detail, go for it, but I'm just kind of keeping my ear to the ground until I know what the output is going to be.

DR. RUNDE: Well, it's a joint species distribution model. They looked at all the Northeast surveys, NOAA surveys, and have -- My understanding is that they basically conducted a species distribution model looking at catch of each species in those surveys, and then the various environmental covariates, turned the crank of the distribution models, and came up with density maps of each species, and each life stage, where they could, within species.

Then this is the part that I'm 90 percent sure of. They've identified EFH as the 75th -- The upper 75 percent of density for a given species, or life stage, and then HAPC is the top quartile, the top 25 percent, of density, and that those maps are what triggers the consultation, and then, once they're in the consultation phase, there's like a text description of EFH and HAPC for each species, or life stage, and that's where specific biological information could come into play, and so we could we could talk about the merits and drawbacks of that approach. Your Sub-Bullet 3 there should say "HAPC". You're on it. Okay. Thanks.

MS. CROWE: Thanks, Brenden. Kathleen, I see Cameron had his hand up next.

MR. LUCK: Kathleen, do you mind scrolling up to the North Carolina portion, when you're done capturing everything Brenden had to say?

MS. HOWINGTON: There you go.

MR. LUCK: Okay. Cool, and so, the Wilmington Harbor Project, I just want to read what Anne had included. NMFS provided the consultation to the Corps for their draft EIS on this. This is a really big project. It's tied up in federal consistency right now. It's pretty contentious, and it's taking a lot of my time.

There may be more that I can add here with specifics as it relates to habitat impacts. I think Anne has done a good job. I'm not sure if it's appropriate in this document, but comments should include, or at least it might be worth documenting, PFAS concerns, contaminant concerns, associated with this, and I'm just checking to make sure -- There's pretty significant habitat conversion concerns. We have basically a salt wedge push that's going to be moving north in the Cape Fear River, converting a bunch of freshwater habitat to saltwater marsh, but, anyway, I can take a look at this and add some additional perspective. This is -- This is, and will be, an ongoing federal consistency battle, for lack of a better word.

MS. CROWE: Thank you. Wilson.

MS. HOWINGTON: Thank you, Cameron. Wilson.

DR. LANEY: thank you, Madam Chair, and so a couple of things. Simon Kaalstad couldn't be with us today during the meeting, and asked me to put on my ASMFC and ACFHP hat, and so it's appropriate that I do that during this part of the meeting. So, Kathleen, one thing that we have very close to completion, by the ASMFC Habitat Committee, is the shell recycling document, oyster shell, clam shell, any kind of mollusk shell, recycling document, and so that's getting ready to come out very soon.

Then I wanted to ask if it -- Do we -- I can't remember what we did last year, and so scroll to the appropriate place, if it is appropriate, but do we want to include updates, or is the council already overly familiar with what's going on with waters of the United States, and the Endangered Species Act, and so forth and so on. Is that -- I mean, there have basically been, you know, major proposed changes to federal regulations, with respect to those -- Well, with respect to actually air and water quality, and ESA as well.

I don't know whether that's something that the council already feels like they know enough about, because of the opportunity that NMFS has to comment on those, or whether it would be useful for us to put some information about those issues in this document.

MS. HOWINGTON: I think it would be appropriate to put some of those issues in this document, and I think that's the reason why we have region-wide projects, and so I think that needs to be region-wide, or coast wide.

DR. LANEY: Okay. Thanks. Then here's plenty in the public record we could put in there.

MS. CROWE: Okay. I saw -- Cameron did you put your hand back up?

MR. LUCK: No. Sorry about that. I forgot to take it down.

MS. CROWE: Okay. Laura I think I saw next.

MS. BUSCH: Yes. Hi. I'm not sure if this is appropriate for this, and, if it's not that's fine, but the Navy did get our Marine Mammal Protection Act and Endangered Species Act consultations completed in 2025, and so we got a seven-year permit for all of our training and testing on the east coast, Gulf of Mexico/America, and, with that, we did get essential fish habitat consultation, and all of our coastal zone management consultations, and so I don't know if that's appropriate.

MS. HOWINGTON: I'm typing as fast as I can, but I'm probably going to --At the end, when we finally hit where nobody is adding anything, I'll save this, and send it out, and, Wilson and Laura, if you could go add in, as well as if we could add in some details to this North Carolina, and make certain I'm not doing this incorrectly, I would appreciate it.

MS. BUSCH: Yes. Absolutely.

MS. HOWINGTON: Thank you.

DR. LANEY: One other thing that comes to mind is we probably may want to put an update in on environmental dredging windows. Anne may want to comment on that. I'm not exactly sure where things are at the moment. There was some litigation, you know, by the Southern Environmental Law Center, in at least three different core districts. I think Charleston and Brunswick and Wilmington, and so I'm not

It might be useful to summarize the outcome of that litigation, and then what has to happen next, or what may happen next, with respect to environmental dredging windows, and, again, I'll defer to Anne on that point. I think, as far as I know, based on the outcome of the court cases, the dredging windows are at least still being recommended, and I guess they're still being adhered to, but, again, Anne, I'll defer to you on that, because I think you're a whole lot more knowledgeable than I am.

MS. DEATON: Definitely I'm not more knowledgeable than Wilson, okay, but I do know the court is working on this, and I was going to talk about it tomorrow in my update, and so I can wait until then, but they are working on EISs for the courts, and know probably a lot of people on the AP are -- Does that answer your question, because so, in other words, this is kind of having to do this EIS because of that litigation, and, because of that litigation, they are supposed to be adhering to environmental windows right now, and this is the attempt to look at that again.

MS. CROWE: Okay. Matt has his hand up.

MR. KENWORTHY: Again, to the regional projects of interest to the council, I know, in past iterations of this document, we've included the South Atlantic Saltmarsh Initiative as kind of a general reference, but I know that each state has an implementation team, and, you know, each state respectively has been working on, you know, sizable projects, and taking big steps towards the goals of SASMI. I would recommend then maybe reaching out to the SASMI coordinator, to see if they have any recommendations, or requests to include anything particular in there, but maybe, at the least, they're developing like a project tracking tool.

I can't recall if it's active and public yet, but that might be something to include in this report-out, and maybe provide a link to it, just so it's something that, you know, anybody who is interested can go to it, but I would recommend maybe connecting with the SASMI coordinator, to see if they have anything that's, you know, monumental, or something of interest specific to add, and they could probably coordinate that across the whole region, rather than just state-by-state.

MS. CROWE: Thanks, Matt. Laura, you had your hand up?

MS. BUSCH: I just forgot to put it down.

MS. CROWE: Anyone else have anything for Kathleen to add? You can also email her stuff to add later. Scott, you want to go ahead?

MR. KATHEY: Yes, and this isn't really an activity that's directly habitat related, but it might impact fishing. The Coast Guard has been looking at a fairway study for the east coast that would funnel shipping traffic into basically these lanes offshore. Right now, ships can kind of chart their

own course, and they would still be able to do that, but this would be encouraged to -- Basically for shipping safety purposes.

If it were successful, then you would have this concentrated shipping in these lanes, whereas now it's kind of a free-for-all, and dispersed, and so I'm just thinking that might potentially have an impact on, or could potentially have an impact on, traditional fishing areas, particularly commercial fishing, and I'm sure the Coast Guard is considering that, but, you know, I was just looking at this section of projects of interest to the council, that's winding its way through the Federal Register process, and, if that hasn't been on their radar, it might be something of interest to them, but I'm not sure.

The Coast Guard came out with a Federal Register notice in January 2024, and it's been kind of delayed over the past year, of getting this PEIS out on the street for environmental impacts of this suggested regulatory change, and so it hasn't gone out. They did a notice of intent back in January 2024, and the draft PEIS has not yet hit the streets for public review yet, but it should be coming out sometime in the next few months.

They had originally thought they were going to publish that in October, but a lot of things happened in October, and so it's been delayed, and I haven't heard a solid date of when that's going to come out for public review. I just thought I would mention it.

MS. CROWE: Thank you, Scott. Wilson.

DR. LANEY: Thank you, ma'am. Two things. One is not directly a South Atlantic thing, but I will ask Dr. Runde if he knows much about it. I recently was made aware that BOEM had put out a press release on a proposal for offshore sand mining, and my understanding is that would occur off Virginia, and so I think -- It's already in there. Okay.

It's already -- It’s something we should probably just keep an eye on, and I don't know, again, exactly where the location is, or how much they're proposing to remove, or whatever, but clearly it would have an impact on benthic habitat, for sure, and I guess, again, just keeping an eye on it by this council, for the South Atlantic, if anybody proposes something similar.

The other thing I wanted to mention is that Simon wanted me to note that we have a draft, and I think it's near final, of the ASMFC's habitat hotline newsletter that will be coming out in the not-too-distant future, and so there may be things in there, and hopefully there are a lot of things in there, that would be of interest to the council, and all of the APs as well, and he just sent -- He sent it to me earlier today, Kathleen, and I'll shoot it to you and Stacie, and maybe we can collectively take a look and see if there are particular things in there that we would like to emphasize.

MS. CROWE: Thank you, Wilson. Anyone else have any updates for Kathleen? Kathleen, I'm going to send you a couple for South Carolina.

MS. HOWINGTON: Like I said to everyone, I will -- This draft, that we are updating during this meeting, I can send this out. If you all can't think of anything, that's okay, but please just check your perspective states. If you are with a region-wide group, check the coast-wide area. If you can think of anything that's future developing, send it to me, and then, tomorrow I'll try and, you know, put everything together. We'll take one last look at it, and then I'll send it out to the group

for review and edits, and then we'll get it done for the briefing book for the March council meeting, and so I'm glad we were able to get some stuff added in. That sounds good. Stacie, Wilson has his hand up again.

MS. CROWE: Okay. Wilson, go ahead.

DR. LANEY: Thank you, Madam Chair, and so one other thing, Kathleen, and I'm not sure where it goes but I'll provide an update on the Roanoke River Sustainable Rivers and Climate Adaptation Science Center Project, of which I am one team member of many that are working on this. We're getting close to actually cranking out some funding

It's Roanoke River. It's a climate Science Center and sustainable rivers program-funded project, which is looking specifically at how might we anticipate climate changes to affect river discharge, and then, correspondingly, anadromous fish spawning, as well as bottom land hardwood forest health downstream. I think it would be of interest to the HEAP, and the council as well, and I think a lot of what -- Not me, but the modeling gurus working on this thing are really sharp.

They know what they're doing, and I think a lot of the papers that come out of this project are going to provide methodology that can be used for other river systems nationally, probably, but certainly throughout the Southeast, and it all relates back to flows again.

MS. CROWE: Thank you, Wilson. Kathleen, you good?

MS. HOWINGTON: I am good on this, and I, again, will send it out, and everyone can have a little look-see, and see if you can think of anything. I can give the communication strategy talk, but that's up to you, or we can just leave everyone a little bit early, give them thirty minutes back today, and then we'll probably end early tomorrow, since we just cranked out that.

MS. CROWE: It's totally up to you.

MS. HOWINGTON: How about I recommend that we finish early today. I think that we are in good standing for tomorrow. We'll start with Anne's presentation, and then go to Chip's, Laura's, and then we'll have my final two talks. We'll revisit this report, but, since we did just add a lot of stuff to it, and we're going to do stuff via email, we should be good.

I do want to recommend to the group, or remind the group, excuse me, for Chip's talk tomorrow, I have been sending out the evaluation tool. Please fill this out prior to the meeting, and we will discuss the results during the meeting, and so please do that. You will have to use a Gmail account. You can probably sign-in -- If you have a NOAA email, or a work email, you can probably sign-in with those, and then I would request that everyone use the free forty minutes that they're getting to send me the annual report stuff, and so, that way, tomorrow, looking at the annual report is really quick, and we don't have to look at it again, but two people's hands just went up, and so maybe I'm wrong.

MS. CROWE: Okay. Matt.

MR. KENWORTHY: Two questions, one regarding the homework that you asked us to complete. If we have -- If we're fairly unfamiliar with that activity, and those projects, and that working, and,

I mean, I'll speak for myself. I felt uncomfortable going through that exercise without being familiar and connected to it, and so asking for some feedback on that, and, two, can you help point me to where the past year's annual reports are located?

MS. HOWINGTON: I can send the past year's annual reports via a link in my email, and then I will refer to Chip regarding expertise and filling out the evaluation tool.

DR. COLLIER: Yes, and doing these evaluations is challenging, and I recognize that, and that's why all the questions are optional, whether or not you want to fill it out. Additionally, if you want to focus in on certain areas, you're able to focus in on certain areas. We're trying to provide you the flexibility, but also enable this group to comment on a process that's been going on for a few years.

We know we can't provide you all the information. You only have a two-day meeting. We've had multiple days of meetings to talk about these, and so whatever comments this workgroup, or this advisory panel, might have in regards to the spawning special management zones I think could be of value, just trying to think of it as trying to incorporate as many perspectives as possible in the evaluation, recognizing that the people trying to do it, trying to develop the survey, and then trying to do the survey, might get down into the weeds, and might miss some of the bigger picture.

Somebody like the Habitat and Ecosystem Advisory Panel might have a slightly different view, and that perspective can be important to the council when they're considering whether or not to allow the sunset for the regulations of the spawning special management zone to go into place. I hope that helps.

MR. KENWORTHY: Thanks, Chip.

DR. COLLIER: Just be comfortable saying nothing, if you're not comfortable responding. I'll give a short update tomorrow, and then we can talk about it as a group.

MS. CROWE: Thanks, Chip. Anne, you were next.

MS. DEATON: I was going to ask -- I will tell you that I listened to the webinar on the SSMZs, and I thought it was very helpful, and I was wondering if you guys had that available, and you could send it out to the AP, and at least they would see what the monitoring results were.

DR. COLLIER: Yes, I can send that.

MS. DEATON: Okay. I think that would help everybody.

MS. CROWE: Thank you, Anne. Paula had her hand up next.

MS. KEENER: Thank you. Chip, thanks for that response. Matt, I'm going to tell you that I'm right in that boat with you, and I know we'll discuss it more tomorrow, but man-oh-man, and so thank you.

MS. CROWE: Thank you, Paula. Wilson.

DR. LANEY: My question was also on the survey, and so what I did -- Well, my confusion, Chip, was, when it first asked me to pick an area, and so I picked one, the one that was closest to me, the one in North Carolina there. Were we supposed to go through -- Because it looked like it kept trying to get me to go through and answer all the questions for all of the other SMZs as well, and I was ignorant enough on the North Carolina one, not to mention how ignorant I would be on the rest of them, and so I like Anne's suggestion for listening to the SSMZ webinar. I think that would help, but was it okay if we just filled out one, as opposed to filling out all of them?

DR. COLLIER: Absolutely. If you don't feel comfortable filling anything out, don't fill it out. I have no issues with that. We're just trying to get some perspectives from the advisory groups on what the council should do, and so, if you're not comfortable, leave it blank, and you should be able to -- As opposed to having to go through all of them, you should be able to click on completed the -- I can't remember how I termed it, but, basically, you were done with the area-based reviews, and it will take you to the end of the survey.

DR. LANEY: I did that, and it kept taking me back to the list again, but I finally just went out of it, I think, but hopefully I completed enough of it so it will be a useful data point.

DR. COLLIER: Okay. I'll look into it.

MS. CROWE: Okay. Brenden.

DR. RUNDE: Thank you. It seems like we're getting close to the end. I just wanted to say, since tomorrow's meeting includes lunchtime, I just wanted to have a reminder on how I can submit my expense report for tomorrow's lunch. Thanks.

MS. CROWE: Kathleen, are you going to answer that?

MS. HOWINGTON: Since this is via webinar, unfortunately, the council is not covering your lunch, since there is no travel involved. I really hope that was a -- I don't know.

DR. RUNDE: This is an outrage.

MS. HOWINGTON: Okay. Good. It was a joke. Thank God.

AP MEMBER: Your peanut butter sandwich is in the mail, Brenden.

AP MEMBER: Uber Eats.

MS. CROWE: Okay. Let's see. Paula.

MS. KEENER: My name is supposed to be down. Sorry.

MS. CROWE: All right, and so, if there is nothing else for the good of the cause, then I think we'll wrap up for today, and we will start back tomorrow morning at 10:00 with Anne's update on HCD activities. Kathleen, anything else before we close out for today?

MS. HOWINGTON: Don't be afraid to send me all the stuff you mentioned for the annual report, so I can try and consolidate it, and then I will send out the annual report to the group, along with a link for last year's, and a link to the SMZ seminar series, and so you will be receiving that within the next fifteen minutes or so.

MS. CROWE: Okay, and so, if there is nothing else, we will see everyone tomorrow at 10:00 a.m. Thanks, everybody.

(Whereupon, the meeting recessed on January 29, 2026.)

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JANUARY 29, 2026

THURSDAY MORNING SESSION

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The Habitat and Ecosystem Advisory Panel of the South Atlantic Fishery Management Council reconvened via webinar on January 29, 2026, and was called to order by Chairman Stacie Crowe.

MS. CROWE: Welcome back, everybody. We're going to go ahead and get started today with another round of introductions. Apologies for that. Kathleen needs it for transcription purposes, and so I will start that off.

I'm Stacie Crowe, with the South Carolina Department of Natural Resources, and Kathleen has suggested that today's icebreaker is what is your favorite potato chip, and so I'm going to go with salt and vinegar, and I am going to pass it back to Kathleen to call on names, so she can keep track of who we have.

MS. HOWINGTON: Thank you, Stacie. All right. Daniel.

MR. ROYSTER: Hi, everyone. This is Daniel Royster, Division of Marine Fisheries out of North Carolina. I'm the Fisheries Resource Specialist out of the Washington Regional Office, and I guess my favorite potato chip is a Sunchip.

MS. HOWINGTON: Brenden.

DR. RUNDE: Hi, folks. Brenden Runde with the Nature Conservancy. I suppose I would say a chocolate-covered potato chip.

MS. HOWINGTON: Cameron.

MR. LUCK: Did you say Cameron?

MS. HOWINGTON: Yes.

MR. LUCK: Cameron Luck, North Carolina at-large. I like the cheddar Sunchip.

MS. HOWINGTON: Paula.

MS. KEENER: Did you call on me?

MS. HOWINGTON: Yes, I did. Am I being quiet?

MS. KEENER: I've just got to say that I know that taro can't technically be considered a potato, but I like the taro chip, and, if I have to have a potato chip, it would be you can't eat just one Ruffles with ridges.

MS. HOWINGTON: What's your affiliation, Paula?

MS. KEENER: Oh my God. I'm hungry now. I am with the Marine Advisory Committee for the South Carolina Department of Natural Resources and retired NOAA.

MS. HOWINGTON: David Whitaker.

MR. WHITAKER: David Whitaker, South Carolina DNR, retired, and I like the Cape Cod chips.

MS. HOWINGTON: Thomas Jones. Thomas, please make sure and unmute yourself on your end. You're self-muted. All right. We'll come back to him later. Steve Miller.

MR. MILLER: Hi. I'm Steve Miller, with the St. Johns River Water Management District in northeast Florida, and my favorite potato chip is the Lays pickle-flavored potato chips.

MS. CROWE: David Webb.

MR. WEBB: Morning, everybody. David Webb, recreational angler, Florida, and mesquite barbecue.

MS. CROWE: Anne Deaton.

MS. DEATON: This is Anne Deaton, with NOAA Fisheries Habitat Conservation Division, out of the Beaufort Lab, and my favorite potato chip is the sour cream and cheese ones, and I can tell you a story about Cape Cod, though. I used to like those.

MS. HOWINGTON: Noah Claflin.

MR. CLAFLIN: Hi. Noah Claflin, here for NOAA Fisheries Habitat Ecology Branch in Galveston, sitting in for Matt Johnson, and I'm a fan of the Zapp's Cajun Crawtators.

MS. HOWINGTON: Scott Kathey.

MR. KATHEY: Hi. I'm Scott Kathey, representing NOAA's Office of National Marine Sanctuaries. I'm physically located with the Gray's Reef National Marine Sanctuary Office in Savannah., and I would have to go with mesquite barbecue as well. It's my favorite potato chip.

MS. HOWINGTON: Laura Busch. I know you're calling in on your phone. You need to unmute yourself on your end. It says you're self-muted. We are having a hard time with people calling on a phone today. All right, and so we're going to move on and try and figure that out. Laurent.

DR. CHERUBIN: Good morning, everyone. I'm Laurent Cherubin, with the Harbor Branch Oceanographic Institute at Florida Atlantic University, and my favorite chips are salt and vinegar.

MS. HOWINGTON: All right. Kevin Spanik.

MR. SPANIK: Good morning. Kevin Spanik, South Carolina DNR. I'm going to go with Pringles, the pizza flavored ones.

MS. CROWE: Wilson.

DR. LANEY: Thank you, ma'am. Wilson Laney, retired after thirty-eight years with the U.S. Fish and Wildlife Service, now representing North Carolina State University's Department of Applied Ecology, and I'll go with Kevin and say anything in a Pringles can. I'm partial to barbecue.

MS. HOWINGTON: Rua Mordecai. Rua, you're unmuted on my end. Make certain to unmute on yours. There you go.

MR. MORDECAI: Rua Mordecai, U.S. Fish and Wildlife Service, working through the Southeast Conservation Blueprint. For chips, I'm going to go with a two-way tie between jalapeno and salt and vinegar.

MS. HOWINGTON: Paul Medders.

MR. MEDDERS: Paul Medders, Georgia DNR. For a chip, those Cape Cod dark russet potato chips.

MS. HOWINGTON: I am Kathleen Howington, South Atlantic Fishery Management Council, and kettle chips, New York white cheddar, and so then the two people that we're still waiting on are Laura Busch and Thomas Jones, both of which are calling in on their phone. Laura, I see you've unmuted yourself. Go ahead.

MS. BUSCH: This is Laura Busch. This is interesting. I had to unmute myself both on the computer and on my phone, and so I don't know, and that seems weird, but so Laura Busch. I'm with the U.S. Navy, Natural Resources Program Manager, and I like a sweet potato chip.

MS. HOWINGTON: So, Thomas Jones, if you are on the web, you need to make certain to do what Laura did, of unmute yourself on the computer and on the phone, because it's through the same account, and so it's connecting the two, but we also just got Stephen Morrison, and so, Stephen Morrison, you're unmuted on my end.

Go ahead and test your audio and give yourself an introduction. Stephen, you need to make certain to unmute yourself on your end. You do that by going to the top right-hand side of your screen with the microphone. You've got to click it and make it green. Okay. I will try and figure Stephen Morrison and Thomas Jones out, but I hand it back over to you, Madam Chair.

MS. CROWE: Great. Thank you. Okay, and so we're going to go ahead and get started today, and, before we get rolling, we do have one schedule change this morning, and so we are going to start off with Anne, but then we are going to swap Laura and Chip's presentations, and do both of those before the break, but just switch the order, and so we're going to go ahead and get started with Anne, and she is going to give us an update on the Habitat Conservation Division projects.

MS. DEATON: Thanks, Stacie. Can you guys hear me okay?

MS. CROWE: Yes.

MS. DEATON: All right, and so you know who I am, and I'm with National Marine Fisheries Service, and so Kathleen just asked me to go over some of the consultation activities we've had in the last fiscal year, and so, just quickly, this is what we do by the numbers. This is last fiscal year, and so October through September of 2025, and you can see it's up a little bit from previous years.

It's been pretty busy, and so these numbers show that there was 1,010 applications that we received and reviewed. These numbers reflect all the applications, not just EFH, but we also receive applications that are under our authority under fish and wildlife, and so you can see Florida, again, always receives the most, because they are a large state, and that's just the East Coast, and changes in the regulatory processes, as well as the staff time available, can affect the number of consultations. Next slide.

MS. HOWINGTON: Sorry. I just had a glitch with my presentation. Somehow it --

MS. DEATON: Okay.

MS. HOWINGTON: I want to make certain everyone should be seeing the second slide that Anne was just talking about, and not the introductory slide.

AP MEMBER: We can see the pie chart.

MS. HOWINGTON: Okay. Great. Then I think we're good, Anne.

MS. DEATON: Yes, and I'm sorry. Go to the next one. I just talked about this. Sorry. Okay, and so, of those thousand-and-something applications, when they come in, staff does a quick review, to see if a consultation is needed, and so, this past year, around 35 percent were not reviewed, due to staffing and being a lower priority.

There were 491 applications that were no objections, and that's the green bars right there, and so this is actually good, because it means they submitted an application that minimized EFH impacts. That could be because they had a pre-application meeting, or, you know, they just did a good job and knew what to -- How to avoid impacts.

The remaining reviews resulted in EFH conservation recommendations or other recommendations that are not as binding as conservation recommendations, and we also do a lot of technical assistance, and so that's when an agency asks for assistance, whether that's like sitting on a workgroup to help them develop their EIS, and things like that, and so the red bar is the

conservation recommendations that were made, and that's -- Those are the ones that Magnuson-Stevens Act requires, that then the agency responds, and, if they disagree, and they will not implement one of those conservation recommendations, and you get into a bit of a negotiation, or a discussion, stage to finalize that, and so it's good that a lot of these don't have problem. Then, also. we do try and work with the agency so that they get their project in a way that reduces impacts.

This is just the type of projects reviewed by different categories that's in our database, and you can see docks, you know, are definitely the most common project we review. However, it's the most common project we've received, but the majority of these are no objection, 70 percent this year, and so the Habitat Conservation Division is working on creating a general concurrence and programmatic responses for docks that meet certain criteria, to reduce that workload, so we can focus on the higher-priority projects, and so that's something that's underway right now.

Other common projects are various developments, shoreline stabilization, and dredging. Dredging is a big one. Roads usually often have impact, roads and bridges, and then marinas. Also, they review mitigation that's proposed, or mitigation banks that are getting underway.

This year, I also noticed there were several artificial reef applications in Florida and South Carolina, and living shorelines is listed there. There were permits for Florida, Georgia, and North Carolina, with North Carolina having the most, but the other states increasing as well.

One project that's pretty significant, took a lot of time, and we're still working on, is the Corps' Wilmington Harbor Navigation Improvement Project, and that was mentioned yesterday, I think, with Cameron and I, and so, since NMFS is a federal cooperating agency to the Corps, we get involved with technical workgroups to assist with the draft EIS development, and so, for the last year or so, we've been going to technical workgroups, helping them, providing input.

I think this project is really important, because the Cape Fear River is the largest river basin in North Carolina. It starts way up in Greensboro, and it drains directly into the ocean, and, because of this, fish composition in the system is really diverse. It varies seasonally with weather conditions, and so, when it's drier year, and salinity is higher, you can find estuarine and marine species all the way up to the Lock and Dam 1, and, when it's a really wet year, you'll find catfish down by downtown Wilmington.

Then there's a mixing zone where you can -- They sample, and they find both high-salinity and low-salinity fish, and so it's kind of unusual. The purpose of this 2025 action was to contribute -- For the Corps' document, it's to contribute to the national economic development by addressing constraints that contribute to inefficiencies in the existing navigation system, and so what this means is they want to increase the depth, so they can support the larger cargo vessels.

The project included these things that are bulleted up here on the slide, and so extending the ocean bar in the ocean, and so if you see the green line there is the ocean bar and inlet sections, , that last line, that's going to be all new dredge channel there, and so they want to get it deeper further out, and that would be to forty-nine feet, and so all of the outside channels would be -- They want to forty-nine feet, and, the inner harbor, they want to increase from forty-two to forty-seven feet.

All of this will require widening the inner and outer channels, and the width varies, and it looks -- 600 feet, that's out in the ocean where there is no channel currently. This project also was -- What

we saw was -- Well, for me, it's the first seeing so much beneficial use of the dredge material, and so, you know, it was mentioned, I think in our last meeting, that there's a mandate that they have to increase use of that, and one reason is because the existing confined DMDAs, dredge material disposal areas, are getting full, or are full, and so I'll go over that in a minute.

This project involved creating mud flats in the inside, within the river, as well as expanding and enhancing bird islands and doing the ocean beach nourishment, and so the new piece is these mud flats that they're proposing.

The EFH impacts really add up in the sensitive habitats, and you can see that in this table, and so PNA is our primary nursery areas that are habitat areas of particular concern. All of these state designated areas, PNA, secondary nursery areas, and sanctuaries are considered HAPC, and so there will be new dredging, because of that width, and so the deeper part is existing, but it will be deeper, but, because they have to go out wider for the angle of the side slope, that's the new dredging, and so, for inside, there's going to be 698 new acres of dredging, and, on the outside, it's 855 acres. One point, you know, just to raise is that, especially for this primary nursery area, this inside work, that's a lot of impact, and no mitigation was offered for those impacts.

Other impacts to this project, and it's a very large project, and so, in the upper area around the harbor, down to Keg Island, there's a lot of mud flats that they are fairly certain that they will have to blast, just based on when they deepened the harbor previously, and so that's -- There's concern about the vibration and sound and effect, on sturgeon in particular, and other fish.

Another concern that's been raised is the resuspension of toxins, and so we know there's been testing. There's PFAS in the Wilmington intake, and so the drinking water, and they're doing a lot to remove it from the water column, but we know that PFAS are also called forever chemicals, and there's also been studies on the heavy metals in the river.

We know it's not -- It's been around, you know, there's been a lot of industry there, and there are contaminants, and so people are worried that it will be resuspended, and that makes it bioavailable to the fish, and maybe increases it for, you know, water column as well, as well as for wetlands and in the drinking water.

Altered salinity regime, this is probably the biggest impact. The deepening will increase salinity. It will push salinity upstream. We've already seen that from the past dredging, and what happens is -- Well, I'll show you later about the dead trees. Anyhow, so you're going to get higher salinity upstream, where it was oligohaline, and then the oligohaline -- What was tidal fresh might become oligohaline, and so the main thing is that there's going to be a reduced acreage of, in the water and wetlands, of oligohaline and tidal fresh.

This is primarily an impact for the anadromous fish, and the EIS doesn't really look at it as a loss, because they say it's just a conversion, and so converting from one habitat to the other, but it's going to change the habitat available for different fish.

There's also -- I wanted mentioned the ship wakes. The EIS talks about how the ship wakes will not increase, and will actually probably decrease, because it's deeper, and then there will be more clearance between the bottom of the ship and the bottom of the substrate, and the ship wakes here -- I mean, I guess other people have seen this, where, if they have been near ports, they're huge,

and they're causing wetland erosion, and resuspension of sediment, and they're really significant, and so it's hard to believe that the Corps says there won't be any increase in the ship wakes and wetland impacts.

The other thing is they said that, you know, the whole purpose of this project is so they can -- The ships are currently already going up the river, but they have to light load, and so they don't put as much cargo in there, so they don't draw as much, and so, by deepening it, they're going to be able to put more cargo in there, which means they'll be heavier, and they will be down lower, and so, really, there won't be more clearance, and so I feel like the ship wakes will be the same, or worse, but that really isn't addressed, in terms of impacts in the document.

Then, of course, they don't want -- They weren't asking for any time of year restrictions for dredging, except, if it was a bird island, they have to go around bird islands for beach nourishment, and so we've been -- We've submitted our comments. Those are some of our concerns that we mentioned, and NMFS is currently in the process of talking with them, having conversations of how they can address our conservation recommendations.

We heard from Cameron and Gregg, I guess yesterday that, I guess -- Maybe they can speak to this at the end, and they just did -- They said it was inconsistent, and I'm not sure, and so more work is going to have to be done to satisfy the environmental concerns.

When I did speak to some of the Corps staff, what they are coming up with is they want to offer changes to the dredging procedures, in lieu of the time of year restrictions, and so using -- They offered to use turbidity curtains around the bird islands, or the beneficial use of the mud flats, when they create those, and use no overflow from the mechanical dredges, which will help, you know, but nothing has been determined at this point.

I was just going to talk a little bit about beneficial use, and, you know, we've discussed this before, and how we're going to be seeing more of it, and I think where we're going to see the most of it is with port projects, and so, with this one, it looks like approximately 50 percent of the dredge material will be used beneficially, and that would be for beach nourishment, bird islands, and creating those mud flats that are intertidal and subtidal.

There are actually thirteen of those mud flats and so, on this map, the orange is the beaches, and that's not new, and, you know, that's where they've been putting sand for maintenance, and the green is those mud flats.

Some of them are just along the shoreline, and I don't know if you can see where it says "Brunswick Town". That's a historic site that has had erosion happening, and they've done -- They've put in some substantial sill structure to try and prevent that, and so this is calling for just putting a bunch of the sediment just along the shoreline there. Then the same with some of these are like enlarging bird islands, but a lot of them are just like dumping the material, and this would be non-beach suitable, and so finer material, in the river, on that east side.

I think NMFS' biggest concern was the lack of specific information on the methodology concerning that, and so the EIS was released before the Corps completed the pre-construction engineering and design, and so there are no details, and like there was no information about the hydrodynamic modeling, or sediment transport, to say will the sediments stay there. It's a really

strong current, and it has like a five-foot tidal range, and then there's the ship wakes that could flush it around, and so no details on whether they would put like a rock sill around them.

I think their intent was not to, and so we're just wondering -- You know, that there's not going to be another review period, we were told, once they finalize with the PED, and so our recommendations on this was NMFS requested eliminating sites. Some of the sites looked like there was shellfish, according to some mapping data on them, and some said no. We asked that they stagger, like stagger the project, so that like we could see how well one or two work, and do them first, because it's a multi-year project, and then have adaptive management.

If it all slushes away, you've got to do something different, right, and so that was one suggestion. We did ask for the time of year restrictions, our standard April 1 to September 30, and, most importantly, I asked for a scientific group to be established to provide input, before this is final, on the design and monitoring, and also to monitor it.

Okay, and so they are offering mitigation, but mostly it's for the salinity change, the reduction of the oligohaline and tidal freshwater areas, and for marsh impacts, and so one of the projects would be preservation of swamp forest wetlands on the Black River. The Black River is upstream of the port, and it feeds into the Cape Fear. It's an area of virgin cypress trees, and a lot of that area has already been purchased as conservation lands, but some of it hasn't, and so this is to get some of those outholdings.

In this picture, that big cypress tree, that's not the big one, and so this area is called the Three Sisters Swamp, and there's a tree there that they -- It's approximately 2,624 years old, and so that's a long time, and they say it's the oldest tree east of Mississippi, and so helping preserve the flow and everything in this area is, I think, a good decision, and it will help maintain the flow downstream.

Then the other, Eagle Island, Alligator Creek and Eagle Island, is the land that's just to the west, the left, of the port in downtown Wilmington. Part of it is a dredge material disposal area, and the south end and the north end is a lot like this. It's just marsh that's been degraded with -- There's been spoil in places. Some of the creeks have been filled, and, in this photo, you can see how the cypress trees are dead, because this flow is fresher, and so that was -- I'm trying to remember what year that was, 2004, and, I mean, that was a long time ago, and the area hasn't really transitioned yet to a true mesohaline marsh.

The idea is they're going to restore tidal creek and tidal pools, remove frag, and plant native marsh, and so I think that will be good, and then they have two mediation projects proposed for the Lock and Dams.

One is the proposing to create a bypass around the existing fish passage, which is a rock arch, and so, in this photo, it will be above, in the top part, above -- Right under the words “Lock and Dam”. There's a little creek, maybe natural, maybe not, but they've got permission that they could make a bypass creek over there, and do some engineering and stuff to attract the fish, for the larger fish to get through, and so this fish passage has been really good for the smaller fish, like American shad, but it hasn't worked as well for the sturgeon, and so they're hoping that that would work.

It sounds good, but a major flaw is, again, it's pre-construction. It's before they did their pre-construction engineering and design, and so there were very little details in the document, and there's been groups that have been studying this for years, and so, again, we asked to pull in those experts, and get input from them, before they finalize anything.

Then the last one is Lock and Dam 2, and that's up by Elizabethtown, and they're proposed a rock arch ramp. This dam is a lower dam, and would probably be a less substantial structure, but, again, there were no details, and they need to get the experts involved in that. Okay. That's it. Next slide.

MS. HOWINGTON: Before we go to the next slide, Anne, I did have a request from a panel member for you to speak up a little bit. I can hear you fine, but she's having a hard time, and so I don't know if that's true for anyone, but just -- I said I would pass it along.

MS. DEATON: Okay, and so another large project that's ongoing right now, that was mentioned yesterday is the South Atlantic Regional Dredging Draft EISs, and so there's a lot to this. It is for four ports, Morehead, Wilmington, Charleston, and Brunswick, and the reason for this is the history.

The South Atlantic Division began following the SARBO 2020 back around the end of 2020, the beginning of 2021. That was a programmatic biological opinion, and it was really based on endangered species, in terms of time of year. There was no required time of year restrictions for fishery species, and so what happened in 2021, and later in 2022, is there were legal challenges at the Brunswick, Wilmington, and Morehead ports.

The Brunswick was first and that took several years, and then a group also sued, a different group sued, over the Wilmington and Morehead ports, in I think 2023, and so both of these ended with the Corps agreeing to go back to the traditional time of year restrictions, and that they would be required to develop EISs later for four ports. It also included Charleston, and so you've got Morehead, Wilmington, Charleston, and Brunswick. It doesn't include Savannah. I'm not sure why.

They started working on this, and there's been some initial workshops to get input, and this would be for just the maintenance dredging, and not for any deepening, and so we're in year-one in the process, if you haven't been to one of these meetings, and they're just getting input to develop alternatives. In year-two, in the summer of year-two, will be a notice of intent, and that would be a first opportunity for public comment. Then year-two, in the spring of 2027, they expect they would have a draft environmental impact statement out for notice of availability, and then they are expecting that the final EIS would be in spring of 2028.

It's a long process, and I know NMFS will be involved. I know many of the states are involved, and there's going to be an in-person meeting in April to go over stuff, and come to some agreements.

What they really want is better science. If we're going to ask for environmental windows, time of year restrictions, they really want it to be more science-based. They're saying the data is somewhat outdated. There is good science though about impacts of turbidity on different species, and so

NMFS has been working on how to do this systematically, so that the same approach could be used wherever you go, and modified for the system that you're in.

We're thinking like, first, to be flexible, because they want flexibility, prioritize what are the most important fishery species of concern, and then look at that and say, okay, which ones are the most economically important? Which are the healthiest, and then which are the most sensitive to suspended sediments at the life stage that they're present in, you know, and which ones are present the most in the project area.

You use that to thin down the species ,and look at what their windows are, and those are the ones you're going to want to most protect, as well as the habitat. Most of these are going to be in the unconsolidated substrate, and then look at if there are ways you can reduce the restricted times if they do certain practices, if they use a certain type of gear, a certain type of dredge, if they don't allow overflow, if they do real-time monitoring for turbidity, and then, you know, pause when it reaches some threshold level.

That's kind of the thought we have, but it's really early in, and we're working on that, and I think it would be great if we got other states. You know, Lisa Wickliffe, that I work with, was involved, and it would be great to get other states together and see how they would feel about this approach for species if they were prioritized.

I just wanted to mention briefly beneficial use, because we talked about it increasing, and so I think that the Corps projects are the biggest beneficial use projects we're going to see. Just that Wilmington Harbor deepening is thirteen sites in the river for bird island or dredge spill expansion.

Other beneficial use activities that I know about is there's been some interest from private developments, and so there's a HOA that had been wanting to do thin layer disposal. They were going to dredge their basin, and then spread the sediment on the marsh adjacent to the channel, entrance channel, and DCM has been working with them closely, and can correct anything I say, but I heard it was dropped, due to they found out that it was just getting too expensive, because of the equipment and everything, and so that's the first one I know of a private group wanting to do it.

NGOs, Coastal Federation, is working on a thin layer -- I guess you would call it a thin layer project on a spoil island, sort of restore the spoil islands, wetlands, and include a living shoreline around it as well, and the concept is that the island is providing wave energy protection for the seagrass that's behind it, on the opposite side of the waterway, and so, instead of letting it erode, and then lose seagrass, protect the island, but make it in a more natural way. Then, also, there's a human element that these spoil islands are protecting the shoreline properties on the mainland, on the adjacent uplands.

Another NGO, Audubon, has been getting active with beneficial use in Currituck Sound. They have a Pine Island Sanctuary up there, and they applied to do a living shoreline, which isn't really beneficial. It is beneficial use, because they want to use Christmas trees.

There's been done in a few other states, I think New Jersey and somewhere in the Gulf, and so I think that's underway actually, and they're talking about a thin layer project as well, because they're worried about the wetlands, or losing wetlands, but, a lot of times with these projects, there's EFH

concerns, because the structure is going right next to the upland. It's shallow, and it's like a good seagrass area, and so it's happened a couple of times with beneficial use and living shorelines, and so it's that habitat tradeoff that we have to figure out.

All right, and so they're estimating to be about 250 living shorelines of some type that have been permitted in North Carolina, and so there was a study done in 2010 that looked -- When there was just a few of them, and looked at that, and so we had an idea of doing an interagency effort, and going around to a subset of these and seeing how they performed over time, and so we started doing this in the fall, and our plan is to survey fifty living shorelines of different ages and material. We got halfway done before the furlough, and so now we're just gearing up to start again and finish.

We've got National Marine Fisheries Service staff, NCCOS, the Corps, DCM, DMF Division of Water Resources, and universities as well, the Institute of Marine Science that are all participating, and we're really fortunate that we're also going to get elevation data by NCCOS. They're doing as many as they can. They're going to get elevation, and they're also going to do wave energy modeling at them. This will help in understanding why some are successful or not successful.

The materials that we have seen in the database that we're going to is some are just marsh, and some are the marsh with oyster shell bags. There's the sills with a rock, like granite or limestone, and then we have a lot of these newer structures that are a concrete base. These are usually companies, and they've come up with these structures that would enhance oyster recruitment, as well as, you know, protect from wave energy.

In this photo at the top-left, that's oyster shell bags that I would say are not doing too well, because they've been there a while, and they aren't really recruiting oysters, and they're getting tossed around. They're not staying put. The top-right is Jenny Davis, that talked to you last time, and she's getting some elevation data.

That structure is called quick reef, and it's really concrete slabs, sort of pyramided or tented, and so it gets oysters on top and underneath it, and underneath that photo is a closeup of one that's doing well with oyster recruitment, and then the bottom-left is getting more elevation data, and that's like -- That's an old sill right there. It's done with granite rock, and so there's a real big diversity, and so it will be interesting what we see. What else?

NMFS is now requiring ten-foot gaps for fish passage and flow through those, and so that's one thing we're looking at. We have some that have the ten-foot gap, and previously it was five feet, and so we can compare and see, you know, do we really need ten feet, and would five feet be okay, and just kind of reevaluate how these things are designed. I was going to mention one thing we've already seen, is the results can differ with the same type of structure, and so getting it in exactly the right elevation is really important, and a structure that's appropriate for that wave energy level.

Okay, and so this is a photo of a living shoreline composed of a concrete mix. It's been called oyster catcher, and so, in the top, this is a park, and they've put them out here, and they have gaps, and like a little baffle in front of it to catch wave energy, and the bottom is just closeups. You can see this is made out of burlap that's dipped in concrete mix, and then they put it in many different designs. This one is a table. They have one called a donut, and they have one called a patty. You know, you can shape it any way you want, kind of like Legos, and you can see it.

I mean, one advantage is there is a lot of open space between it. It's not solid concrete, and so you've got a lot of surface area for potential oyster recruitment, and so the bottom-right is what I would say is very good recruitment, and, once they get some age on them, they will look more natural, like an oyster reef, and so I think that's, you know, one of the promising structures, but all of this needs more monitoring to have a firmer idea where to direct things. That's it. That's all I have, and so thank you, and, if anybody has any questions, I'll be glad to take those.

MS. CROWE: Thank you, Anne. That was a great presentation. Sounds like you all have been very busy.

MS. DEATON: Yes.

MS. CROWE: I see Wilson has his hand up with a question, and so we'll start with Wilson.

DR. LANEY: Thank you, Madam Chair and Anne. Thank you for the usual great presentation from the Habitat Conservation Division. It's just really great to get these annual updates from you all on what you're doing. I have one question on the Wilmington Harbor Project, and you may or may not know the answer to this one, because it doesn't really have anything to do with biology.

At one time, it seemed to me, I recall, and it may have been -- It may have come up during some earlier Habitat AP meetings. We had a discussion about the fact that, you know, there are a whole bunch of ports along the east coast.

As somebody who doesn't have a tremendous economic background, it doesn't seem to me that it can be economically profitable to deepen and widen every single port to handle these larger cargo vessels, and so I wondered if anybody has challenged this one, because the Cape Fear channel is so much longer, and seems to me costs a whole lot more to maintain than other ports, which would likely be much more economically competitive. Do you know if there's been any discussion of that particular issue, and if that will be addressed in the EIS?

MS. DEATON: Yes, and I do know some of the comments from nonprofits have talked about that, but that gets back to purpose and need, and is it really doing -- Is it really beneficial, because it seems like it won't increase the number of vessels coming in as much as they'll be able to bring more cargo, and so it's more profitable for the companies, and I don't know -- I don't know. I think how that relates to how much money the state gets, or the port gets, and so I think Cameron has his hand up, and he might know better, but it's not over.

MS. CROWE: Okay. Wilson, were you finished?

DR. LANEY: Yes, and, if Cameron has got his hand up, and can contribute to the information to the answer to that question, that would be great.

MS. CROWE: Okay. He does, and so we're going to go to Cameron, and then to Paula.

MR. LUCK: Hi, Wilson, and sorry. I was waiting to be called on, and so I apologize for the awkward silence there, Wilson, and so this is an awesome presentation by Anne. You know, it's

great to hear somebody else present on it, and also give the NMFS perspective. I have their comments, and they're pretty extensive.

The project is massive, and we talked about it a little bit yesterday. One of the big components, or the big concerns, if you will, during the review process of the EIS is the economic component. There's additional stopgaps that the Corps has to go through, as part of that EIS, that includes a more in-depth economic assessment, but, like Anne said, there's comments coming from all different directions, from communities, and this is public information, but the majority of the towns, including Bald Head Island, Town of Oak Island, et cetera, Kure Beach, have submitted joint resolutions.

Within those resolutions, there's all sorts of concerns, but one of the concerns that are shared is the economic justification for the project. A lot of the public comments, including several that were submitted separate of the resolution from Bald Head Island, but also from Southern Environmental Law, talk about the economics, and potential lack of justification there, and so that's -- Like Anne said, it goes back to purpose and need.

From the state's perspective, this project is still under federal consistency review. We've had several extensions to the deadline, and are currently working under a new timetable agreed upon between the State of North Carolina and the Corps, and so, because of that, there's not much more, you know, I can talk about, in terms of impacts and the state's position on it, but the economics is a big question-mark, especially when comparing the Wilmington Harbor to other harbors, like Savannah or Brunswick, and so I hope that helps.

DR. LANEY: Cameron, that helped a lot. Thank you for that. It's pretty clear then that that is something that will be addressed, I think, probably in great detail, and so thank you for that summary. Appreciate it.

MR. LUCK: No problem.

MS. CROWE: Okay. Paula, you can go ahead with your question, or comment.

MS. KEENER: Okay. Great. Thank you. It deals with the economics of this, and I think that the demand for maritime transport in these coastal ports is only going to increase as population, not only in coastal areas, but everywhere is increasing, and so, you know, I just really hope that there will be serious consideration of, you know, what is the balance of this economic impact for the environment.

I mean, granted, you know, there's the business side of it for the maritime transport industry, but there's also clearly the cost on the environment, and I'll also further note that, and I'm sure this has been discussed, there is a large gag grouper spawning population right off of Wilmington Harbor, and I think, as many of you know, the post larvae and the juveniles use those areas as nursery grounds. That's just one species, but it's an important species, a very important species, and so that definitely needs to be looked at, and I know it will. Thank you.

MS. CROWE: Thank you, Paula. Wilson, go ahead.

DR. LANEY: Thank you, and so Paula's comment about the gag grouper spawning aggregation offshore reminds me to reiterate I think something I've said before, which is that, because of the Gulf Stream offshore, and the gyres that spin inshore, the lower Cape Fear River estuary is a nursery ground for a lot of species that you don't necessarily see in estuaries elsewhere, for juvenile groupers in particular.

I've told this story before, and I'll keep it short, but, years ago, Dr. Chuck Manooch and the NOAA lab were looking for young-of-year groupers to try and fill out their growth curves, and he just happened to casually mention that to me one day, and, at the time I was doing my doctoral work, using the Brunswick Steam Electric plant traveling screens as a sampling device to recover my marked penaeid shrimp, and I told Chuck -- I said, hey, we get tons of young-of-year groupers, of multiple species, you know, on the traveling screens.

To me, that documented, very clearly at that time, how much of an important nursery area the lower Cape Fear River was, not just for gag, but we also got red grouper, yellowedge, snowies even, and scamp, and all those data are available in the reports that were done for the Carolina Power and Light when they were building the Brunswick Steam Electric plant, and so I'll just throw that out there, in case those data are of interest to anybody. I've got copies of most of those reports, and we could probably pull that information out, Anne, if needed, because I think it would be useful, especially to look at the overall impacts of the proposed project.

MS. DEATON: Yes, and that's a good dataset, and I have some of it, some of those reports, Wilson, but we could look at it again.

MS. CROWE: Thanks, Wilson and Anne. Anne, I did have one question for you about the mudflat creation concept. I'm curious, and is this similar to the coastal resilience concept that's been used in like Galveston, where it's like mound placement that serves as habitat, and then also kind of a barrier, or is this more of just like a flat fill type situation?

MS. DEATON: Well, that's part of the problem, is there was no information about the size, the slope, anything like that, and so all it sounded like was they were just going to put -- Maybe they had some approximate volumes, because they hadn't done their engineering and design yet, but I don't think it's going to be like the mounds I've heard about in the Gulf. I think they were trying to -- If they created uplands, they would be taking EFH away, right, but, by making a deeper area just shallow, it was a habitat conversion, and so they saw that as less impactful.

They weren't even going to put any marsh vegetation on it, and I suggested that they do that to help hold it down. I mean, marsh is also EFH, and really good nursery habitat, and so I'm just not sure what they'll come up with, but they have done this before in the Northeast, and so it's sort of like an, I don't know, intertidal shoal here and there, with some marsh. I think they are going to add marsh where it's the right elevation.

MS. CROWE: Very interesting concept. It seems like possibly it could be successful, but a lot of room for error.

MS. DEATON: Yes, and I just don't understand how it will stay put.

MS. CROWE: Okay. It looks like we have Matthew had his hand up.

MS. HOWINGTON: So Matthew Shudtz is not on the advisory panel. I leave it up to you, Madam Chair, but I wanted to let you know.

MS. CROWE: Okay. Let's go with our panel members first then. I saw Scott, and then Paul.

MR. KATHEY: Hi, Anne. I had a question about the NEPA process for this deepening and widening in Wilmington, as opposed to that regional NEPA process that has multiple harbors. Is the deepening of the Wilmington Channel under a separate NEPA process than the maintenance work?

MS. DEATON: Yes. Yes, it's a separate process. However, because it's multi-year, I have heard it could be that they'll be dredging for the deepening in some areas at the same time as they're dredging for maintenance, and so they will overlap in their construction.

MR. KATHEY: So where is that NEPA process for the deepening of the channel up in Wilmington? Have the DEIS has come out, or is it just a --

MS. DEATON: Yes, and it's out. It's been -- The period to review is over, but I think they're still working with the agencies, from the state and federal level, to satisfy concerns that were raised, and then I'm not even involved with economics, and so I don't know what they're going to do about that.

MR. KATHEY: Right, and you said there was some litigation. Was that after the DEIS came out or before?

MS. DEATON: The litigation I mentioned was when -- That was like 2021. It was different than -- That's when the U.S. Corps said, well, the SARBO, the South Atlantic Regional Biological Opinion, that was redone in 2020, covers -- It's programmatic, and it will cover our maintenance strategy.

MR. KATHEY: I see.

MS. DEATON: That document did not require any time of year restrictions for fish. It did for right whales.

MR. KATHEY: So that's what was challenged in court?

MS. DEATON: Yes, and that's what was challenged, and so it was literally -- They did even say that they didn't do a thorough NEPA process, and that they really lost because -- Well, it said that they felt the Corps -- The litigation established that the Corps must follow stricter environmental review when challenging longstanding thirty-year dredging practices, and so it was a big deal to switch from not doing windows.

MR. KATHEY: It sounds like this still remains a very litigious proposal, if I understand earlier that you've got local municipalities passing resolutions with grave concerns.

MS. DEATON: That's for the deepening. That’s for the deepening.

MR. KATHEY: Right.

MS. DEATON: Right, but they overlap, and I think, at the last meeting about the four ports, they did say that the deepening project would fall under -- Once it's done, would fall under whatever comes up out of the four port project, if that makes sense.

MR. KATHEY: Okay. Thank you.

MS. DEATON: You're welcome.

MS. CROWE: Paul, you can go ahead.

MR. MEDDERS: Thank you. I was just going to mention, for maybe the good of the folks, just kind of our experience in Georgia with the beneficial use, because I hear some of these same concerns that I had, and it is a little bit of a paradigm shift. We have a couple of spots, one I'll speak to in particular behind Jekyll Island, that's seen a lot of erosion over the last twenty years, and the Corps has proposed putting sediment there as beneficial use.

Jekyll Island, for the past decade, has had a very robust conservation group within Jekyll Island Authority that do a lot of good work, and they wanted to armor that to protect that beneficial use place there, and even place -- Plant Spartina on top of it, for the sake of creating more marsh, and all the good things those words sound like, and the Corps was quick to say that they really wanted that sediment to enter back into the system, just not enter back into the system in a negative way, meaning in the channel that they just dredged.

It does sound like a little bit of a crapshoot to me, but it is appealing, in a way, to think -- It's a paradigm shift for me. It is appealing, in a way, to think about not just taking sediment out and out and out forever, like we've done in harbor deepening projects, and so I'm just throwing that out there, because I have to admit that -- I'm a oyster restoration guy, and I wanted to armor the shoreline, and put oysters on it, and plant some Spartina too, but I understand that that is a different thing sometimes in this beneficial use, and requires different permits in our state, but that's it, just to kind of maybe add to that conversation a little bit.

MS. DEATON: Thanks, and, yes, I hear that a lot, about keep it in the system. It has pros and cons, and where they are proposing to put it in the Cape Fear River is in some shallower areas on the opposite side from where the dredge channel is. It's really productive fishing. It is a primary nursery, but it's where people go and get drum, all kinds of things in that river, and so it's healthy, and so I don't know how that would impact it, or if it would. Thank you.

MS. CROWE: Thank you, Anne. Does anyone else have any questions, or comments?

MS. DEATON: Can I ask Paul -- Like so how long has it been since that Jekyll Island project, and how is it working? Do you know?

MR. MEDDERS: So we haven't actually gotten there. This has been in the planning phases for a while, but that's one of the projects we've talked about, and so they have not done it as of yet.

MS. DEATON: Okay.

MR. MEDDERS: They did do some beneficial use, which was really strange to me. We have some deep holes in a couple of our sounds, and they did put some beneficial use sand in those deep holes, with some tracers, and that sand kind of, for lack of a -- It's not a very science term, but disappeared, and it did not go back into the places they didn't want it to go back into, but we're not really sure where it went, but I had concerns, because some of those deep holes are unique ecological systems, that we don't fully understand either, but so they are -- I would say the Corps has been trying some things to see, you know, so we don't keep filling up dredge spoil islands.

MS. DEATON: Yes, and they do that in North Carolina too, deep holes within a channel, which I always didn't really think that was a great idea, but they say it stays put.

MS. CROWE: Anything else for Anne? Seeing no -- Wait, we have Scott. Go ahead, Scott.

MR. KATHEY: Anne, one more question on the pie chart there, looking at 245 projects in Georgia, and, between North and South Carolina, roughly that same amount for those two states combined. Given that all the shorelines in these three states are pretty active shorelines, do you have any idea why Georgia is, you know, so much larger than South Carolina and North Carolina? Florida, that's a given, but I'm wondering.

MS. DEATON: I wanted to ask Pace about that, because I thought it was kind of large, too. It might be docks that aren't reviewed, because that's the total, and it also includes the Fish and Wildlife Coordination Act project, and so upriver, and then those fish passage projects.

MR. KATHEY: I didn't think about that, once you get away from the coast. Right. Okay. Thank you.

MS. CROWE: Okay. Thank you, Anne. That was a great presentation. We always appreciate it. If there are no further questions, then we will go on with our next presentation, and that is going to be Lara, and she is going to give us an overview of the Resilient Fisheries Project.

MS. HOWINGTON: One moment, while I switch over to Lara's screen. Lara, you should be getting a prompt right now, and so you need to accept that prompt, and then we'll troubleshoot from there.

DR. LANEY: Kathleen and Stacie, didn't we have a raised hand from a non-panel member? I didn't know whether you wanted to take that question now or wait until public comment.

MS. CROWE: Kathleen, do you want to respond to that? The hand went down, and so I didn't know if the question was still out there.

MS. HOWINGTON: Generally, when we are doing an in-person meeting, we would listen to the AP members, and members of the public would be called to the table if necessary, but then, typically, we would only give members of the public free reign during public comment. It is, however, up to you, Stacie, if somebody knows who this is, and I do not recognize the name. Again, it is up to you, as chair, but generally, when we're in person, that is not something we do.

MS. CROWE: Well, okay, and let's handle it the way we would in-person, just to keep things consistent, and so we'll just take that comment during our public comment period at the end.

MS. HOWINGTON: I'll write down his name and make certain that we call on him. In the meantime though, Lara, I see your presentation. I see that it's full screen.

MS. KLIBANSKY: I'm going to go to my next slide, just to make sure everything is working, and so, if you would, just let me know when you see it.

MS. HOWINGTON: I see the next slide.

MS. KLIBANSKY: Fantastic. Thank you so much. Okay. Hi, everyone. I am going to be giving you an update on our Resilient Fisheries projects that we have going on. Before I get started, I do want to remind you that, on the website, there is a tab, on the left-hand menu, for Resilient Fisheries.

If you go there, you will get kind of an overview of all the different projects that are ongoing, and you will also see the quarterly updates that are provided to the council during each of their meetings, and so, if you want to see more detail, those are available. I'm going to give you kind of a brief overview for each of our four projects, but there is more detail in those one-pagers that we put together, and so here are our four projects.

We have kind of a program overview that -- I believe, last time I was with you, we were in the process of having -- I think we were in the RFP period for this project, and this project actually has been split into two parts. We have a management process review and an ecosystem information review. Those have since been contracted and are underway.

For Project 2, the stakeholder-driven adaptable implementable management, this is an AIM process. It's very similar to an MSE for the wreckfish fishery. That one was underway when we spoke last, as was Number 3, which I think is the most exciting project for this AP, because they are looking at updating the distributions for species and essential fish habitat for snapper groupers, coastal migratory pelagics, and dolphin wahoo, and then our fourth project is actually our multi-phase communities project.

There are actually three phases of this project. We have the RFPs. The RFP went out December 5, and it just closed on January 16, and so we are currently reviewing proposals for the phase one and phase two of this project, and we will be putting out the ecosystem change impacts on fishing communities phase portion soon, and so we'll be looking for people to apply for that soon.

Okay, and so Project 1a, and so this is the first part of our management program review. I've put the project objectives, just as a reminder of what is up here, of what the goals of the project are, and we have made really good progress. We had our first project oversight team meeting in September, and the project oversight team, because this is one of our -- It will have impacts for governance and jurisdictional kind of processes, and we have included members from the Mid-Atlantic Council, the New England Council, and from the Gulf Council to serve as project team members, and so they are helping us with the oversight for this project.

The contractors have made really good progress reviewing council processes. We've had a lot of initial interviews conducted for this one. It's Aaron Kornbluth, Steve Poland, and Purcie Bennett-Nickerson are the ones who are the leads on this project, and so some of you may have heard and interviewed with them already.

Our first project report came in on December 1, and that was process mapping and case study, and it's under review at this time, and they are going to be submitting their next deliverable, I believe, February 1, and so, again, at the bottom of each of these slides, I've included the full project overview. That will link you to that overview that I told you about that's on the Resilient Fisheries webpage.

For Project 1b, and that's the second part, the ecosystem information review and strategy development, this project is being undertaken by Sarah Gaichas of Hydra Scientific. She recently retired from the Northeast Fisheries Science Center. I am assuming, if you work in ecosystem information, you have seen her name on a paper, and so she is evaluating kind of how the South Atlantic Council, and other councils, use ecosystem information in their management decisions, and she will be developing strategies for how to incorporate it more completely into those processes.

She developed an interim report on data products and methods from all councils, and that was submitted to the oversight team in December, and it's under review, and that will be updated for a final product in, I believe February, at the end of this month.

She is also going to be working on beginning data gathering to create kind of prototype ecosystem indicators for the Southeast, and she is working with us closely as we work on the ecosystem data gaps workshop. She worked with the steering committee preparing tools and presentations for that.

Project 2 is the stakeholder-driven AIM for the wreckfish fishery. This is a project that's been underway for a while, and I think the most exciting part of this is, in November, we held our first stakeholder workshop, and so the point of this was to really incorporate stakeholder input into these management decisions, and, in November, we held a workshop, where basically the stakeholders were introduced to the AIM process and the tools that the contractor is going to be using.

It's called the AIM Harvest Control Rule Design Tool, which was really cool, and so that workshop went really well, and we're looking forward to the next iteration of that, which will incorporate kind of more discussion around the development of those control rules.

For Project 3, this is the updating spatial distribution and essential fish habitat. This project is being undertaken by Jie Cao and Janet Nye. Jie is at NC State, and Janet is at UNC, and they are working alongside Kevin Craig, at NOAA's Southeast Fisheries Science Center, to update the spatial distribution and the essential fish habitat for the species that I listed before, and this is pretty exciting.

It's a continuation of work that they have done already, and this is actually -- So, all of these projects, we're kind of beginning to think about how to implement the outcomes. This one is -- I think I mentioned this last time I was with you. This is a project where we are anticipating a very

clear implementation pathway, which is we expect this information to be available to you as you work through your five-year EFH review, and so that's pretty exciting, and the timing seems appropriate, because the outcomes of this will be ready in 2027, which is, I believe, when you will be getting going with that, and it looks like I put the wrong --

Some of the wrong progress updates. Anyway, they are making good progress. We are going to be hearing an update on their spatial models soon. They're doing single species, and then they're going to be working on multi-species modeling, and we are going to be seeing that update in February for the oversight team, and so that's really exciting.

Our last project, it's the multi-phase communities project. Again, it's been split into three phases. The objective for phase one are to gather and analyze data to characterize the South Atlantic fishing communities, their economic dependencies, and vulnerabilities to environmental change, and so this is really meant to try to get at South Atlantic fishing communities at a higher resolution that's currently -- Than is currently available.

Phase two will then build on the outcomes of phase one, and it is to develop a stakeholder and outreach plan to try to incorporate those communities more effectively into the management processes, and we are currently reviewing the proposals for this. We had really good response to the RFPs, and we've had some really good teams apply for this, and so we're really excited to get this underway. We are hoping to have contractors onboarded by early March, and, for this one, there is no project overview yet, but that will be available soon.

All right. The next resilient fisheries project that I want to talk about is not one of our contracted projects, or rather it's part of my tasks that I was contracted for, and so I was -- Part of my tasks were to develop a ecosystem data workshop, and to organize that for the South Atlantic, and so this is funded through the IRA NOAA-funded projects, as with the other, and it's a South-Atlantic-led regional workshop to address ecosystem data and collaboration recommendations.

The workshop was organized to address recommendations that came out of previous workshops, or initiatives, and one was the Atlantic Coast Science Coordination Workshop that was held in 2021, and the other was the East Coast Climate Scenario Planning initiative that was undertaken from 2021 to 2023, and, through both of those, there were recommendations that came out that the council wanted addressed. Part of that is to have a data ecosystem workshop where we look at these pretty significant data gaps in ecosystem information in the Southeast and how we can address those.

Through the workshop, we are going to develop guidance. That guidance is going to address like the other IRA projects, the outcomes for those, and so the ecosystem information review that Sarah Gaichas is undertaking will directly benefit from the guidance that comes out of this workshop, as will hopefully all the other projects, because they all have ecosystem components.

All right, and so we took a very collaborative approach to this workshop. We put together a steering committee that included not only people from the South Atlantic, but also from our regional partners, and so we have members from the Gulf staff, Mid-Atlantic staff, and so Verena Wang and Brandon Muffley, and we also had NOAA Southeast Fisheries Science Center staff join us on the steering committee, to try to ensure that we were collaborating and working together on these kind of broader issues.

We also have an SWCA facilitation team, who have been helping us develop the workshop products, and the layout of the workshop, and then we put together a group of participants. The steering committee put together this group, and it pulls from all different areas, and so there are a lot of different people, from across the east coast and the Gulf region, who have a lot of different expertise.

Here, the workshop is broken up into five sessions. We initially hoped to do an in-person workshop, but, with some of the changes in the travel status for the federal employees, we determined that it would be better to approach it from a virtual setting, and, in order not to have people sit at their computers for three solid days, we did break it up into five sessions.

We have already completed the first three session, and these were really opportunities to brainstorm around different specific topics. We started by discussing management decisions that the councils are making. We kind of categorized those into the scope of the decisions, and also the timeframe in which those decisions are made, and talked about how those are or are not supported by ecosystem information.

We then talked about the ecosystem information tools that are already available during session two. Sarah Gaichas gave us an overview of all the different tools across councils that are available, and how they're being used, and this was really an opportunity for us to understand regional differences, and also to talk about how those tools align with management decisions.

For session three, we really dug into the indicators and the data. We received a presentation by Mandy Karnauskas, who talked to us about how the Science Center is approaching kind of -- Well, they're developing a new approach to how they're developing the Southeast ecosystem status reports, and so they've just finished kind of this updated method with the Caribbean Council. They're working on an update with the Gulf Council now, and then they will follow up then with the South Atlantic Council after that, with those regions.

Mandy presented, and we had a really good discussion about what the indicators are, how well are they supported with data in the Southeast, and in other regions, and then also started to identify some of the gaps in those. I will say, during these three sessions, one of the main things I think that we identified was that one of the gaps that we have is the gap between the information that's already available and the council decision-making processes and getting those two connected. We not only have sort of gaps in the data specifically, but also gaps in how that data that's already available is used.

Our next two sessions, which are February 4 and February 18, will be development of guidance, and so we're going to be putting these three pieces together, sort of the management decisions, ecosystem information, and these indicators. We're going to put that information together, and develop guidance for the council, but also the intention is to develop guidance for NOAA as they develop these new ecosystem status report formats, and so it will go hopefully both ways, and also with our regional partners, as we begin to talk about distribution changes, and species, and how that might impact jurisdictional issues. This will be, you know, sort of considered as we develop this.

All right, and so just some highlights from our discussion so far. We talked about, like I said, decision type. We categorized it, just to help us. There's many, many, many different types of decisions that the council makes, but there's kind of these big categories that you can put them in, and that was just to help us refine the discussion.

When you put together this ecosystem data workshop, as you all are aware, it is a huge topic, and trying to figure out how to have a productive discussion, and to focus it, that's really kind of a challenge, and that was something we worked through with the steering committee.

Another highlight was that, overall, ecosystem information is not well integrated into the South Atlantic Fisheries Management Council decision processes, and so I think we all kind of agree that there is a lot of really good information. There's some really good policies in place, but the actual decision-making, for example setting catch limits and things like that, it's not integrated in those decision processes.

There are a lot of tools, including the ecosystem status report, the climate vulnerability assessment, and fishery ecosystem plans, but it's not clear how those integrate into processes, and so, again, it's that connection point between the data, the information that's already available, and then how it's actually used by the council, and then timing of information is not well matched with the timing of council decisions.

For example, the ecosystem status reports, I think the council has had one, and it was -- I can't remember, Kathleen, and maybe you can, but it was not very recent, and it was 2021 maybe, but, if you're trying to make decisions such as a catch limit, you really need a consistent flow of information, if you're going to incorporate it into a process.

Okay, and then some examples of where councils are making progress that are potential examples of how the South Atlantic might incorporate ecosystem information is, in the Mid-Atlantic, they've developed a risk assessment tool as part of their ecosystem approach to fisheries management, and that is really interesting. I've included a link here, if you would like to look into that more.

That's something that we've considered in this workshop, and then, also, the Gulf Council is currently developing a fishery ecosystem plan that includes fishery ecosystem issues, and so it's a way to identify really specific issues for implementation, and I've also included a link to that, if you'd like to look into it more, and so I would be very interested to hear if you have any feedback on some of these questions that we've run into in the workshop, specifically trying to identify what are specific barriers in the South Atlantic to using ecosystem information.

One of the things I said was the timing of information, and so that was a barrier that we've identified. I would be interested if you have thoughts about any others. Also, there's a lot of indicators being developed, but are they useful in predicting management decision success, and so are there, you know, connections, or specific information, that you think is really important to focus on in terms of incorporating that into decision processes?

Then, if the council uses ecosystem information, the implementation pathways need to be legally defensible. This is kind of a big question that came up, and I thought this group might have thoughts on that, and so how do we formalize these processes, once we, you know, come up with a plan?

Then are there types of information, or data, that may be appropriate for long-term trend analysis, but that could be used to inform more routine tactical decisions, and so this would be setting catch limits and things like that, and so if you -- You know, in terms of thinking about how to fill data gaps, there's a lot of long-term analysis that's really important, but we can also think about, if we're in a moment, and we need to make a decision, are there other types of data that might be appropriate in sort of a short-term, you know, sort of snapshot way?

I think, with that, I'm happy to take any questions, if anyone has any, and, actually, I'll just go back to this page, if it's okay and leave it there. If anybody has any thoughts, I would love to hear about them, and I would love to hear about it now or after.

MS. CROWE: Great. Thank you, Lara, for that presentation. I see that Brenden has some feedback for you.

DR. RUNDE: H, Lara, and thanks. That was great. A lot of information. I'm glad you're on the slide. This is where I wanted to start, and so I think one thing, that I spent probably way too much time thinking about, that might help here, if you haven't already considered it, is that the video reads from SERFS, or SEFIS, that they just record presence-absence for a number of I think what they call maybe non-priority species.

They're not counting tomtates. They're not counting sand perch, and, in terms of gathering ecosystem data, and developing indicators, thinking about those species as ecosystem components, I think sort of harnessing that data, tapping into that data stream -- All those video files exist. To my knowledge, there's still just a presence-absence read on those non-priority species, and so I think that would be an early step, trying to develop indices for those non-priority species in this process. Thanks.

MS. KLIBANSKY: Thanks, Brenden. Yes, and I think that fits in with that kind of larger question of how the ecosystem component -- How do you incorporate that into a fishery management plan or not? Thank you for that. That's great.

MS. CROWE: Thanks, Brenden. Wilson has a question.

DR. LANEY: Thank you, Stacie. More of a comment than a question, Lara, and thanks for the presentation, by the way. Excellent summary. In terms of that first question, what are the barriers in the South Atlantic to using ecosystem information, one of the big barriers, that I have harped on for years, is that there isn't any central repository for a lot of the data that are out there.

I've been hoping, for a long time, that, you know, somebody would tackle creating a centralized database, and one example that comes to mind is the American Fisheries Society has established this database for gray literature, which they have opened up, I think, to pretty much everybody to just plug gray lit reports into it, and so, if we had something similar in the South Atlantic for people to plug data into, I think that would be very useful.

There's so many, you know, short-term studies, that generate a lot of useful information, but a lot of it winds up, you know, in somebody's MS thesis, or PhD dissertation, sitting on a shelf in the library, and, unless it happens to get published in the peer-reviewed literature, it's hard to track

down sometimes, and so, for what it's worth, I think some sort of a central repository would be very useful, but, you know, the key is getting somebody to build it and populate it.

MS. KLIBANSKY: Thank you, Wilson. If I could just follow up on Wilson's comment, Mandy Karnauskas gave us basically an overview how they're updating kind of their process of developing the ecosystem status reports, and one of the things they're doing is trying to automate a lot of the data collection, and the analyses, and things like that, and so I don't know if it gets exactly at what you're recommending, but in terms of, for example, raw datasets that are available for the analysis, it seems like they're landing on the idea of having a central database, and I think they're using kind of the GitHub platform to put a lot of their analyses on.

Actually, Brenden probably has a lot of experience with this, but just putting those things in a space where it's accessible to all of the people who are involved in the analysis, so it's hopefully more efficient as they work through those things, and so it seems like that would be also helpful in incorporating those shorter-term datasets, because, if the development process can be shortened sufficiently, you can incorporate those shorter datasets, you know, in a more regular way.

DR. LANEY: Thanks, Lara. That sounds like it gets at it, for sure.

MS. CROWE: Scott, you can go ahead.

MR. KATHEY: Thank you, Stacie. I've mentioned this in previous meetings, that the Southeast is the only ocean region in the United States that does not have a NOAA integrated ecosystem analysis having been performed here, and it still begs the question why, why that hasn't been done, or isn't even in the planning stages, as far as I can tell. I don't know if -- Trish, I think you were interested in kind of looking into this. Were you able to explore that at all?

MS. HOWINGTON: Trish, if you don't mind, I can answer that.

DR. COLLIER: Yes, and it looks like it might be good for you to answer, Kathleen.

MS. HOWINGTON: Yes, and so we are looking into that. Actually, that is going to be -- It's part of the Habitat AP workplan, and so we're going to be bringing that up in the summer. We're going to be getting presentations from our two surrounding regions for an integrated ecosystem assessment, and we're going to be getting some recommendations from --

Or hopefully we'll be getting recommendations from the Sarah Gaichas project of ecosystem indicators, and that may help, as well as goals and objectives, that we can then submit to the Science Center, saying we would like to have an ecosystem -- Integrated ecosystem assessment, and here are our indicators, and here are our goals and objectives, because, the last time we requested it, they then rebutted and said, okay, if you want that, why, and give us goals and objectives for it, and so that is part of the plan. We got it on the workplan. It's just not during this meeting.

MR. KATHEY: Okay. thank you.

MS. KLIBANSKY: Kathleen, can I follow-up with a question? Is that -- The integrated ecosystem assessment, and so that came up during our workshop discussions, and the kind of sense that I got

from the discussion was it's resource-intensive, and the resource -- Resources are somewhat limited, and that might be an issue, but. in terms of developing our guidance, which is one of the things that we are going to be doing, and Kathleen is a member of our team as well, and so I'm thinking, as we develop that guidance, we can keep that in mind as a priority that the AP is interested in, and so we could focus maybe some of the discussion around that.

MR. KATHEY: I think that these gaps that you've identified already, you know, through this presentation, would be some of that response to why do you need this, you know, because we do have these gaps, and we need to -- I'm also hearing that we don't have this information centralized, and it's kind of dispersed, and we need some kind of vehicle to kind of draw all this -- Pull all this together, and that's presumably what an IEA would help to do, and its ramifications for fisheries management, but well beyond that, and just ecosystem management in the National Marine Sanctuaries, in state MPAs. You know, I think there's a strong case for why this type of assessment is needed here.

MS. CROWE: Thanks, Scott. Does anyone else have a comment, or a question, for Lara?

MS. HOWINGTON: Scott, you still have your hand raised. I'm not seeing any other hands raised.

MS. CROWE: Okay, and so thank you, Lara, again, and just everyone please keep in mind that she did say she would be happy to take any comments or feedback later too, and so, if you think of anything, please get in touch with Lara. Okay, and, with that, we will go to our next presentation, and that is Chip, and he is going to talk about the Spawning Special Management Zone Working Group.

MS. HOWINGTON: That's right, and so Chip.

DR. COLLIER: I'm just wondering, and do we need a bio break?

MS. CROWE: That might be a good idea. It's been almost two hours, and so what are you thinking? Like ten minutes?

MS. HOWINGTON: We could come back at noon.

MS. CROWE: We could come back at noon. That sounds good.

DR. COLLIER: All right.

(Whereupon, a recess was taken.)

MS. CROWE: Okay. It is 12:00, and it looks like Chip is up, and ready to go, and so, if you are, then let's just go ahead with the next presentation.

DR. COLLIER: All right. I am ready, and so today I'm going to be talking to you about spawning special management zones, which are some areas that the council created back in 2017, after some extensive discussions with the public, and I'll get into a brief description of what the spawning special management zones are, and then I'll have a separate presentation on the homework that I had assigned you all.

I think I put it together about 7:30 this morning, and so I might not have all the comments, but I will integrate those additional comments, if there are responses in there, into a next update that will go into a final report, and so we'll get started on the introduction to the spawning special management zones.

These areas were created in Amendment 36. They identified a purpose and need pretty specific for these areas. One of them was to protect important spawning habitat, and this was to enhance spawning, recognizing that these fish spawn in certain areas, potentially year after year, and they wanted to protect those fish when they were in higher abundance in certain areas.

There was also a notice to reduce bycatch and bycatch mortality, and, specific, they were focused on speckled hind and warsaw grouper. Although that was listed as a purpose and need, it's really difficult, when you look at the size of these areas, to really be able to estimate how much reduction of bycatch you would get from these small areas.

Another part of the need that came out of this was to prevent overfishing and achieve optimum yield. That's part of National Standard 1, and then they're looking to achieve conservation goals, while minimizing, to the extent practicable, negative and social effects, and so I just wanted to give you an introduction on why the council had identified creating these areas, and now I want to introduce you to these areas.

So there's five spawning special management zones that were created, and, in the figure to the right, or the map to the right, you can see the labels of the areas, and it is drawn to our best attempt at scale, and what I do want to highlight is the overall size of these spawning special management zones.

They're pretty small. The biggest one is approximately five square miles, and the other ones are less than that, and so, in all likelihood, they wouldn't show up. If you were looking at a map this size, an area of five square miles, that's about the size of downtown Charleston on the peninsula, and so it is a fairly small area, but, if you were to walk it, it does feel bigger, and so it just depends on your frame of reference.

Of the five areas that were created, three of them were created on natural reefs, and so, going from south to north, the most northern one was South Cape Lookout. It was created off of North Carolina. It's about sixty miles offshore. Then we have Devil's Hole, or Georgetown Hole. That's a promontory off of Georgetown, South Carolina, and then, all the way down at the bottom, probably pretty hard to see, because it's way down here, is Warsaw Hole. This is an area that was created off of the Keys in order to protect warsaw grouper.

Then we also have two artificial areas that the South Carolina Department of Natural Resources created in order to enhance fish populations. These areas are called Area 51 and Area 53. In the creation of these, and their application through the U.S. Army Corps of Engineers, they had indicated that these areas were not going to be fishing reefs, but they were going to be reefs for basically population rebuilding, and the first one, Area 51, was created in 1998, and then the other, Area 53, was created a little bit after that, in slightly deeper water, just to test if it would work there as well.

The regulations in the spawning SMZs, it prohibits fishing for, harvest of, and possession of snapper grouper, and so snapper grouper just doesn't mean snappers and groupers. This means all fish within the snapper grouper complex, and so it could mean black sea bass, and it could mean white grunt, gray triggerfish, tilefish, a variety of species, a variety of the fifty-five species that are in the fishery management unit.

There is a transit provision that allows people to go through these areas if their gear is stowed properly, and then another provision is there's no anchoring by fishing vessels. It is what we call a Type II MPA. I don't know if that's a universal definition or not, but it does allow other types of fishing to occur in the area, and some of the areas can be visited by people that are trolling or doing other types of fishing. For the three natural reefs, they do have a sunset clause, which the regulations will cease to be in existence after July 2027 if the council does not renew regulations for the area.

The focal species of this -- When they were looking at important spawning areas, they were not necessarily looking at all species for this, just, one, because we don't have enough information, and, two, they felt like certain species were more likely to aggregate, or form larger spawning groups. Aggregation is not always the agreed-upon term for the South Atlantic region. We've had a difficult time finding spawning aggregations in the area, but what they do call it is an enhanced, or increased, population abundance in the area during spawning time.

The groupers, there's fourteen groupers. We have them listed there, that are some of the focal species for these areas, and there's six snappers, two tilefish, and then greater amberjack was also included.

Some of the habitat information, why these areas were created, in the natural sites, they were looking to find areas where multiple species were spawning, and, when we're thinking about this, and, if you saw the video last night, you did see some of these areas, or all the areas, all the natural reef areas, are in fact areas where multiple species are potentially spawning.

Two of the areas are promontories, or areas where you can see like a large edge, and that's kind of depicted on the top-right, and, if you think about Warsaw Hole and Devil's Hole, those two areas do have a large edge. South Cape Lookout is a slightly different habitat. That habitat is more of a pavement area, kind of flat, and not much relief, but it was designed more to protect red grouper, a concern that the council -- A species that the council is concerned about.

Then we also have two of the areas that are artificial reefs. Just to give a little background on those, they were designed as protected areas in their applications. These areas were created well before they were designated as spawning special management zones. They remained off the maps until it was finalized as protected areas. Prior to these reefs being created, they were placed on sand, and so now you can see some of the areas depicted to the right, where you can see fish on -- You can see the artificial reefs, and then fish on top of those. An important part of this is all the areas have been mapped, and so we do have mapping of the area, and some habitat characterization of the area as well.

Recent research that has occurred, or research and monitoring that has occurred, there was a larval connectivity model that was developed by Brothers et al., and what they had looked at was four or five different grouper species, and red snapper, trying to determine are these spawning special

management zones -- Do they have the potential to contribute to a larger spawning -- To contribute to the spawning, I guess, density, and what they found was some of the areas performed better than other areas in order to increase recruitment in the area.

They found that -- I'm trying to think through everything here without trying to get in too much details, but there were definitely some areas that were better than others, but, overall, given the size, these areas contributed very little to a potential increase in spawning, but, when the models were being developed, they were assuming a very uniform distribution of spawning, and so, if these areas are truly important for the species, then they could have a little bit more impact than what was predicted through the models.

There's been a sampling, or a monitoring, project going on. This was done by the Nature Conservancy and LGL, and what they did was they went out and sampled fish during spawning season, and they were sampling the natural areas. Up in South Cape Lookout, they were up there sampling around the time that red grouper were suspected to be spawning, and, in Devil's Hole, they went out when scamp grouper were suspected to be spawning, because scamp had been seen in the area in a fairly large abundance.

Then, down in Warsaw Hole, they went sampling when warsaw grouper were suspected to be sampling, as well as greater amberjack. There was a thought that greater amberjack might be going down to the south Keys, in order to spawn down there.

The artificial reefs are monitored by the South Carolina Aquarium. We had a presentation from them on the information that they've been collecting, and then, opportunistically, the Southeast Reef Fish Survey collects information in these areas as well, if it's possible, and, the Southeast Reef Fish Survey, they typically use traps in order to collect information, traps and videos to collect information on the species in the area, but sometimes they do additional sampling, in order to get some biological samples.

Why we're here today is the evaluation of the spawning special management zones. It's been recognized for a long time that you need to evaluate the effectiveness of these protected areas. People are very cautious about protected areas. Sometimes it's felt like it's a black box. Once it's created, nobody goes in and looks at it, and so this was the intent of the council, and also the intent of the sunset clause, and they wanted to make sure that the spawning special management zones information was being collected.

We are making sure it's doing what it's intended to do, looking at the adequacy and the appropriateness, and then we want to see potentially the outputs of these areas. Are they achieving what was actually achieved by closing these areas?

It might be a little bit early to really be looking into the outcomes, but we can definitely look at the designing and planning, and also the inputs about what we need to do, and how we go about doing it, and so, in order to do this, the council created a workgroup called the System Management Plan Work Group.

This includes biologists, law enforcement officers, outreach specialists, habitat biologists, a wide group of people, as well as fishermen, in order to evaluate the areas, making sure that we're getting a diverse input, like I mentioned yesterday, because we are very -- The council has been very

concerned about the perception of these areas. We want to make sure that they are doing what was intended to be done.

In addition to that, we want to go to all the advisory, or many of the advisory, panels to gather input from them as well on their perception of the areas, making sure that we're gathering, once again, a wide range of input, in order for the council to make a decision later, and part of this, gathering all this information, is because we do recognize these are essentially data-limited approaches that we're taking, and it's very difficult to make a decision if you're not getting all the inputs that you might need.

Part of the evaluation, especially for this one, is looking if management should change. Should we keep the areas as they are right now? Should the areas modify by either moving the areas, or changing their size, or should we change regulations?

Here's a link to the tool that many of the AP members have already completed. Once again, do not feel like you have to complete all the sections. If you're not familiar with them, just complete what you're familiar with, provide feedback, and we will incorporate it into the evaluation report that goes to the council, and then we will review aggregated comments at this meeting, and I'm going to do a presentation of that shortly after this, but I'll take any questions that you might have on the background of the spawning SMZs before we get into your responses.

MS. CROWE: All right. Thanks, Chip, for that. Anyone have any questions? Doesn't look like we have any hands up.

DR. COLLIER: Okay. I will move into the next presentation, and so let me start off by saying thank you. I recognize that this survey is challenging. Not only is it a lot of responses, but it's fairly new information. We don't have great sources for you to build off of, and so I appreciate you taking the time to respond. This is our first one that we've been -- That we've done. I know we -- If you look into the system management plan for the spawning special management zones, it indicates that we were supposed to do this at several steps throughout the time period.

However, I did not feel comfortable, as a staff, bringing folks together and saying we have no new information, and we really didn't get information going on the spawning special management zones until about 2021, and so that's why we've delayed trying to do an evaluation of these areas. All your responses and discussion that we have today will be added into the report, and I have basically a color coding of what you're going to be seeing in several of the histograms that are coming up next.

In blue, kind of more of a Duke blue, or Florida blue, you have strongly disagree, or that's not evident, and I wrote that improperly. It should not be “note”. It should be “not”. Sorry, and I guess working at seven this morning didn't -- Didn't do well. Red is disagree, and so once -- Then we go to neutral, and then green is agree, and strongly agree in purple, and then blue is not sufficient information.

Red and blue, if you look at those, those are basically a negative, and then green and purple are going to be the positives as we move forward, and this basic key is going to be on the top-right of the following graphs.

In planning, the Habitat Advisory panel, Habitat and Ecosystem Advisory Panel, it seems like the council did a fairly good job. Most of the, or the majority, of the responses are positive, especially when you're looking at the management purposes. They were clearly designated. The objectives are consistent with the council purpose for spawning protection, and then we got a little bit more neutral response when you look at the boundaries.

Do they encompass known spawning areas, and that not -- It's not to be unexpected. You know, we don't know all the spawning areas. I heard Paula mentioned a spawning area for gag grouper off the Cape Fear River, which I would be interested in knowing more about, and so I might reach out to her in that, and then is there sufficient documentation, and the group felt like there was plenty of documentation on these areas.

Going into the next one, looking at roles and responsibilities, it looks like the council did well on that. However, the coordination, it's not as positive for that one, and so the coordination among NOAA, the council, and state partners, trying to figure out who's going to do what for the area. The engagement, it looks like we need to do a little bit more work on that. We're seeing some of the disagree pop in, and then the decision-making was done in a fairly transparent way. You're seeing a little bit more purple over there, indicating that the group strongly agrees.

This is just a quick one showing which areas were evaluated, and so I'm going to go into the five different areas. These aren't going to be color coded. They'll follow the same color coding as the as before, and these are just going to be a subset of the information that's going to the System Management Plan Workgroup, but we did want to focus in on the specialty of the habitat and ecosystem group.

Starting off with the are there adequate resources, that one is on more of the negative side, indicating that there's not adequate resources, funding, personnel, vessels or data access to monitor and enforce the area. As far as data collection programs, once again, there's fairly negative responses, but we're getting a few more of the insufficient information for people to really evaluate that.

Some more of the outputs looking at the management measures, this one is a bit more balanced. It ranges from strongly disagree all the way up to strongly agree on whether or not the management measures are being implemented as intended. Going into the outcomes effectiveness, this one is either negative, or there was not sufficient information in order to address it, and I just wanted to make sure I go over some of the points here, because you can't see the entire piece of it, and so the left one is biological indicators, and so over here is biological indicators.

This is habitat condition. It's either negative or not available. Non-target species, once again, is negative or unavailable. Compliance, there's one more individual that indicated that it's either -- It's not well enforced, or there's low compliance, and then, finally, with stakeholder buy-in to the areas, there weren't any negative, and there weren't any positive, and so we need to work on trying to get more buy-in from the stakeholders in that area.

With this, we had four responses that indicated -- Half indicated there was insufficient information on what to do, but the other half had indicated retain as-is, and so we'll go into similar descriptions for the other four areas.

We're trying -- Although the sunset provisions aren't going in place for Area 51 and 53, it's still good to evaluate the areas, to make sure it's meeting the needs that the council had to address, or identified when these areas were created. Once again, there's limited resources and data collection programs. It's either neutral or insufficient information.

It was felt like the areas do have sufficient management measures, and so it's slightly different than South Cape Lookout, and here we do have some -- The biological indicators are positive. The habitat condition is good, or increasing. The non-target species are good, or increasing. Compliance is unknown, essentially, and as well as stakeholder buy-in to the area. Once again, this is the exact same as the South Cape Lookout, with half indicating retain as-is and the other half being unsure.

Going into Area 53, this is likely to be a mirror of Area 51, just because those two areas were created with the exact same sampling of the area. Going into Devil's Hole, which is the area off of South Carolina, in this area, once again, it's either disagree or neutral on whether or not there's sufficient funding or adequate resources, and then it was felt like there's adequate -- They agree that there are data collection programs that are active and effective in the area.

As far as management measures, it was felt like these are being implemented as intended, and, as far as outcomes in Devil's Hole, this one seemed to be fairly positive overall, with either insufficient information or strongly agree or agree, and so, once again, the biological indicators, the habitat condition, the non-target species, the compliance, and the stakeholders. This too had indicated that the area should remain as-is, or there was insufficient information.

Looking at Warsaw Hole, once again, there's inadequate resources in the area, as indicated by most folks, or two of the three people that had responded. There was information on the data collection programs. They disagree that they're active and effective, or are neutral or unknown. As far as management measures, there is some agreement that they are being implemented as intended, and then, going into the outcomes here, there's a lot of unknowns, based on the yellow and blue, with some potential stakeholder engagement in the area being positive.

Then, most of the folks that had commented on this, I guess two out of three, indicated retain as-is, and then one had indicated unsure on the information, and then, going back and doing some cross-area comparisons, trying to make sure that the planning, the processes, the inputs and outputs and everything is going well, and this color code is a little bit different than before.

When you're looking at the blue and red, that's indicating that the conditions, or those dimensions, have either regressed, or there's been no progress. Yellow indicates there's been some progress, green indicates there's been progress, and then there's been the most progress with purple, and so, as far as the planning, that seems to be the area where we had the most progress. When you're getting into some of the process parts of the areas, that is indicating that there is either some negative or some positive.

Give me one second, just to make sure I can look into some of the details on this. The processes include enforcement, compliance and outreach, and so it looks like we need to do some improvements on some of the outreach. Some of the inputs, when we're thinking about inputs, we're thinking about availability of resources, funding and capacity. As indicated by many of the

graphs, it does seem like it's regressed quite a bit, and we need more funding in order to monitor some of the areas, and basically get to some of the processes a little bit better.

Some of the outputs, and, when we're thinking about outputs, those are the biological, social and economic research that can be conducted within and around the area. There's been little progress, or some progress, and then, as far as the outcomes, it looks like there's been -- The outcomes are very spread out.

Now going into what the Habitat and Ecosystem Group has recommended so far, as far as the areas for the most improvement, and it's not a surprise that it's coming out as outputs that had some of the more negative responses to it, and so we need more biological, social, and economic research to be conducted for the area.

We need more inputs, we need more availability of funds, resources, and capacity, and then compliance, and compliance is an important issue, through enforcement and outreach, and then monitoring the trends in the population. The biological, economic, social, and environment is also important.

Looking at some of the text that was written, the reasons for improvement, you know, it's challenging monitoring these areas, one because they are so isolated. They're very far offshore. Most of them are greater than thirty miles offshore. That's hard to monitor, whether it's from a biological side or from an enforcement side. There's insufficient information. I think that was highlighted throughout many of the figures I had just shown.

With that, it's hard to compare with areas that are nearby. That might be most valuable, trying to figure out did the council do a good job in protecting the most appropriate areas? We are only -- The information that's only been collected so far is looking at areas that the council has protected, and then there was indication that more data might increase interest in the areas.

As we know more about these areas, we might be able to highlight some of the stories that are coming out of it, and then some of the priorities. You know, we need funding for data collection and monitoring. We need enforcement and compliance in the area, and then, finally, we need more outreach, and, with some of the outreach, we do -- I was hoping to present a video to you all today.

We're still working on a video in conjunction with the Nature Conservancy and LGL, based on some of the more recent work, but that video is not available. It should be coming soon, and so we'll be putting that on our website when it is ready.

With the next steps, we will work with SMP to fill out the full evaluation. We are going to gather information from other advisory groups. Obviously, another advisory group that we're going to reach out to is the Snapper Grouper Advisory Panel. We're going to develop a report that is inclusive of everybody's inputs, whether it's advisory or independent individuals, and we'll present those in the report, and then that will be provided to the council, and so, with that, I will be happy to go to any of the slides.

Hopefully you're not bored to death with it by now, but I wanted to make sure that we did have some input from you all, some concrete input, figuring out exactly how you felt about the areas, because this is a lot to go through. I feel like doing it the homework way does provide us some

starting point to have a discussion, and maybe the discussion, if we just want to have a very short discussion, and I'll leave that up to the chair, but maybe it's focusing on this question here of should these areas be retained, modified or removed? I think that is most valuable to the council to hear from this group, and so, with that, I will pass it back to the chair.

MS. CROWE: Great. Thank you, Chip. Appreciate that. Does anybody have any comments on specifically the information that Chip requested, and I see Wilson's hand up.

DR. LANEY: Thank you, Madam Chair. Chip, thanks for the presentation. Excellent presentation. I was one of those people who didn't feel like I was informed enough to certainly answer questions on any of the other sites outside of Cape Lookout South, and, even that one, I was marginal for.

Watching the webinar helped a lot, and, in terms of my answer to the question about whether these should be retained, you know, in terms of modification, the answer is I don't know, but, in terms of retention, I think that the TNC and LGL work clearly documented that, you know, spawning is taking place in these areas by the priority species, and so, you know, I'm going to take a conservative approach and say, you know, retain the areas, even in the absence of significant information that documents all of the areas of interest, such as in enforcement and compliance, and so that's my answer to that question, is retain them. I would retain them all.

In terms of enforcement, has there been any consideration - As you pointed out, these things are way offshore, and they're not very big. Has there been any consideration about trying to get some sort of an idea about enforcement by remote sensing, you know, using satellite imagery at all? Is that a viable option?

DR. COLLIER: Well, I have looked into some of the satellite imagery data, and, a lot of the free stuff that you get, it's really focused on the coast. It only goes about maybe ten or fifteen miles offshore in some of the areas, and so it wasn't capturing very much information in regard to these, and then, when we're looking at satellite coverage, unless you buy time for a satellite to sit over a spot, it's only giving you a quick snapshot, right? It's only the time that that picture was taken, and so I think there might be better tools out there to help with some of the monitoring, whether it's VMS, AIS, something along those lines.

Those might be more effective tools, but then that only potentially works for the charter, the headboat and the commercial fleet. The private recreational fleet is a challenge to get information on exactly where they're going, and it's not likely that it would be an acceptable solution to have VMS on recreational vessels, and so that one presents a major challenge that the council has to address.

DR. LANEY: Yes, and thanks for that response. I certainly am aware of all the problems that you raised. I think it might be worth a little bit more conversation with some folks who are -- Who have a lot of expertise with regard to the sorts of coverage that might be available for longer-term periods of time.

The other idea that pops into my head too is if you could combine -- Let's just say that there was, you know, imagery that gave you broad and consistent coverage of a given area. I wonder about developing an AI tool that would, you know, look at it and calculate how much -- I was going to

use the word ingress, but I'm having second thoughts about that. How much activity there is within, you know, an SSMZ, and, of course, just because a boat, you know, is there, it doesn't mean they're fishing, and so they could be there, but still be in compliance. I know it's difficult.

I know at least one person that I can talk to a little bit about this, and I will take as an action item for myself to talk to that individual, and, if I get any sort of useful information out of that conversation, I'll certainly send it back to you.

DR. COLLIER: Thank you.

MS. CROWE: Thank you, Wilson. The next person with the hand up was Brenden.

DR. RUNDE: Thank you. Chip, thanks for the presentation, and so I wanted to speak as not only a member of the AP, but also one of the PIs on the TNC and LGL work that Chip mentioned and that was covered in the seminar that Chip sent around, and I think Kathleen also sent around last night, and so I think the most important thing is that the thesis hasn't really changed.

The reason why the spawning special management zones were initially established hasn't changed. These are still important species. Some of these species are imperiled, and a lot of these species have various levels of conservation concern, probably now more than in 2017 when these areas were designated, and so the idea that protecting at least some of the places where these animals spawn remains a good idea.

It stands to reason, to me, that the council shouldn't make a change unless there's information to contradict the initial idea, the thesis that happened in 2017, and I think still holds true today. I'm not aware of any information that contradicts that.

As Chip mentioned, the work that TNC and LGL did was only inside the closed areas. It didn't vet any areas that are outside, and so there was no comparison done. It was just an information-gathering step to see are these areas that are currently closed protecting what they were intended to protect, and, for the three natural areas that we sampled, we found evidence for that.

What we also have consensus on is that the knowledge of the existence of these areas, and so the education of the general public, seems to be lacking, and so does compliance and enforcement. I asked somebody about these areas, a commercial fisherman, about the South Cape Lookout area, and he didn't have any idea that it was there. He said -- When I told him where it was, he said, yes, that's great greater amberjack bottom right there.

If the council does what I believe they should do, and extend protections for the same areas that are now closed, I think it should come with some sort of commitment, whatever -- As firm as possible, whatever the council is able to commit to, as far as adequately resourcing the education and outreach, as well as the monitoring of these areas going forward. That's what I think. Thank you.

MS. CROWE: Thank you, Brenden. Let's see. Laurent was next.

DR. CHERUBIN: Thank you, Madam Chair. Chip, great presentation. Luckily, I was able to watch both the seminar when it happened and then I'm sorry that I provided my input late, but I

realized that my answers were sort of aligned with what everyone answered, and so it makes me feel good about that, but to go back to Wilson's point about, you know, how can we track activity over there, I think passive acoustic monitoring would be a good answer to that, because, you know, now we have an AI algorithm that can detect boat sound, and so we can easily track boat presence, even if it's, you know, after the fact, and have to recover the equipment.

There's also technology out there, and t's quite affordable, and you can get a mooring down there in those environments for about $30,000 or $40,000, and get data transmitted, and there's also -- There's systems now that allow you to compress the acoustic data, or only send what is important, what is relevant to you, and so, basically, the AI algorithm is implemented on the buoy itself, and it sends only the information that you want, and so you could have fish sound of, you know, some species that spawn, some of the sounds that are known, so we could have algorithms that actually track the presence of the fish, and the arrival of the spawning fish at those locations, and we get information about that.

That goes back to, you know, ecosystem assessment. You could use that as a short-term, basically, evaluation of the presence of the spawning fish, you know, if there's an increasing number of calls, and it's not always associated with the number of fish, but that gives you an idea of whether the fish are spawning in numbers this year, or maybe have moved away from the area, the sort of situation awareness that you would get from the environment itself, when it happens, that you can continue to apply for the next, you know, recruitment period in the stock assessment at a later time, and so that's what I wanted to add.

You know, the technology is already there. Some of my group are already working on boat detection, and so that's something that could easily be done, and you can actually identify also fishing activity from those sounds themselves, which is some work that we did, and so, anyway, I wanted to put that out there, that the technology, and the feasibility of getting information almost in real time from those sites, is definitely doable, at a cost that's not exorbitant. That's it for me.

MS. CROWE: Thank you, Laurent. Scott, did you have a comment?

MR. KATHEY: Yes, and, actually, this issue of trying to monitor a site that's twenty to sixty miles offshore is very relevant for Gray's Reef National Marine Sanctuary, which is twenty miles east of Sapelo Island, and that's been a challenge for us since the sanctuary was designated back in 1981, and so we had some funding that we passed to the National Centers for Coastal Ocean Science to try to kind of tackle this.

They took a multifaceted approach, and it was a -- It was just a five-month study, but they used AIS, satellite imagery, hydrophones, buoy camera on the NOAA NDBC buoy that's in the sanctuary, vessel surveys, and aerial surveys, and these different techniques give you -- They have different advantages. For instance, satellites, you can see, you know, the whole sanctuary, which is only twenty-two square miles, but then you have problems that they don't -- They don't give you good visual imagery, obviously, at night, or if you have cloud cover, that type of thing, and so it's not a twenty-four-seven solution, but it gives you a piece of the puzzle.

AIS, some small boats have AIS, but we were interested in all vessels in the sanctuary, and so that that was another data source. Hydrophones are great, because they're working twenty-four-seven,

and you can tell either a presence or absence of a vessel, but it's not going to tell you the size of the vessel, per se.

You might be able to make some inferences based on the sound files, but it doesn't tell you how many people were onboard, or what they're doing, whereas the satellite imagery, or the aerial surveys, you know, you can you can sometimes zoom-in and see what general activity is going on, whether there's a wake behind the boat, whether it's stopped, whether it's anchored.

Basically, by combining all these different elements, they could get a more complete picture throughout that five-month time span, and what they were able to do, really, which was most helpful, rather than just the data itself, was to determine what are the peak periods when we do have visitation out there, and so they kind of put together a model, and they and they were able to pin this this determination of vessel presence on sea conditions, and also time of time of the month, or time of the day.

They basically came up with a model that showed that the most frequent visitation out there by vessels was Friday to Sunday, or during holiday weekends, and then there's a kind of a wave-wind kind of calculus there as to, above a certain wave height, you just don't see any boats out there. I mean, it makes sense.

They also were able to define what's the typical sized vessel in the sanctuary, which is a twenty-seven-foot center console vessel, and that was by far the most prominent size vessel out there, and so, if you if you have that kind of information, then you can direct your law enforcement patrols out there much more efficiently, so that they're hitting these peak periods, to see what kind of activities going on out there.

There's a lot of value in just having that that model, that predictive model, of when you're going to see traffic out there, and the type of activity that's going on, and so, if anyone is interested in seeing their report, if you contact me, I can give you a link for that, and there may be some relevance to some of these other sites that are offshore.

MS. CROWE: Thank you, Scott. Paula, would you like to go ahead?

MS. KEENER: Thank you. So, given what we know, based on some of the conversations yesterday, and we've delved into some of this in-depth over the years, quite honestly, but, anyway, what we know about inshore nursery habitat alteration, whether that's caused by dredging, or loss or migration of the salt marsh, and so those are some of the knowns, along with many others.

Then, given what we don't fully understand right now in terms of climate change, and how -- Granted, this is deeper water, but we don't know how that is going to affect, or how that is affecting, I will say, species distribution and abundance, species range changes, extensions as the result of the effect that it's going to -- Is having on general oceanographic processes, and so I think, at a minimum, all of these areas should be retained. Thank you.

MS. CROWE: Thank you, Paula. Chip, did you want to respond?

DR. COLLIER: Yes, and I'm not responding positive or negative, and just some ideas. Laurent actually gave a presentation, through our seminar series in 2024, on the algorithm that they have

developed in order to detect spawning fish, and so that tool is definitely available. If you want to find out more information, you can go to our seminar series for -- I think it was April 2024 when he gave that really good presentation on the spawning detection algorithm that he has.

Following up with Scott, yes, I would definitely be interested in that report that you all developed, and, when we were talking to our Law Enforcement Advisory Panel last week, or the week before, another thing that they had indicated for us was what is most important for these areas, not only when people are going out there, but let's make sure that the area is being protected when we think fish are spawning in the area.

Something like Devil's Hole, it seems like it's definitely needs protection around the time of spawning for scamp grouper, and then, maybe something like Warsaw Hole, trying to make sure it's protected around the spawning of greater amberjack and warsaw grouper, although, with warsaw grouper, you've really got to be ready to catch those fish. They are -- They will break your lines if you're just fishing for normal snapper grouper species. You got to be prepared for them. They are a big fish, typically well over a hundred pounds, and so you're definitely in for a battle if you catch one.

MS. CROWE: Thanks, Chip. Does anyone else have any comments, or feedback? Okay. I don't see any hands, and so thank you for that, and I appreciate all of the conversation from everyone. Let's go ahead and move on to our next topic, and we are going to go back to Kathleen, and she is going to talk about the habitat communication strategy.

MS. HOWINGTON: Okay, and so, before I do that, I'm going to hit on the annual report, if that's okay, Stacie, just to remind everyone, with your permission.

MS. CROWE: Sure. Sounds good.

MS. HOWINGTON: Cool, and so I did get one or two emails about the annual report, and so I will clean this up and send it out to the group. You will get, I think, a week to review and make certain that we haven't forgotten anything. I'll remove any, you know, like this right here. If we have nothing underneath it, then we're going to remove it, and so I'll clean that up, send it out to group, you'll get a week to review, and then we'll put it in the March briefing book. I appreciate everyone's work on this. I know it's, you know, every year we do it, and so thank you so much for helping out.

Now, for the outreach and communication strategy, the frequently asked questions, and this was a recommendation by the council's Outreach and Communication Advisory Panel, that the habitat people create a frequently asked questions as a way of distributing information on habitat EFH, on things that we -- Questions that we encounter commonly.

I developed a list of questions, and I brought it to you guys in July of last year, and you did not like the list I made, and you gave me feedback that you wanted basically an EFH step-by-step, from start to finish, and somebody has a general idea of what a habitat is maybe, but let's go from start to finish about what EFH is.

I developed another list. Now, the following will need to be developed into a shareable format, and it will need to be approved again by the Outreach and Communication Advisory Panel. I am

going to give you a list of acronyms that I've put together, and, if you have any additional ones, please let me know. Questions, if you have any feedback on those, and then one graphic that I put together just to help communicate a process, the EFH process.

This is the list of common acronyms as I was developing this list of questions that I kept encountering. This, of course, would be somewhere on whatever shareable format we form, and it will probably be at the very top, so it's easy to see. Please just give it a quick look-see and let me know what you think. Am I missing any? Is this a good list? We can always add more later on as well.

MS. CROWE: Wilson, go ahead.

DR. LANEY: Did you want feedback right now, Kathleen? If so, National Marine Fisheries Service, NMFS, you might want to add that one.

MS. HOWINGTON: Okay. I've added that to the possible acronym list. Once you see the questions, you'll see why I didn't have like really specific regional things, but I could see that, yes, you're right. I should include them. All right. I'm not seeing any hands raised, and so I'm going to go to the next.

Again, this is just the questions. You wanted me to go start to finish for EFH layman's terms, and so the first thing is what is EFH, and then we would move on from that to what does EFH do, and so does it --- You know, what does EFH do, and then what is the EFH user guide, and so those are the first like three that I felt like really covered a lot, and then, after that, moving on to then more specifics of what habitats are EFH, why is it identified, and then what the difference between these four types are.

OHAPC, I debated, because technically it is a CHAPC, but the Oculina habitat area is so specific, and, with Coral 11, it is brought up a lot, and so I put that in there, and then, as I was going through this list, I realized that I felt like we also needed like some more like council-related questions, and so I added in the what are managed areas, what is the difference between habitat and ecosystem, just in case, and then the ecosystem-based fisheries management, and what is that, and why are there FMPs for habitats, like coral and sargassum, and so this is the list that I've come up with.

I think it gives a generalized idea of what EFH is. It hits on a few things for the council. A lot of this is going to include a lot of links, and be relatively short, but now I'm going to pause for this and just ask what you guys think of like this list of questions. Should I keep developing it? Should I add some more? What do you think?

MS. CROWE: So, Kathleen, we have a couple of hands up, but, before I call on them, I was -- Was FMP on the previous list?

MS. HOWINGTON: No, but I will add that.

MS. CROWE: Yes, and that might need to be on there. Okay. I think Scott had his hand up first.

MR. KATHEY: I think -- Yes, and I think it's a good list, Kathleen. There's one thing I would add, and that is the question of who is affected by federal regulations protecting EFH, to make it clear what the span of authority is under EFH designations.

MS. HOWINGTON: All right.

MS. CROWE: Okay. Thanks, Scott. Wilson.

DR. LANEY: Thank you, Madam Chair. Kathleen, I think it's a good list. I like the flow of it. I think it's logical. It's going to be interesting to see what you come up with in terms of a definition for ecosystem-based fisheries management. There's a lot of different ones out there, and so that's one I imagine the committee, or the AP, might have some input into at some point, but we can certainly help with that one, but I like it. I think it's good, and I think Scott's suggested addition is a good addition as well.

MS. CROWE: Thank you, Wilson. Anne, you can go ahead with your question.

MS. DEATON: Thanks. I think, if people are looking at this -- I think it's a good list, but, if people are looking at this, one of their next questions is, well, where are these EFH habitats, and so that -- You could have something like that, and then link them to a map, the map of the different habitat types.

MS. HOWINGTON: I can do that, and I would probably do a short snippet, and then that can be like underneath what habitats are identified, where are EFH, and I can do a little short snippet of, you know, it's different by FMP, and then add the link to our mapper.

MR. KATHEY: That would go along well with your question of what's the difference between EFH, HAPCs, et cetera, too. It almost is going to dovetail right onto that.

MS. CROWE: Anyone else have any feedback for Kathleen? Paula, go ahead.

MS. KEENER: Thank you. Sorry, and I may have missed this, but I'm thinking that possibly a question, or an FAQ, about who are the -- Or what are the organizations involved in either designation or providing detailed information regarding EFH, you know, and HAPC, et cetera. There's a lot involved in this, and so I think an understanding of what the process is, who are the agencies and organizations involved, or agencies involved, would be helpful, I think, or maybe more confusing. Thank you.

MS. CROWE: Wilson, go ahead.

DR. LANEY: Thank you, Madam Chair, and so it occurs to me, Kathleen, that we might want to have a question that says something along the lines of does another -- Or do other councils -- Have other councils designated EFH that overlaps the South Atlantic, and I think the answer is yes, and I know summer flounder is one such species, and black sea bass may be another, and so I think that it would be productive for us to add that question to it as well, but I could be convinced otherwise, if we don't think it's a significant issue.

MS. HOWINGTON: No, and I think that's a relevant issue, and that would be pretty easy to do with links of, you know, surrounding regions' EFH. I would want to look and see how many we have of that. I'm putting it on the list, and I'll look into it.

DR. LANEY: Okay. Thanks, and that reminds me too that -- So I presume, since the South Atlantic Council is the lead council for dolphin and wahoo management, doesn't dolphin and wahoo EFH extend into the jurisdiction of Mid-Atlantic and New England as well?

MS. HOWINGTON: Yes, and so I can go over -- Maybe I'll change the question from other councils' designated EFH and do more like a region-wide EFH kind of thing. I'll figure it out, but I like the thought process.

DR. LANEY: Thank you.

MS. CROWE: Thanks, Wilson. Laura is up next.

MS. BUSCH: Can you hear me?

MS. HOWINGTON: We can.

MS. BUSCH: Okay. Thanks. This may be covered, but I was wondering if a question about is there seasonal EFH might be good, or, I mean, maybe that could be captured under the habitat question, or just the basic EFH question, but just thinking that might be something to address, too.

MS. HOWINGTON: Yes, and we don't have that in the South Atlantic, but I do know that that's in other regions. Eventually we'll get there, but I think that's not this five-year EFH update. I think I've given us a big enough to-do list for that one, but that might be the next EFH, or five-year EFH.

MS. BUSCH: Great. Sounds good. Thanks.

MS. CROWE: Okay. Any other feedback?

DR. COLLIER: Stacie, I had a comment. This is Chip.

MS. CROWE: Sure.

DR. COLLIER: Just to follow-up to Wilson's point of whether or not EFH for the South Atlantic, when you're looking at the visualization tool that we have, our EFH actually stops at the North Carolina-Virginia border for coastal migratory pelagics, as well as dolphin wahoo, but you're absolutely right that, some of the Mid-Atlantic species, their EFH comes down into the South Atlantic region.

If you look at something like bluefish, it goes all the way down to Florida, and so that's something that I think we're going to be bringing up in some of our discussions when we're having some of these staff-to-staff meetings that have kind of spawned out some of the projects that Lara talked about. The East Coast scenario planning, there's going to be a meeting of the three east coast councils, and I think this could be something that we talk about, in order to make sure we're getting EFH for especially coastal migratory pelagics and dolphin wahoo going up the coast.

MS. CROWE: Thank you, Chip. Scott.

MR. KATHEY: I just want to suggest that, the earlier question about who is involved in designation of EFH, maybe you could take the Bullet Number 5 there and just say why and how is EFH identified, and that would give you an opportunity to kind of hit both those together.

MS. CROWE: Thanks, Scott. Anne, do you want to go ahead?

MS. DEATON: Yes, and, also, I was just curious, and like the what does EFH do, and is that where you would explain whether there are rules, restrictions, or talk about, you know, avoid, minimize, mitigate?

MS. HOWINGTON: Yes, and that was my thought process of what -- When we're going out, and we identify EFH, what does it do, and like why are we doing this at all.

MS. DEATON: Right. Okay. That's good. I mean, that's what I would -- People are going to want to know that and I guess -- I guess that wording of what does EFH do kind of is confusing to me, but --

MS. HOWINGTON: Okay.

MS. DEATON: It's a good way to say it for the general public.

MR. KATHEY: It's kind of how it works, right?

MS. HOWINGTON: Like what ways of identifying EFH are?

MS. DEATON: What was that?

MS. HOWINGTON: I was saying something, but then Scott said something as well. Scott.

MR. KATHEY: Well, I think what -- What does it do, and, I mean, that's basically how does it work, right, and how does it accomplish the mission to protect this habitat, and that's either through, you know, regulations, or however you want to describe that.

MS. HOWINGTON: But I will reword to clarify. Anne, is your hand still up, or is that from before?

MS. DEATON: Sorry. It's down now.

MS. HOWINGTON: Thank you.

MS. CROWE: I don't see any other hands, Kathleen, if you want to go ahead.

MS. HOWINGTON: Yes. All right, and so then this is the last thing. This is the how is EFH designated, and so this does get into a little bit of what we were saying of who is involved, and I had NMFS in here as well, and so I'm going to put that, and I'll probably put NOAA on the

acronyms, because that needs to be added in. This is kind of a way that I was visualizing how EFH is designated. What do you all think? Do you think this is a good visualization? Should I try something different?

MS. CROWE: Scott, go ahead.

MR. KATHEY: I think it's a nice depiction of the process, but kind of where does it start? You know, you've got scientific data collection at the top, but is it, you know, something that someone on the council promotes, or does it come from the public, or are there public hearings? It's not clear to me what the genesis point is. You know, is this solely an internal FMC decision, or can it -- You know, is there a way for public calls to designate it? I'm not sure if that's covered here somewhere.

MS. HOWINGTON: All right, and so maybe less of a circle and more of a starting point would be helpful.

MR. KATHEY: Right.

MS. HOWINGTON: Okay.

MR. KATHEY: You know, what prompts that scientific data collection in the first place?

MS. HOWINGTON: Well, it would be the periodic review, and so the National Marine Fisheries Service, Magnuson-Stevens, said, hey, you guys need to identify EFH, and so that was the first identification of EFH that pushed this, and then, every five years, it's supposed to go in the circle, and then it starts again.

MR. KATHEY: Okay, and so that's your starting point, is that periodic review.

MS HOWINGTON: Yes.

MR. KATHEY: Okay.

MS. CROWE: Anyone else have any feedback on this image? David Webb, go ahead.

MR. WEBB: Thank you, Kathleen. I think, based on that last comment, I think it's important to include the regulatory requirement to identify EFH. This is not something the council comes up with, or the HEAP comes up with, or some scientist comes up with. This is a statutory requirement, and that's how the funding goes for the data collection, and everything that follows comes from that, and so I think that might need a little bit more emphasis to clarify what the genesis of the creation of an EFH comes from. Thanks.

MS. HOWINGTON: That could also be underneath the why is EFH identified. I could make certain to highlight the regulatory requirements in there.

MS. CROWE: Laura has her hand up.

MS. BUSCH: Going back to the last two comments as well, where you have the text box that says, "SAFMC HEAP FAQs", that could be a spot there where you could put the Magnuson-Stevens Act, and then just a single arrow kind of indicating that that's the starting point, and an arrow pointing over to the scientific data collection, and kind of leave your loop as it is, because I like how it kind of goes through that it's an ongoing process, but that starting point would be the one -- It would be a box to the left that points over to it and gets this whole loop started, something like that.

MS. CROWE: Scott.

MR. KATHEY: One possibility for graphic display of this would be to use the P cycle that's used for, you know, incidents like oil spills, that type of thing, and so you start at the bottom of the P, and then you get into the circle, you know, and so the Magnuson Act is static, because you're not coming back to the Magnuson Act every single time, right, and so that might be a model worth looking at, as far as how you want to depict it, because, once you get into the loop of the P, then it just keeps looping, but you have an origin point at the beginning, that's just kind of a fixed point in time, and then you get into the cycle.

MS. HOWINGTON: Yes, and I could do that.

MS. CROWE: Wilson.

DR. LANEY: Thank you, Madam Chair. This is probably out of left field, because of my previous Fish and Wildlife Service existence in dealing with the Endangered Species Act, and has anybody ever challenged an EFH designation, and is that -- Well, just answer the first question first. Has anybody ever challenged one?

I'm not aware that anybody has ever challenged one, but I suppose it's possible, and, if it has happened, how frequent has that been? How frequently has that occurred, and is that something you would, you know, stick in the figure as a possible challenge? I don't know who it would be. I mean, maybe a conservation group, or an NGO, might challenge one, if they felt like the designation did not adequately cover habitat for a given species. I don't know, and I just wondered.

MS. HOWINGTON: We are the only council that has not ever been sued because of our EFH identification, mostly because we're still at that Level 1. The moment that you start going Level 2, Level 3, and getting more specific, and getting more -- I don't want to necessarily say accurate, but then fishermen start paying attention, as well as when you start adding more regulatory processes with the EFH, and then suddenly you're getting more lawsuits, but we have not ever had one in the South Atlantic. What was the other thing you said? You prompted something in my brain. No, and I do not know of any lawsuits that have occurred because they didn't feel like the EFH was not accurate, and the opposite actually, of we just don't like EFH designations, is what I've heard of.

DR. LANEY: Thanks, Kathleen. Yes, and I know the South Atlantic did them a good bit differently than the other councils did, and that has its benefits. You know, having a very broad designation is beneficial, in that regard, and so that's interesting, that the South Atlantic Council is the only one who hasn't had its EFH designations challenged at all.

MS. CROWE: Okay. Kathleen, I'm not seeing any other hands at the moment.

MS. HOWINGTON: Okay. All right, and so it sounds like we're good. I'll add in those acronyms, and I'll add in those questions and details, and then I'm going to loop in -- We actually now for the council have a new communication and a new outreach coordinator staff members, and so we have two new staff members that are all about public relations, and so I'm going to bring this to them in February.

I actually already have a meeting scheduled, which is great, and we're going to try and determine the best way to try and deliver this information, and the best way to present it, and then, once it's developed kind of in-house, I'm going to bring it to the Outreach and Communications Advisory Panel, and then, once that's complete, I'll bring it to you guys, and let you know that like kind of here's what we've developed, and we're hopefully going to be able to do some social media posts.

We can actually schedule these three months in advance, and so maybe we could do one for July, but then it kind of depends on the timing. I will be presenting these to the Outreach and Communications Advisory Panel this spring, and so hopefully, by summer, I will be able to say, hey, this is what has been developed, but that's best-case scenario, just letting you all know.

Other than that, for other outreach communication plans, I have been in contact with those two staff about the flow policy, and possibly doing a social media post about water and flow quality. That's going to happen post the policy approval in July. I've also talked with our web guru about making an ecosystem webpage, as well as Chip, and that's still on the to-do list, especially with all the resilient fisheries things coming out, and so hopefully we'll be able to do that.

Then, also, the informational webinars, and so, if you all remember, during July, we decided, or the AP recommended, that we start trying to do informational webinars, to make certain that we aren't convening, you know, everyone in-person and then just getting presentations that have no action items.

The one that we decided that we proposed was going to be kind of an example, or an experiment, was getting an informational webinar on the Port Everglades deepening project. Jocelyn and I were in communication, we were working on it, and then the shutdown happened, and, basically, after the shutdown opened back up, Jocelyn recommended that we wait until we get the BiOp, which should be released sometime this spring.

She and I are communicating. As soon as the BiOp is available, then I'm going to send out an email saying, hey, when's a good time, and we'll come up with the time for that informational webinar, and see if that's something that we want to try and keep doing, and so hopefully we'll have at least one before the July summer meeting, but does anyone else have any other recommendations that they think would be good for outreach and communication that you feel like we as a Habitat and Ecosystem Advisory Panel should explore? I am not seeing any hands raised.

MS. CROWE: No. Does anyone have any recommendations for Kathleen?

MS. HOWINGTON: If anyone thinks of anything, please let me know, but we are working on it, and hopefully, in the next year, you'll start seeing a little bit more outreach, a little bit more communication, that's habitat focused, which would be nice. All right, and so then, Madam Chair,

with your permission, I would like to move on to the final thing that we have on our to-do list, which is the workplan.

MS. CROWE: Yes. Sounds good.

MS. HOWINGTON: Fantastic. I think I'm going to finish this just a little bit early, which would be nice. All right, guys. So let's discuss our habitat workplan, and now I'm going to go to the workplan. Okay, and let me zoom-in a little bit.

A friendly reminder, before I zoom-in, that green means future, to be decided at the meeting, and so we might continue to talk about it, and we might not. X means it's underway, and blue means we are finishing it during this meeting, and we just completed the winter 2026 to-do list, and so that's here, and so that is all good. We can hide that now, and so then one moment while I zoom-in for everyone.

All right, and so, summer of this year, we are -- The communication strategy development, and so that's going to be about the social media posts for the flow policy. I'll be able to bring FAQs to you guys, and that should be complete and pretty, hopefully, on the website, and so there you go. We, of course, are going to do the workplan, which we do every time, just like we're doing right now.

Annual report, we only do in the winter, because that's the beginning of the year. Citizen science update, and so we just got one this meeting, because we did that whole switch from winter to summer, or from spring to fall to winter to summer, and so we're going to get another one in summer if Julia feels like it, if there's been enough changes, and, if not, then that will be dropped, but I just want to let everyone know.

EFH consultations only happen in the winter, and so, Anne, you're off for one meeting. Congratulations. Then space program, and so this is when we're going to determine the future of this. I have it stopping in -- I'm going to continue to do some data acquisition, and then, during the summer meeting, we're going to be making choices on what we're going to do with that data.

Then, hopefully in July, we finish the flow policy. That's the game plan. We just got this one, and so that's going to be removed. We'll be getting another resilient fisheries update. That is going to be then incorporated into our EFH five-year review, and so I have that scheduled every single meeting until it's complete. Actually, I think I have it scheduled past when we have Lara, but that's okay.

Then the integrated ecosystem assessment and we'll be getting a presentation from the Gulf and the Mid-Atlantic on theirs, and how they integrate it into management, and then deciding what our goals and objectives are, kind of making some decisions that we can then recommend to the council. We will also have some resilient fisheries products to be able to integrate into those talks, and so that will be nice.

We're going to be getting an offshore energy update from BOEM. I don't know how much that's going to entail, and you'll note that it is no longer wind energy. We're talking offshore energy, and so we'll be getting that from them, and then we also had on our list, Sea Risk Solutions, and so, if

you all remember during last July, we got a presentation from a subsea cable, a transmission cable, company that didn't really answer a lot of our questions on the impacts of habitat.

During that talk, I got emailed many times by a company called Sea Risk Solutions, that I felt they had a more habitat focus, and had a very strong opinion, and so we added that to the list after the last meeting. If you all are still interested, we still have it on here, and then, of course, talking about the higher abundance locations and EFH tier structure, talking about the food web working group, and then talking about life stage information, which I am going to be sending out a reminder with that in the next month or so, to remind everyone they should be working on those, for our volunteers, and so that is what we have coming up this summer.

Then long-term goals, and we, of course, have habitat production relationships, and maps using Ecopath and Ecosim. I'm not sure when we're going to get in there. Modeling species habitat use, and this goes back to using that SERFS video, trying to see if we can get some AI. I can try and request a presentation from some people that I know are working on this, if anyone is interested.

Compiling habitat data for a CVA, that would be nice, but we need some Science Center help with that, and so that's going to be difficult. The same thing with this, the expanding deepwater coral habitat areas of particular concern. This is actually marked on our calendar to discuss before next March, and so this is probably going to be something we discuss in June, unless you all want to talk about it in the summer.

It could be prudent to discuss it now, but the council wants to discuss it in March of 2027, and so that might be coming up, and, if it is, I will let you all know that that's going to be added to the list, and, if not, then we'll talk about it next January, and that's okay. Then we have here, Brenden Runde and Deep Sea Mining University of Hawaii presentation. Are we still interested in that, Brenden? Do we have a date on that?

DR. RUNDE: Let's see. That presentation happened. There's a recording. I'm trying to remember what I did that resulted in this being on here. I'm guessing I maybe sent you that that presentation happened, and it was great. That faculty member at the University of Hawaii might be interested in giving us a virtual presentation. I think that would be interesting, especially since some areas off of the campus of the Southeast U.S. have been talked about, Blake Plateau in particular have been talked about, for deep sea mining.

Along that same thread, Kathleen, where you have offshore energy updates from BOEM, I might even suggest broadening that further, to like offshore development updates, or offshore energy and mineral extraction updates, or something like that. I don't think, at this point, that energy really covers it. Sorry, and now I've given you two things, and so you can go back to the Hawaii thing if you want.

MS. HOWINGTON: Well, if the group is not against it, I could send a request, and try and get a presentation for this coming summer meeting. Would everyone be interested in that?

DR. LANEY: Yes, I would, and I second Brendan's motion to change that to “and development”, because BOEM already put out that press release that I noted earlier yesterday on heavy mineral sand mining off Virginia, and so who knows when it might come to the South Atlantic as well.

MS. HOWINGTON: All right, and so I'll add that to the list, and I'm assuming -- I'll do a green fill, just for precautionary sake. Okay, and so then everything else - We've got these three other short-term goals, if you all are interested in adding them in.

This Port Everglades Coral Project, again, is hopefully going to be an informational. The Mid-Atlantic IRA EFH Project, I'm hoping to get integrated in by this summer, and then we had debated talking with Manomet, and getting a presentation this summer. I'm starting to feel like the summer is getting kind of slammed, because we just went up to thirteen, but it is our in-person, and it is supposed to be our bigger meeting, and so, Stacie, do you think getting a Manomet presentation would be good?

MS. CROWE: If I remember correctly -- Were we having them talk about their thin layer placement and beneficial use projects? Was that what it was?

MS. HOWINGTON: I think that's when we got it added into the list, yes.

MS. CROWE: I mean, if we can fit it, I think that's a topic that seems to come up, and so, I mean, I feel like it would be interesting, if anybody else wants to chime-in and disagree, or otherwise. Cameron.

MR. LUCK: I was just going to add that several states were involved in -- I'm wondering where the Manomet came from. We were involved in a discussion where Manomet helped facilitate discussion with states and the Corps on thin layer placement, but I'm assuming that's what we're talking about here, because the alternative is, you know, their focus on beneficial use and thin layer placement for bird habitat, and so I'm assuming we would want them to come and talk about the work they've done to facilitate the Corps.

Sorry, and the coral just threw me off. The work they've been doing alongside the Corps to collaborate with different states for identifying locations, and just trying to make sure that's what we're talking about here. I mean, I think -- I also think it's a great idea.

MS HOWINGTON: Okay, and so I'll try and get these two added on. I don't think fifteen is too much. We had fifteen during the last meeting, and we ended early, and so I think we're okay. I'm not going to add them to up here yet. I would want to get an approval, but I'm going to go ahead and fill these in for myself, so I don't forget that I need to do that.

Okay, and then, again, during the last meeting, I added this in. This is just for the research and monitoring goals. These are the two that we're working on, and so I'm keeping track of -- If we start doing something that's on the big council research and monitoring plan, and we're working on something that's on there, I'm leaving that here.

That way, then I can follow up with Chip and say, hey, we actually did this, and so this is more just for me keeping notes, but I have it on here just in case, you know, and to make certain I don't forget. So, with that, does the group approve of this workplan for this coming summer, and then do we have any other long-term or short-term thought processes you want to add in?

MS. CROWE: Okay. Does anyone have any thoughts on that or make a motion to approve?

DR. LANEY: Sure. This is Wilson, Madam Chair. I move we approve the proposed workplan.

DR. RUNDE: Second.

MS. HOWINGTON: Fantastic.

MS. CROWE: Great. Thank you.

MS. HOWINGTON: All right then. I hope you all appreciate that this is what I consider the workplan. Okay, and so, the next meeting dates, we have our summer meeting coming up, and so that's going to be our in-person meeting, and it is going to be in Charleston, and so then what week do we want to try for? Generally, we do two days. If we feel like we need to do like two-and-a-half, we can do that, and so typically it's from, you know, Tuesday to Thursday. You all are traveling either Monday or Tuesday morning, but these are the weeks that I've looked at.

I tried to do pros and cons. Honestly, I just found cons. I don't know about pros. Personally, I would recommend maybe this week, early July, but that's a personal preference. That shouldn't weigh in on anything, and so please debate and let me know what your thoughts are.

MS. CROWE: So Kathleen, just clarify two days. Would the meeting be Tuesday and Wednesday, or would it be Wednesday and Thursday?

MS. HOWINGTON: So, typically, when we do two days, we do a half-a-day on Tuesday, a full day Wednesday, half-a-day Thursday. That way, you can travel Thursday afternoon. Now, if we bump this to fifteen, I'm probably going to talk with you, Stacie, about requesting a two-and-a-half-day, and if we think we can get everything done, which would then mean you travel Tuesday morning and then you leave Friday morning.

MS. CROWE: Okay, and so I'll just throw out that the 13th does not work for me.

MS. HOWINGTON: Okay.

MS. CROWE: And the 6th might be difficult if anybody is traveling for the 4th of July.

DR. RUNDE: Agreed, and, if anyone cares about ICAST, it's the week of the 13th, and so I know you just said that doesn't work for you, but that is another potential conflict for I don't know who on this group.

MS. HOWINGTON: So would the week of June 29th work? It would be before the 4th.

MS. CROWE: Go ahead.

DR. RUNDE: I'm sorry, and would that be a Wednesday and Thursday, or could that be like a Tuesday and Wednesday, or I don't know if people would be willing to travel Monday morning, and do a Monday and Tuesday, or how that would work.

MS. HOWINGTON: I could send out a doodle poll for each day, and see what everyone thinks for that week. We could probably do a Tuesday and Wednesday, and that means Monday and Wednesday morning.

MS. CROWE: Again, it might be a struggle of people traveling for the 4th, but it's probably worth sending out a doodle poll.

MS. HOWINGTON: Okay.

MS. CROWE: Unless people don't know their travel plans yet.

MR. KATHEY: It's several days before the 4th, and so --

MS. CROWE: Well, Wednesday is the 1st, and so --

MR. KATHEY: I see what you're saying. June 29th, hat's actually, what, a Sunday, I think, right?

DR. RUNDE: The 29th is a Monday.

MR. KATHEY: No, and it's a Monday. Okay.

DR. RUNDE: That would be -- That week would be my preference, personally, if we're talking about personal preference.

MR. KATHEY: It will be cooler in Charleston.

MS. HOWINGTON: Yes. The further along in the summer you get, the hotter it is.

MR. KATHEY: That's right. Think about it. Steam. Could we -- Like if we backed it up just a few days in June, to the previous week, does that work, or is there a conflict there?

MS. HOWINGTON: I was just picking mid-summer, but I guess we can -- Give me one second. I had my, you know, mail closed, because I was trying not to have this up, but let me double-check the calendar. The only issue that that comes is, for me, then that means the June council meeting is --

DR. RUNDE: The week of the 8th, June 8th.

MS. HOWINGTON: Yes, the week of the 8th, and so then my briefing book would be due that week, and so that just means I need to coordinate with Myra and get the briefing book due before the council meeting, and that means, everyone, you're going to need to get stuff done way ahead of time.

Then the Mid-Atlantic Council meeting is June 16 to the 18, and so, if we do the week of June 22nd, that is further away, and that means briefing book would be due on the 8th itself, and so I could get everything done. Myra is here, and so, if she wants to chime in, feel free, but I could do the week of June 22nd, I think.

DR. RUNDE: I love that idea.

MR. KATHEY: Schools are all out by then, right? I'm pretty sure.

MS. HOWINGTON: Yes.

MR. KATHEY: If that factors in for anyone.

MS. HOWINGTON: Anyone opposed to the week of June 22nd? Benjamin.

MS. CROWE: Do you want to send a doodle poll out, with that and maybe another option, and just see, or would you rather nail it down?

MS. HOWINGTON: We can do that. We can take June 22nd or June 29th, since that seems to be the other week everyone seems to be interested in, and then figure out a good two-day period in those two weeks.

DR. RUNDE: That sounds like a great idea.

MS. CROWE: Yes, and that works for me.

MS. HOWINGTON: David, are you there?

MR. WEBB: Yes, and I just was misunderstanding June 22nd or June 27th. Are you thinking about the week of the 22nd or the 29th?

MS. HOWINGTON: Yes, 22nd or 29th and so this is the calendar I'm looking at. This would be June 22nd or June 29th.

MR. WEBB: The mini-season in Florida is that June 29th and the 30th, or I mean July. Are you talking about June or July?

MS. HOWINGTON: June.

MR. WEBB: June. Okay. I'm sorry. Forget everything I said.

MS. HOWINGTON: Okay. Benjamin.

MR. THEPAUT: Hi. Good afternoon, everyone. Sorry for missing the morning. I echo trying to stay away from those two weeks around July 4th, and I think that would be best. I like the week of June 22nd. I would also like to make a motion to try to schedule a networking event after, you know, the Tuesday afternoon or whatnot, and so we can all get together, and maybe do a little happy hour, and get some good notes on the back of napkins, and so that would be my wish.

MS. HOWINGTON: I don't think anyone has ever had a motion saying I would like to get together and drink.

DR. RUNDE: No, no, and I've made that motion before, as a point of order.

MS. HOWINGTON: Okay, but, yes, I will do a networking plan, or I'll make certain that we have a social event planned one of the days, but it is sounding like -- I'm going to send out a when to meet for either the week of June 22nd, June, or June 29th, and then, once we figure out a good two-day period in there, then I will submit the meeting request, and I'll send out a, you know, scheduling the date as soon as I can, and so sometime within the next couple of weeks. Does that sound good for everyone? Laura.

MS. BUSCH: I was just going to say that you have that the Saturday is the 4th, but I'm wondering if the federal holiday is that Friday the 3rd or Monday the 6th, because, if it's Friday the 3rd, traveling might be --

DR. RUNDE: The 3rd.

MS. BUSCH: Okay.

MS. HOWINGTON: Yes, and it's that Friday.

MS. BUSCH: Good to know, and so at least us federal folks would have to travel by Thursday, just to note that on your doodle poll.

MS. HOWINGTON: Yes, and so I would probably not even include Friday at all, and probably not Thursday afternoon, and so, that way, you all could go home. Okay. Sounds like a plan. I'll send that out, and we'll get that on our schedules ahead of time. Again, this will be in-person. It will be in Charleston, and so that's the choice, and then we'll have done a full year of our summer and winter plans, and we can discuss, next time, if this is something we want to keep doing, or do we want to go back to fall and spring, and so, with that, then, Madam Chair, I hand it over to you. I don't think we have any other business.

MS. CROWE: Okay, and so, if there's no other business, then the last thing we do is our public comment, and, the person who had raised his hand earlier, I think has left.

MS. HOWINGTON: Yes.

MS. CROWE: Okay, and so let's see. I wasn't sure if you were putting something up on the screen.

MS. HOWINGTON: I was checking the public comment form, but, as of right now, it's just the one that we saw yesterday.

MS. CROWE: Okay, and so do we have anyone else that wants to make a comment at this time? I am not seeing any hands raised, and so I think we are good, and, with that, then I will adjourn our January meeting, and we will look forward to getting a when-to-meet poll from Kathleen for scheduling our next meeting, and so thank you, everyone.

(Whereupon, the meeting was adjourned on January 29, 2026.)

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Certified By: _____ Date: _____

Transcribed By
Amanda Thomas
February 12, 2026

GoTo Webinar Multi-Session Report

Habitat and Ecosystem Adv

Last Name	First Name	Date
Bianchi	Alan	01/28/2026
Bianchi	Alan	01/29/2026
Dukes	Amy	01/28/2026
Dukes	Amy	01/29/2026
Delaney	Angela	01/28/2026
Delaney	Angela	01/29/2026
Deaton	Anne	01/28/2026
Deaton	Anne	01/29/2026
Oliver	Ashley	01/28/2026
Oliver	Ashley	01/29/2026
Thepaut	Benjamin	01/28/2026
Thepaut	Benjamin	01/29/2026
Runde	Brendan	01/28/2026
Runde	Brendan	01/29/2026
Luck	Cameron	01/28/2026

Luck	Cameron	01/29/2026
collier	chip	01/28/2026
collier	chip	01/29/2026
Royster	Daniel	01/28/2026
Royster	Daniel	01/29/2026
Zapf	Daniel	01/28/2026
Zapf	Daniel	01/29/2026
Whitaker	David	01/28/2026
Whitaker	David	01/29/2026
Webb	David	01/28/2026
Webb	David	01/29/2026
Bodnar	Gregg	01/28/2026
Bodnar	Gregg	01/29/2026
Cox	Jack	01/28/2026
Cox	Jack	01/29/2026
Curtis	Judd	01/28/2026
Curtis	Judd	01/29/2026
Helmey	Judy	01/28/2026
Helmey	Judy	01/29/2026
Byrd	Julia	01/28/2026
Byrd	Julia	01/29/2026

Latanich	Katie	01/29/2026
Spanik	Kevin	01/28/2026
Spanik	Kevin	01/29/2026
Klibansky	Lara	01/28/2026
Klibansky	Lara	01/29/2026
Busch	Laura	01/28/2026
Busch	Laura	01/29/2026
Cherubin	Laurent	01/28/2026
Cherubin	Laurent	01/29/2026
Kenworthy	Matt	01/28/2026
Kenworthy	Matt	01/29/2026
Shudtz	Matthew	01/28/2026
Shudtz	Matthew	01/29/2026
Johnson	Matthew	01/28/2026
Johnson	Matthew	01/29/2026
Seward	McLean	01/28/2026
Seward	McLean	01/29/2026
Whitten	Meredith	01/28/2026
Whitten	Meredith	01/29/2026
Brouwer	Myra	01/28/2026
Brouwer	Myra	01/29/2026

Mehta	Nikhil	01/28/2026
Mehta	Nikhil	01/29/2026
Claflin	Noah	01/28/2026
Claflin	Noah	01/29/2026
Medders	Paul	01/28/2026
Medders	Paul	01/29/2026
Keener	Paula	01/28/2026
Keener	Paula	01/29/2026
Laney	Reid Wilson	01/28/2026
Laney	Reid Wilson	01/29/2026
Mordecai	Rua	01/28/2026
Mordecai	Rua	01/29/2026
Kathey	Scott	01/28/2026
Kathey	Scott	01/29/2026
Kaalstad	Simen	01/28/2026
Kaalstad	Simen	01/29/2026
Crowe	Stacie	01/28/2026
Crowe	Stacie	01/29/2026
Cecil	Stacy	01/28/2026
Cecil	Stacy	01/29/2026
Morrison	Stephen	01/28/2026

Morrison	Stephen	01/29/2026
miller	steven	01/28/2026
miller	steven	01/29/2026
Jones	Thomas	01/28/2026
Jones	Thomas	01/29/2026
Roller	Tom	01/29/2026
Murphey	Trish	01/28/2026
Murphey	Trish	01/29/2026