

**SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL**

**CITIZEN SCIENCE COMMITTEE**

**Hilton Garden Inn Outer Banks/Kitty Hawk**

**Kitty Hawk, North Carolina**

**December 9, 2025**

**Transcript**

**Citizen Science Committee**

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**Attendees and Invited Participants**

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Dr. Clay Porch  
Sonny Gwin  
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Kristen Foss  
Kathy Knowlton  
Geoff White  
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**Observers and Participants**

Other observers and participants attached.

The Citizen Science Committee of the South Atlantic Fishery Management Council convened at the Hilton Garden Inn Outer Banks/Kitty Hawk in Kitty Hawk, North Carolina, on Tuesday, December 9, 2025, and was called to order by Chairman Amy Dukes.

MS. DUKES: Good morning. I would like to call to order the Citizen Science Committee meeting. Thank you all for being here. This is my first one, and so go easy on me. To remind everybody, every sitting council member serves as a committee member for Citizen Science, and, this morning, Jessica is having to take a few work phone calls, and so we have Ms. Kristin sitting in her place.

The agenda has been presented to you. Are there any changes to the agenda? Seeing none, I will say that the agenda has been approved. You were all provided the minutes from the December 2024 Citizen Science Committee meeting. Are there any major edits or changes to that document? Seeing none, we'll approve those minutes.

I did want to draw one attention. If you haven't had that opportunity to look at those minutes, there are links in there to both the Citizen Science Project and Operations Meeting discussions. Most of those comments have been incorporated into the material that Julia and Meg are going to review today.

Also, I handed out a little refresher information, a guide. It's actually information that's going to be presented by Julia and Meg, but I wanted these to be reference documents, and it's going to be primarily in the Number 2 for the indicators, but we'll re-associate and get this to you in a minute, and so, with that, I'll turn it over to Ms. Julia.

MS. BYRD: All right. Thanks, Amy, and so the first thing on the agenda for the Citizen Science Committee is to update the citizen science research priorities, and so, before getting into the actual updated draft research priorities that we'll want to get some kind of feedback and discussion from you guys, I wanted to provide a little bit of background information.

I know some of you have updated the citizen science research priorities before, and some of you haven't, and so I wanted to provide a little bit of information on kind of how we use these priorities and the process we use to update them, and so, back when the citizen science program was started, we developed a citizen science, specific citizen science, list of research priorities, and the thought is that those would guide the types of projects our program supports and develops.

What that helps us do is the South Atlantic has a lot of different data needs, many different data needs, so these research priorities help us kind of narrow the focus down to data needs that are kind of tangible ideas that we think would work well with the citizen science approach that are important to kind of South Atlantic fishermen, scientists, and managers, and so you can kind of think of it as a wish list.

If we had all the resources in the world, these are the types of projects we would want to develop and support, and then another way that we use these priorities is, if we're approached by kind of an individual, or a group, that may be interested in kind of partnering with us on something or collaborating, one of the things we initially will share with them is this list of research priorities that kind of highlights some of the key data needs, as well as some of the projects we would be

interested in developing, and so we can see if there are overlapping interests and what may make sense for us to partner on.

We update the citizen science research priorities every two years, and so they were first developed back in 2018. You guys adopted those initial priorities that were developed by our citizen science action teams back in 2018, and then we've updated them every two years. We update them the same year that you guys update the council's overall research and monitoring plan, and so we've updated them in 2019, 2021, 2023, and here we are again kind of updating them in 2025.

The process that we use to update them is kind of you guys will update the council's overall research and monitoring plan. That's informed by the advisory panels, the SSC, kind of SEDAR kind of research recommendations coming out of stock assessments, the SEP kind of, and then you guys provide input on that, too. You guys reviewed the research and monitoring plan and approved it back in September.

In addition to kind of the information in that research and monitoring plan, we also have a citizen science project idea portal, and so that is basically an online forum that members of the public can share their citizen science project ideas with us. That launched last summer, and we've gotten kind of limited submissions so far, but that's kind of a way where we can get ideas for projects from members of the public.

We take both of those kind of pieces of information, and then we meet with the two citizen science advisory panels, the Operations AP and the Projects AP, and they provide -- They review the research recommendations and then provide recommendations for your consideration on how we want to update those for the next two-year period, and so here we are in December.

You guys are going to be reviewing the recommendations from the advisory panels, providing additional feedback, and then, ideally, we're hoping that you all adopt those updated research priorities. I'm going to pause here for a second, to see if anyone has any questions on kind of the process to update these, or if you have questions on kind of how the citizen science program uses these priorities.

All right. I'm going to go ahead and move on, and so kind of the meat of this discussion is going to happen when I pull up kind of Attachment 1b, and those are the draft updated research priorities. That draft incorporates all the feedback we got from the advisory panels. When you're looking at that document, if you see italicized text, that kind of summarizes the advisory panel's feedback, and then, if you see yellow or strikethrough text, that highlights the potential addition and deletions that our APs are recommending.

This slide is just kind of an overview slide to show you the different research priorities that were discussed, and kind of the AP's recommendation, and so we'll be walking through each of these priorities separately, but I wanted to give you kind of an overview. They talked about thirteen different research priorities. They're recommending keeping twelve of those, and removing one, and they have recommended updates to the language in five of those research priorities.

When we pull up the document, if you see kind of an asterisk by a priority, that means the advisory panels highlighted that as a high-priority item, and, if you see kind of a little carrot, or a hat, icon, that just kind of identifies research topics where, if a project was developed, it would likely require

a high level of collaboration between multiple partners. That's something that we added into the document, based on feedback kind of the Citizen Science Committee has given in the past.

When we are kind of walking through the research priorities, some kind of questions for consideration, or things to think about when you're providing feedback, are, you know, are there any priorities on this list that you feel like should be removed? Do we need to add any new priorities to this list? Some of the priorities have target species, and so, if you have additions or deletions to the target species, that would be helpful to know.

We want to make sure that, if you guys think that there are kind of additional kind of council research and monitoring needs where a citizen science approach may work that aren't included on this list, we want to get them on the list, and then, if you guys have thoughts on which of the priorities may be kind of the most -- Help address the most immediate science and management needs, if they're kind of high-priority items for you, that would be helpful to know too, and so that's a little bit of background information.

Then, if everyone is good, I'm going to go ahead and pull up the research priorities document, and so, again, we'll kind of walk through each of the priorities, and, if you guys have feedback, we can kind of take that as we're going through the priority.

There are thirteen priorities, and so what I'm going to try to do is quickly walk through the priority, and the feedback we got from the APs, and then really more try to highlight kind of recommended changes that the APs are suggesting for each of those priorities, and, just so you know, how the document is set up is the priority will be in bold, and then you'll see, under each priority, kind of target volunteers, data that are needed, target species, anticipated outcomes, and so that's anticipated data use, and potential cost, and then, underneath, you'll see the italicized text, which highlights the advisory panel's feedback.

I'll kind of -- Unless anyone has any questions, I'm going to go ahead and dive in, and so the first research priority is age sampling, and so the APs are recommending keeping this as a priority. They noted that age sampling, particularly from the recreational sector, remains a critical data gap. One change that they did make that they are -- That the APs are recommending is when they -- We especially got this from many of the fishermen who were on one of our Projects Advisory Panel, is that they felt that otolith collection by fishermen would likely be challenging, and it could be a barrier to participate, and so they're suggesting that, if a project was developed under this priority, that it would be through kind of carcass collection or collaboration with scientists for that otolith removal.

Then they were also really excited that -- You know, I know this methodology is still developing, but when fin clips are kind of -- When that methodology kind of has advanced further, and we're able to get ages from fin clips, fin clips are something that fishermen could more easily collect that could help with ageing in the future. You can see the list of target species here.

A couple other things they noted is that sampling design and pilot testing for a project under this priority would be critical, and that projects developed under this priority would need to kind of be careful to identify partners that have existing projects or programs that you could collaborate with.

Another thing I'll kind of note is that, when talking about these research priorities, at least for me, from my perspective, one of the hardest things is, for me, wanting to go into the details and about, if a project was developed that was going to collect ages, talking about how that could work, and digging into the details, and this conversation is meant to be a little bit more big picture than that.

If and when we were to develop -- The program were to develop a project under any of these research priorities, we would bring a team together of folks with varying expertise, fishermen, scientists, and managers together to help develop that project, and so, as much as you can, and sometimes it's hard for me to do that in these discussions, but trying to keep kind of big-picture feedback is kind of what we're looking for here.

That's the age sampling priority, and so I think it would be helpful to see if you guys have any feedback on that, if you kind of support their recommendation to keep it as a research priority and their modifications to the language under the data needed.

MS. DUKES: Thanks, Julia. Trish.

MS. MURPHEY: Thanks, Julia, for all that. It's really more question for folks to just ponder. I noticed that we've got some species that we're also discussing on the FMU, of taking off or whatever, or EC or whatever, and I was wondering if those should be removed. I've got -- Was it knobbed porgy, and I think the whole porgy complex is on that list, and so here's my thought. Even if it's decided that they stay, it's obviously not been a priority, and so should those be left, and, even if we go to EC, or totally remove them, then I would think they would definitely be less of a priority, but, anyway, you know, just thinking out loud, I wonder if those should be removed at this point, but I'll see what other folks think.

MS. DUKES: Thanks, Trish. Anybody else on the committee? Tom, please.

MR. ROLLER: Trish, I appreciate your comment there. I mean, I've participated in a lot of these studies, and they've been really, really effective for multi-layers of information gathering, and not just, you know, for the South Atlantic, but multiple state, and multiple private research and university studies, and so, when I look at this, I kind of view it more as an all-encompassing sort of thing, and, if we have this sort of infrastructure out there, does it really matter the species at this time period, right, and so it's like, if it's there, I mean, we're going to be able to utilize it for other things too. but I do appreciate that.

You know, obviously, the porgy complex is very small catches in the region. The only rationale I would ask for is if there was a reason why it was added, if somebody felt the need for it. It's not like we're catching a lot of them, but, big picture, I mean, I look at the target species, and that's -- It's not as important to me now, because I view it as just this is an opening for a lot of other potential, you know, research for gathering otoliths, is just how I participated in it.

MS. DUKES: Thanks, Tom. Andy.

MR. STRELCHECK: I agree with Trish's suggestion. I guess I would add to the list, probably removing wahoo and spiny lobster, and the reason I'm suggesting those is that I don't foresee those being age-based assessments anytime soon, and, given prioritization, I would expect that the

center, if they're going to do assessments of those, could look at alternatives to age-based assessments for those species.

MS. DUKES: Thanks, Andy. A good point, especially related to the use of those ages in an assessment, and not to mention the otoliths for a wahoo are teeny-tiny and hard to get to. Anyone else? Trish, I do appreciate your points. I think as Amendment 61, with respect to those EC and FMU species removals -- That's something we can definitely watch and provide input back to the APs regarding that target list. Thanks. Clay.

DR. PORCH: Thank you. I wonder if you could elaborate a little bit on what the thinking is with the age sampling, and, you know, part of the challenge, of course, is, as we've experienced in our assessments, there's a shortage of folks that are able to actually read otoliths, and everything else, and so that would be one point, making sure that we have the resources to do that, and so, until we do, and I'm sure the states can contribute to that, then there's going to need to be storage and all of that.

There is also some concern, which is mentioned down here in the recommendations, about the sampling design. Obviously, just if you get some people to opportunistically report what they want to report, it can be pretty biasing, and we wouldn't -- You would basically have a lot of data going in that couldn't be used, and so I just wonder if you could give us your thoughts on how that would go.

MS. BYRD: Thanks, Clay. I think those are both really good points, and things that were discussed by the AP is like, this past go-round, and before, when we talked about the age sampling research priority, and so this is one of the priorities that has that little hat beside it, for kind of one of the reasons that you mentioned, is that a lot of people would have to be involved in a project like this, and so that would include a collection of otoliths, the processing of otoliths, the reading of otoliths, and so there are only so many people in our region who have programs that can read otoliths.

If a project were to be developed under this priority, we would be working with the folks who kind of age fish, to figure out do you have the capacity to do this? If you do, great. If you don't, then we need to look at other alternatives, and so, I mean, I think that is something that would have to be considered when a project is actually being developed, and we would be in communication, with whether it be state folks or federal folks, to figure out if that can be done.

Then the other point you make on sampling design is something that was really kind of hammered home a lot on our Operations AP, which includes members from the -- A member from the SSC and that sort of thing, and so I think, again, that's something that we would have to design very carefully. If we were to kind of get funding to develop a project with age sampling, we would want to have a stock assessment scientist. We call them -- On our workgroup, we call them design teams, to help us figure out how we may be able to design this in a way that those age data would be used, and so, you know, I think, if you were to start a project, kind of under this priority, you would want to start it small, pilot it, see what you can get, how you can get it to work, that sort of thing, but those are all great points.

I think, if we were to pursue a project under this priority, things that we would have to really get down in the weeds, talking to people, talking to fishermen, who would be potentially collecting

kind of the fish, the samples, and the stock assessment scientists, and you may want to use those, and so I don't know if that addresses kind of your questions.

MS. DUKES: Charlie.

MR. PHILLIPS: Thank you, Madam Chair, and I guess, Clay, it gets me thinking, you know, as we try to get assessments that are quicker, leaner, meaner, and maybe not age-based, how critical is collecting otoliths, or do we want to keep collecting them, so that, if and when we've got time to do the work, and the people -- Or just how critical is the otolith collection in future assessments, and considering that we're going to be trying to change and streamline things, so they're quicker.

MS. DUKES: Thanks, Charlie. That's good feedback to go back to the APs, but do remember that this is just an idea portal. We want to make sure that we're thinking dynamically. When the idea of a project and funding is presented, that we then kind of figure out those details, and work with the Science Center, the states, and what have you to figure out next steps. It's like an if-then process. Tom.

MR. ROLLER: Going back to the list, I see cobia on there. Do we need to say Gulf cobia, since we don't manage those? Also lane snapper, and I'm not sure what our landings are on those, but I know they're kind of wrapped up in the snapper complex, and so, if we're removing species, I guess I would at least want some rationale as to why they're there.

MS. DUKES: Thanks, Tom. We can get some input back from the APs on that, but this, again, is just a target list, and so it's subject to change, and so things could come off, and things can be added. It depends on the project.

MS. BYRD: I'll say this list is kind of a comprehensive list that's been added to over time, and so, when something is on this list, that likely means it showed up in the council's research and monitoring plan or in, you know, stock assessment recommendations, things like that, and so some of these may be kind of more legacy, and so lane snapper may not need to be in the list anymore, and cobia is on the list. They were on the list before kind of the management switch to ASMFC happened, but we still kind of left it on there, kind of more broadly, but we can definitely focus that in on Gulf cobia, if that makes more sense to the council.

MS. DUKES: Just personally, I kind of like keeping cobia there. Yes, I realize there's some disconnect in the management, but we have quite a bit of connection here, and so I think it would be a good process. Okay. If we don't have any other questions, I think we'll keep moving. Sorry. Chip.

DR. COLLIER: Sorry, and, you know, there's been a lot of discussion about using these pieces of information for stock assessments, but it can be used in other pieces of information, whether it's age and growth, just looking at trends in how things are changing, ages, and, right now, we often provide it to you as length distributions, and we could provide it as age distributions, if those are available to us, and so collecting the data I don't see as a bad thing.

There's publications that can come out of it for academics, and the one I was looking at was wahoo, in particular. The most recent paper I was remembering was one that Hogarth had done back in

the late 1970s for his PhD on wahoo, but there is a more recent one, in 2008, that was done by McBride, and so that information is available for Florida.

It's not necessarily available for the rest of the Atlantic Coast. There's a lot of questions on growth of wahoo, and connectivity among the stocks, and so thinking beyond stock assessments I think could be helpful for some of these species.

Then, you know, it's still important to bank these things, because you can't go back in time. We don't know the age structure of red snapper from back in the 1950s. If we had some of that information, I think we would feel a lot more comfortable with some of the things that are going on today, and so banking these things are important, and you can't go back and collect the otoliths if you don't have them now.

MS. DUKES: Thanks, Chip. In the essence of time, I think we'll keep moving, since this was one of thirteen priorities, and so, Ms. Julia.

MS. BYRD: One question, and so, right now I have an X through wahoo. Do we want to keep that, as kind of -- Do we want to keep it off the list or on the list, and then, as far as anticipated outcome, based on some of what Chip mentioned to you, I added age and growth to that, but I want to make sure the committee is okay with that, and so does anyone want to add wahoo back to the list? It is X'd right now.

MS. DUKES: Tom says add it back, Ms. Julia, and so we're going to add it back.

MS. BYRD: All right. The next one is discard information, and so better information on released fish remains a really high priority for a lot of different council species, and these data can be challenging or expensive to collect, and so the APs are recommending kind of keeping this as a research priority.

They noted that citizen science data on released fish has proven useful in scientific and kind of management contexts, and, just thinking about kind of our SAFMC Release project and the MyFishCount project, a couple of changes that they are recommending adding is they wanted to add kind of tournaments to the list of target volunteers, with the thought that that may be a good place -- A good avenue to kind of explore for promotion and volunteer recruitment.

They added a couple of additional data fields needed. One is species, which is obvious, and we probably should have had that on there before, and then observation of depredation events. For target species, they added -- They're recommending adding Spanish mackerel to that list, and that's due to SEDAR 78, which was the most recent Spanish mackerel assessment, and it highlighted the need for recreational discard data.

Then they're also kind of recommending adding, under the anticipated outcomes, that these data could help characterize effort for the snapper grouper fishery. In particular, they're thinking about looking at kind of depths of kind of fishing activity within the kind of recreational sector, and so I think I'll leave it at that, and one other thing to note is that this was one of the items that the APs flagged as a high priority, and so looking for feedback from the group on this.

MS. DUKES: Jimmy.

MR. HULL: Obviously a high priority, the way things are headed with the private recreational management, and it probably shouldn't even be voluntary. It should be mandatory.

MS. DUKES: Thank you for that, Jimmy. Others? Tom.

MR. ROLLER: Obviously a high priority. This is something we hear about from our stakeholders in all groups as being a major data gap that we need to get better, that we need to better identify, and, you know, short of having everybody report their discards, we need to find better ways to gather information.

MS. DUKES: Clay.

DR. PORCH: Yes, and this one I agree could be extremely useful, especially the same parameters as the other, with the appropriate design, and that's something that would actually line up with our cooperative research work, the idea of having study fleets, et cetera, and so I would love to see the center partner with the council on this one.

MS. BYRD: We can talk about that a little later, Clay. That's great to hear.

MS. DUKES: I'll ditto that. Thanks, Clay, and I will appreciate the idea of the APs thinking about the tournament world, because that is a fixed time and space, where data could be easily collected, and I thought that was a really great added bonus to this particular high priority. Anything further, before we move on? Awesome. Thanks. Julia.

MS. BYRD: All right. The next one is genetic sampling, and the groups, the APs, some of the feedback provided in particular from our Projects AP, flagged this as a high priority. I think some of that is due to the fact that thin clips in the future will be able to help us get age data, and so, again, the group supported keeping this as a research priority and noted that, kind of in the future, this maybe, you know, could be combined sort of with kind of the ageing priority, when methods to get ages from thin clips are further developed.

Originally -- So, for the anticipated outcomes, with APs, we talked about stock identification, but then also kind of species identification, and so the target species weren't broken down between those two kind of outcomes, and so we did that here, and so there are kind of certain species that would be target if you're doing a stock ID sort of project, certain ones that you could target if you're doing a species identification project.

One thing I did want to note is they are recommending adding king mackerel to kind of the target species for stock ID, and that idea came from port meetings, discussions at kind of mackerel port meetings, and needing to kind of explore whether the mixing zone has shifted at all, based on changes in the environment. Again, they noted that fin clips are something that fishermen have been able to collect fairly easily for a variety of different projects, and so they thought it was a good fit for citizen science, and I guess I'll leave it at that, but I'm happy to kind of answer any additional questions, but looking for feedback from the group.

MS. DUKES: Tom.

MR. ROLLER: So, on this one, and going back to the last one as well, I do think target volunteers should include the for-hire industry specifically, because you do have a more captive audience you can work with. Now, specifically speaking, I've participated in a couple of genetic sampling that were done through university researchers, and I guess my point was that I found this to be really - They found it to be very effective, and it was a very cheap and interesting thing to do when you have a community of people who can be involved in stuff, and we did a couple of population genetic studies that were inexpensive, and a really good way to gather information.

I think, also, you know, going back to Chip's comment, is this is a great way to bank information for the future, and so what I was trying to get at in the first discussion was I think delving too deeply into the target species stocks just really isn't kind of helpful here, because who knows what could come out of it in the future, and what our needs will be, you know, five, ten, twenty years in the future.

MS. DUKES: Thanks, Tom. Great feedback. Jimmy.

MR. HULL: I agree with Tom, and, you know, sampling fin clips is relatively easy, and the animal gets released, and lives for another day, and so it's something that can easily be done by anglers, and so I think we should pursue it.

MS. DUKES: Thank you, Jimmy. Clay.

DR. PORCH: I'm actually a little more excited about this one than the otolith collection, because the rage right now is epigenetic ageing, and now we can get fin clips from, as someone said, fish we throw back, and so for discards, and we get the age composition of discards, and, of course, you can use it for other things, like stock ID.

It all depends though -- The same comment I had with otolith. Yes, it has to be a very well-organized process, but it could go hand-in-hand with the discard estimation part in the previous section. The biggest issue there is still things like, okay, we need -- Well, first of all, you have to develop the markers for the epigenetics, but then it's the storage and all that, and so those things would have to be worked out, but I see a lot of potential here, particularly hand-in-hand with the discard section.

MS. DUKES: Thanks, Clay. It's always really fun to hear when you get excited about citizen science projects, and so we'll have to continue to pursue those conversations, and put some money there maybe, and just saying, but I do also like this idea of the targeted for-hire sector, because that could be kind of getting at what you said, Clay, with an audience who is captive, and who really does want to provide that valuable data, and who will take that time to make sure that those samples stay viable, and so thanks. Okay. Let's keep moving. Thank you, guys.

MS. BYRD: All right. The next one is fishing infrastructure, and this is one where the advisory panels are recommending removing it as a research priority for now, and it's not because AP members didn't feel like this was a really critical issue to try to collect information on fishing infrastructure, and kind of how that is changing, and going away over time, but they felt that it may be best addressed initially via a dedicated kind of social science project, and then, after kind of that work is complete, a citizen science approach could potentially be used to help supplement

that information, or if there are certain gaps in that information, or helping update that information over time, and so it's not that the APs didn't think that this was a really important issue.

They just felt that citizen science may not be the best approach right now for gathering this information in a consistent way throughout the region, and so looking for feedback, if you kind of guys agree with removing this as a research priority for now.

MS. DUKES: Does anybody have any opposition for this particular priority being removed? I think the justification of the APs makes a lot of sense. Tom, go ahead.

MR. ROLLER: The rationale provided by the AP is good. When I first looked at the list, I was disappointed to see that, because fishing infrastructure is, obviously, one of the most critical and important issues for the commercial and for-hire industry in general, and it's also increasing on the recreational industry, and so, given the rationale that it could be a dedicated project, I'm more comfortable with this being pulled off, but, as always, I'm just going to state how important fishing infrastructure is for the future.

MS. DUKES: Thanks, Tom. I don't think there's a person at this table that does not agree with you, and so I appreciate that. Any further comments before we move on? Okay. Thanks. Julia.

MS. BYRD: All right. The next priority is historical fishing photos, and so the APs supported keeping this as a research priority. They noted the FISHstory project has gotten a lot of interest from fishermen and scientists and members of the public, and kind of FISHstory falls under this research priority. They also noted that the FISHstory data have proved useful in a scientific context, as far as FISHstory and the SEDAR 90 assessment. They also noted that this is kind of a low barrier for participation, and there's high engagement kind of potential, and so are recommending keeping this one, and so looking for feedback from the group.

MS. DUKES: Jimmy, please.

MR. HULL: I fully support this, and it's a huge success story so far, and it looks like there's going to be ways to utilize these photos for historical data on these stocks, and so continue on. Good job.

MS. DUKES: Great, Jimmy. Thanks. That's a little preview for the next presentation. Any other comments? All right. Love that project. Let's keep going.

MS. BYRD: All right. The next one is kind of -- So the topic is kind of fishing oral histories, combined with kind of historic personal fishing logbooks, or diaries, and so just kind of a broad category, but the idea here, under this topic, is to try to kind of learn about the history and the current state of the fishermen, of the fishery, from folks who have been participating in the fishery for a long time.

The APs felt -- They supported keeping this as a research priority. They noted that this can be a really powerful research tool, and it can collect and provide kind of irreplaceable information that's going to go away as kind of older fishermen transition out of the fishery. Again, they noted, you know, specifically about oral histories, that they kind of require specific training and methodology,

and so you would have to make sure there's a lot of kind of design and training done if you were to do an oral history type project.

They also kind of noted there could be some issues with recall bias, if you're remembering what was happening in a fishery kind of forty years ago, but noted that this may be less of an issue when you're, you know, documenting things like how technology has changed over time, kind of broad, bigger picture information that could help inform things like selectivity over time.

One of our AP members also noted that recent kind of SFA kind of feedback supported sharing anecdotal information with NOAA Fisheries, and they noted that kind of a project developed under this priority may help do that in a more consistent or systematic way, and so I will say that the kind of recommendation is to keep this as a research priority, but the APs did note this was a lower priority for them than others, and so looking for feedback from the group.

MS. DUKES: Carolyn.

DR. BELCHER: Thank you. Would it be worth it to consider breaking that into two pieces, because I kind of see the fishery oral histories as similar to what we talked about with infrastructure. There's -- Because of what it takes to break those stories down, it's kind of like the sociology projects that get done.

Jennifer Sweeney-Tookes with Georgia Southern has done a lot of that work in Georgia, talking about the history of shrimping, and then I think about it because back when -- In the early parts of doing red snapper work, Steve Amick's logbooks were actually used as a data source to be considered during an assessment, and so the logbooks themselves are a different data source than just anecdotal or oral history of what catches were like, and so I would almost like to see that they kind of be separated, because I could see where one might elevate a priority.

If you've got someone like say Judy that has a very comprehensive history of all of her catches, and it's something that's relatively easy to import over, you would have a time series that would have a different bank than an oral history would.

MS. BYRD: So, Carolyn, just to kind of respond to that a little bit, so, the last cycle, they were separate priorities, and kind of they were put together, and the reasoning for that, you know, I think is that you're trying to collect kind of historical information kind of in both projects, but they were separate before, and so I think separating them -- We can make kind of -- If you guys feel like that's kind of the best way to handle these priorities, I'm happy to do that. That's how they were kind of in the past.

One question for you, Carolyn, is so, if we split them into separate priorities, oral histories and kind of historic fishing logbooks, would you recommend keeping both of those priorities, or do you feel like the oral histories would be more similar to infrastructure, where that's more of a social science -- Better handled with a social science methodology than a citizen science approach?

DR. BELCHER: So I'm not as well versed in the storage. I know that Jennifer has done a lot of video logging, and I know that there's another database that that goes to, and so it's a different utility, and so I really don't -- I wouldn't say that it needs to be struck off the list.

I guess the question is like, if you think it's a more pointed thing, then maybe, but I do know that, like I said, there is -- I'm looking down the table, because I'm pretty sure there's a NOAA site that talks about fish histories.

I thought that that was like a video upload that was done, and so there is, obviously, something that's out there that allows for these things to be out and available, where infrastructure is going to be kind of one of those things, like what we're working in with Georgia now. It's a three-year study to pull all of this together, and have a discussion, but there's a final product, and it's one product in the end. It's not necessarily a dynamic thing. It will be updated, but it's not something that will be done on an annual basis, a monthly basis, or whatever.

MS. DUKES: Andy.

MR. STRELCHECK: Based on Carolyn's initial suggestion, I was onboard with splitting them. I think now I'm onboard with keeping them together. I think, with both of these, the emphasis I would place on it is how we're going to use the data and information, right, and not just collect the information, but how can it be used.

It doesn't necessarily have to go into a stock assessment, but how does it inform our body of knowledge about a fishery, and I'm thinking about, you know, if we had these fifty years ago, you know, the information that could tell us with regard to how the changes in the fishery have happened over time, and then, fifty years forward from now, people looking back, and what we're talking about around this table, how that can help inform, obviously, management in the future. To me, the logbooks certainly are intriguing, and something that I would be really interested in pursuing.

My broader question about all of these, that maybe you can touch upon, is we're revisiting twelve of the thirteen prior priorities. When we talk about each one of these, can you talk about how much those were used previously, or how much work went into each one of those previously, because I think that will also help inform us as to whether or not we want to continue it as a priority or we want to put more emphasis in making it a higher priority than what it has been.

MS. BYRD: I want to make sure -- I'm going to ask to make sure I understand the question, Andy, and so we don't have projects developed under all of these priorities, and so, you know -- Is your question how much time have we been -- Have we taken to try to develop a project under each of these priorities or -- You know, I think, the way that we've been operating it, you know, we have kind of three projects --

We'll be talking about this in the next presentation, but we have three projects that are underway right now under three of these different priorities, and we have collaborated with other folks to try to get money to fund projects under other of these priorities, and so I think it's -- I'm not trying to avoid the question, but I'm not sure exactly how to answer it.

MR. STRELCHECK: Well, and that's kind of my point, right? We have a list of twelve priorities, but we can only get to three of them, right, and do we need a list of twelve priorities? Should we look at six priorities, right, and should we narrow this list in scope and scale?

I just went through this with my MARFIN funding priorities, right, and we scaled back some of the aspects of those priorities, just because we want to make sure we hone-in on what are the top priorities that we need for data collection, science, and other information. That's, I guess, my thought process as I walk through this. Yes, it's good to have this longer list, but then, if we're going to keep that longer list, we really need to give you solid direction as to what those top priorities are on the list.

MS. BYRD: Super helpful. Thank you, Andy, and so, yes, I'll say, you know, there are -- Kind of thirteen priorities were discussed, and so I think it's helpful to know which ones you guys think are the highest priority, whether that's just kind of putting an asterisk by them, and knowing that, or taking them off the list. That's kind of up to the discretion of the committee.

I will say our experience, in trying to develop projects, is that you're a little bit opportunistic, you know, and so you don't know what funding sources are going to be available, and so, if you limit the list to something so small, then a funding opportunity may come up that you want to pursue, and it's not on the list, which isn't the end of the world, but you know -- So I think, you know, it's definitely helpful to know what you guys think are the highest priorities, but, also, I think there is some benefit to having kind of a broader list, because we don't know what kind of funding opportunities might come up that we may want to go for that could help address one of these.

MS. DUKES: Carolyn, and then Clay.

DR. BELCHER: Yes, and I was going to basically echo what Julia was saying, because I think the difference being is that this is not an S-K or MARFIN type thing, where we're trying -- You know, we have a pot of money, and we're trying to figure out the best way to distribute the monies to projects that are serving us in the best thing.

Right now, we're basically saying we have these interests, and there happens to be thirteen of them, and, as long as we can find an alignment to help get funding to that, we're going to do it, because, otherwise, what happens is it's like, if you look too specific, then people are going to look and say, okay, all they want is age, or genetics, or whatever, and so I'm not even going to ask, but I might have a really good idea for a CitSci project, and so, at least if we have them there, it's more of what are these -- What are some things that we consider are strong CitSci areas to focus in, but understanding how Andy had to narrow down for funding reasons.

MS. DUKES: Clay, and then Jimmy.

DR. PORCH: Yes, and this is one I can't resist saying, and there was actually a time where we did use an oral history study in an assessment, and that was for Goliath grouper, back in the 1990s, because we needed something to reach back in time, and we interviewed a lot of the old-timers then, and, unfortunately, many of them are not here now, which brings me to maybe there's some sense of urgency.

If we're going to do it, and prioritize it, we need to do it quickly, because a lot of the action really happened 1940s and 1950s. If you look in, for instance, the west coast of Florida, by the 1950s, all the old-timers then said, hey, all the snapper grounds are shot, and so red snapper was depleted way back in the 1950s, but we wouldn't know that if we started with anybody fishing today, and so I think we really -- There is some sense of urgency, if we're going to do this because, again,

most of the people today that talk about they've been fishing a long time, it's been thirty or forty years, but that's after there's already been a long history of fishing, and using modern technology, and so trying to reach back to those few who are still around to tell us what it was like earlier I think is going to be really helpful.

MR. HULL: Just to reinforce what Clay just said, so, for me, the fishing oral histories have helped me understand, you know, some of the changes that I see today in the species that I target, and so black sea bass, for instance, off northeast Florida.

You know, they've disappeared, and so there's a fellow by the name of Bob Stone, who is 100 years old, and, his entire life, he fished for black sea bass as a headboat captain and a commercial fisherman, and he stated that, back in his early, young years, the bass would disappear for years, just like they did now, and then they come back, and so it just helps you understand this isn't something new. This has happened before, and so it's useful, and it's helpful to understand that, you know, some of the things we're seeing isn't new, and it probably happened -- It's anecdotal information, but it probably happened before. Thanks.

MS. BYRD: Okay, and so I've heard from a few people that it sounds like maybe make this one a priority, and so put an asterisk by it, and then I still -- We've heard from some council members that say keep them both, but split them, and then some feedback that says keep them together, because of the kind of anticipated outcome, that documenting of historical information, is the same, and so I guess looking for kind of feedback, and do we split them, or do we keep them together?

MS. DUKES: Thanks for the reminder, Julia. I'm going to go to Trish.

MS. MURPHEY: Just listening to the discussion around the table, I wonder if we don't need to like -- Maybe dropping them would not be something, but maybe we should have a -- Could we categorize these as high, medium, and low priority? I guess, at this point, I would keep -- Just to answer the second question, I would just keep them together. No real logic to it, except that it's just, you know, historical, be it written or oral, and it's historical information, and so I just say keep it together, but, anyway, I just wanted to throw out, since we're discussing priorities and what's -- You know, what's a big priority, and what isn't, maybe just categorize those.

MS. DUKES: Tom.

MR. ROLLER: Yes, and I'm with Trish there, sort of, and I don't see enough rationale at the moment to split them up, and so I think we're okay keeping them together, but I do want to reiterate, quickly, this has been a really interesting discussion, the importance of this. You know, we live in an interesting world now, where it seems like, a lot of fishing activity, we have an oral history of it on social media, but we don't have that for even just a couple decades ago, and we don't want to lose some of that, looking forward. Shifting baselines are a real thing.

MS. DUKES: Thanks, Tom, and so, to summarize this, it sounds like the conversation has come full circle, and that we're going to keep these two together. However, we're going to add an asterisk indicating that it is a priority. I think that both of these decisions can also go back to the APs for further discussion, knowing that we do look at these priorities every two years, and perhaps ask the APs to provide more context as to why to keep these together, as well as provide some input

into creating a priority matrix, a high, low, medium type thing. They already have the low and the high, but not necessarily the medium. Julia.

MS. BYRD: I mean, again, I think it's great discussion, really helpful feedback. The last -- I think it was the last go-round that we updated this, it was kind of that discussion of kind of high, medium, low priority, and does it make sense to take the time to put together like criteria, or a rubric, or have people kind of rank these in order. That's something we can look into, and work with the APs on.

One thing I will say is, you know, again, I think it's helpful to know which ones you guys think are the priorities, so that that's what we can pursue. Even if we put them in order, again, opportunistic things may come up, where we can get money for something else, and so I think it's helpful to know the priorities. If you all are interested in us developing a more formal way to kind of say whether something is a high, medium, or low priority, we're happy to do that, but, you know, we don't have that kind of structure in place right now.

MS. DUKES: Thanks, Julia. Okay, guys. We're only halfway through, and we've kind of allotted my time for this, and so this is a wonderful discussion, and I want to keep it going, and so I'm going to let Julia go.

MS. BYRD: All right. The next one is kind of oceanographic environmental weather conditions. The group, the APs, supported keeping this as a research priority. They noted that this information is becoming kind of increasingly important, as we're seeing more and more kind of environmental changes, and a project like this could help collect some of this type of data on a finer scale than things like buoys, or things like that, and noted that the technology to collect data loggers and things like that, that collect this information, is getting less expensive.

They've noted that, you know, there are successful projects in other regions. There's one in the Northeast, that's called eMOLT, that had collected and used these type of data to help inform kind of assessments, and I think specifically the lobster assessment, and so I'll leave it at that, to try to kind of get through these a little bit quicker, but interested in your feedback on this one.

MS. DUKES: Okay, Julia, and I see a lot of heads shaking that, yes, maybe we should just leave this one right where it is and keep moving forward.

MS. BYRD: All right. The next one is shifting species and rare-event or data-limited species, and so these were originally two separate ones, that were kind of put together the last time we updated these, and, you know, the group felt that this was important to keep this as a research priority, and, again, these types of data are increasingly important as we're starting to see environmental changes that may be impacting kind of species ranges.

They noted that there are kind of several projects in other areas, again, that have been collecting this type of information, both within kind of the fisheries community and within other disciplines, like birding, and eBird, if any of you all are familiar with that platform.

They noted that it could be helpful to kind of include kind of this new siting information that could be collected through a project like this, and integrate that with some historical information collected through like, you know, a FISHstory type project, or something like that, to provide

context to better understand kind of shifting patterns, and so, again, I'll kind of leave it at that, and I'm happy to answer any additional questions, but looking for feedback from you guys on this one.

MS. DUKES: Andy.

MR. STRELCHECK: I believe it was the last council meeting, or maybe two council meetings ago, we talked about unmanaged species in the Mid-Atlantic, and I feel like that might be a group of species here that is kind of missing from the list, that are expanding, obviously, northward, to be considered here.

MS. DUKES: Nice addition. Thank you for that. Anybody else? Trish.

MS. MURPHEY: I don't know if it's worth it or not, but I wonder if looking at invasives -- Should that be added? I mean, I know we don't -- We don't manage invasives, but, you know, they do have impacts, and so I didn't know whether maybe adding -- Especially with climate change happening, and it's kind of impacting those invasives, and movement of those, and so I didn't know if that might be worth adding.

MS. DUKES: Julia is capturing that. I think it's good to add to the list. Others? Clay.

DR. PORCH: I'm curious to hear what your thoughts are in terms of the on-ramp for this information to influence specific council actions. I see some value in it, but, you know, getting to the priority discussion, it's maybe not so much the priority, but what fraction of the resources of this program I would put into this, and it probably wouldn't be as high as some of the other things.

MS. BYRD: Sorry, and I'm trying to type and talk, which is hard for me. Okay, and so, as far as kind of an on-board ramp into how this information would be kind of used, I think that would be a question, if you developed a project, to talk with the design team about how these data can be used.

I know there's a program called Redmap in Australia that, you know, these data have been used kind of as an early warning system of species are showing up in areas where we didn't think they should be, those sorts of things, and so that kind of follows what Andy mentioned, that adding some of kind of these unmanaged species in the Mid-Atlantic, and this could help be kind of an early warning sign that these species are shifting further and further north, so you could have that information that would go in tandem with some of the landings information, or other information, as available, to help kind of provide additional supplemental data, I guess.

As far as -- I mean, again, I don't know that I have a good answer right now for specifically how these data would be integrated into a management decision, but, again, I think that was something that would be discussed if we were to develop a project under this kind of umbrella, and we would talk about that with our design team.

MS. DUKES: Tom.

MR. ROLLER: So I want to point out that this council has had a lot of discussion about having a report like the Mid-Atlantic does for unmanaged species, particularly as we look at the FMU and consider climate impacts, and so I think this is an important issue. I just wonder if maybe this is

not the right place for it, because we have wanted that sort of report, and that data gathering, and is this the place to start that, or does the council want to pursue that from a different way, because I -- This is kind of big picture, but maybe what we want out of it is a little bit more a way to figure out -- You know, a way to have data in front of us to look for early warning signs, right? I'm not -- I don't really have an answer here, though I just want to point out that we've had a lot of discussion about this recently, and just not in Citizen Science.

MS. DUKES: No, and for sure, Tom, and I see this as complementary, and not to take over. I see that unmanaged species presentation documentation still coming down, and not necessarily tied just to here, though.

MR. ROLLER: That's not what I'm saying. I'm saying I think we need this, right, but -- I think we need the data, right, and I'm just not sure -- If we're talking about it not being a priority, and I just -- Maybe it's a priority somewhere else, and does that make sense?

MS. BYRD: So I'm going to repeat back, to make sure like I'm digesting this information --

MR. ROLLER: Because I'm not sure what I was saying in general, and so --

MS. BYRD: So you're saying that citizen science may not be the best, or is not the only, approach to gather information like this, and so that, kind of along with -- Was it Andy who said a lower priority? This is a lower-priority item.

MS. DUKES: Trish.

MS. MURPHEY: Just to add to that, you know, this could probably help with any kind of ecosystem management, as things change and move around, as well as maybe informing EFH, and so I think it's -- I would say it's important to keep, because things are changing, and here's our opportunity to at least get those observations, and then, you know, then the next step would be to maybe -- Do we need to quantify this information, and how is it impacting the species we are managing, or, you know, do we need to expand EFH out, or -- You know, I think it's important to keep.

MS. DUKES: Thanks Trish. Jimmy.

MR. HULL: Yes, and I think the fourth bullet point under the recommendation says it for me. These data could be collected as part of a more comprehensive effort to collect catch, and discard data from fishermen. I think that sums it up for me. It's very important. Is this the proper place in citizen science for it? Should it be, you know -- The fourth bullet point I think is pretty informative for me. Thanks.

MS. DUKES: Thanks, Jimmy. I couldn't agree more. Tom.

MR. ROLLER: Yes, and so I want to be clear that I wasn't saying it was a low priority. I think it's actually a pretty high priority. I think the figure of how it fits into the overall council process, because we are stating that this is information that we want on multiple different levels. The question is how does -- Is this the form to gather all that information, and compile it, or is this to supplement what we're kind of looking for already, because we've had a lot of these discussions

outside of citizen science, is what I'm bringing up, but I agree with Jimmy, and I agree with Trish. It's very important, and it inform us on a lot of different -- On a lot of different levels.

MS. DUKES: Thanks, Tom. I appreciate that clarification of high priority, and perhaps finding a different vehicle to get this information much quicker. Anyone else? I've got Charlie, and then Clay.

MR. PHILLIPS: Yes, and I agree. I mean, if we can figure out, again, where it goes, and have our baseline map on what things are doing, climate, temperature of water, or whatever other variables you put in, and you've got a map, and you see how it grows or shrinks or moves, that could be very, very useful in management.

MS. DUKES: Thanks, Charlie. Clay.

DR. PORCH: I don't -- I still don't see it really standing on its own, and so I like the intervention earlier that this could be information that would be collected anyway during say the discard projects, and so maybe wrapping those up, rather than focusing on this as a completely separate priority.

MS. DUKES: Thank you, sir. I'm not seeing any additional hands, so we'll keep moving. Julia, go ahead.

MS. BYRD: Okay. The next one is observations and managed areas. The AP supported keeping this as a research priority. Folks noted that projects in this area could be considered under kind of the broader cooperative research citizen science, in that, you know, in kind of projects that have fallen under this priority, have been kind of sampling and spawning SMZs, and things like that, things that are far offshore, where a fisherman may need to get paid for their kind of participation on a project like this.

They noted that these types of data could be helpful in informing kind of council decisions, specifically on the spawning special management zones, and noted that narrowing down the specific focus of a project under this area, with kind of a discrete kind of time window, or focusing on specific locations, would make it more appropriate, or feasible, for citizen science, and so kind of interested in the group's feedback on this.

MS. DUKES: Note the hat, and so, yes, this would be one of those priorities that's going to require a high level of involvement, and collaboration between multiple agencies. Any comments or feedback? Andy.

MR. STRELCHECK: It's noted in the comments, and I think where I'm struggling with this is it really is going to have to be, in my view, cooperative research, and fall under like exempted fishing permits, if we're going to allow access, and so how do we differentiate cooperative research from citizen science here, right, because the citizen science, to me, is the engagement piece in the cooperative research and do we need this? Is this something that's going to fall outside of the scope of the citizen science program?

MS. BYRD: This was added to the list, and I can't remember if it was the last cycle or the cycle before that, and one of the kind of things that helped facilitate some of the work that the Nature

Conservancy is doing, or has done, on spawning special management zones came from a conversation that we had with them.

They were interested in collaborating, and we showed them our citizen science priority list, and they said, oh, observations and management, and that's something that we're kind of interested in, and fits under some of our priorities, and so a project was developed. It doesn't fall under our citizen science program, and it's kind of perhaps more cooperative research, but what kind of spawned those discussions is having this be on our citizen science research priorities list, and so I think the APs have kept it on there, in part for that reason, and then there's some --

A Projects AP member noted that there is some work in the Gulf too that may be with private rec guys collecting information, and so that's just to give a little background on kind of some of the reason why it's been kept on the list, even though it has kind of a broader kind of cooperative research focus. I mean, I think, when you're thinking about citizen science and cooperative research and collaborative science, those sorts of things, it can be kind of a broad umbrella, and there are gray areas in there on how you kind of define things.

MS. DUKES: Kerry.

MS. MARHEFKA: Yes, and I see both points, but I'm supportive of leaving it on here, for the exact reason that Julia mentioned. I mean, we've been contacted, you know, by sort of outside groups, NGOs, that are always interested in citizen science approaches, and angles, and having this on the list provides an opportunity to them to view this that they wouldn't, and then, obviously, they would then have to shift into the cooperative research EFP thing, but this list provides them an opportunity to see what we're thinking, and so I think we should leave it on there.

MR. STRELCHECK: Yes, and I'm comfortable with that, and I think we just need to make that abundantly clear here, right, and so my concern would be, you know, the thought that, well, if we're going to allow citizen science people to just kind of freely go into a closed area and start sampling, and collecting data and information, right, and that's not the intent, and I think we all understand that, but making it very abundantly clear.

MS. DUKES: Thanks, Andy. We'll put some creative language in there. Kerry.

MS. MARHEFKA: Yes, and it would be worth noting, like having a different kind of hat or something, that denotes anytime there's something that would require coordination with the agency, or approval from an agency, or something like that.

MS. BYRD: Thank you. We can add -- Hashtags are probably not the right -- But we'll add another kind of thing to say that, if a project was developed under here, there would need to be close cooperation with the agency, and it might require an EFP for folks to be able to participate in a program that would collect data in a managed area.

MS. DUKES: Great conversation. Great points. I do agree that this priority list is definitely a catalyst for a multitude of projects that could be a citizen-science-related. Any other comments before we move on to the next priority? Awesome. Great. Thanks.

MS. BYRD: Thank you. The next one is movement and migration, and so these, you know, tagging projects would fall under this research priority. The group supported keeping kind of movement and migration as a research priority, with the emphasis on supporting already-existing programs.

There are a ton of very successful, wonderful tagging programs out there run by the feds, by the states, by kind of more private or industry-driven efforts, and so the idea here isn't that our citizen science program would create a tagging program. We don't need to do that. There are tons of people already doing that, but this provides an opportunity to say here are target species that the council is interested in getting this sort of information on.

The thought is, if kind of we were involved in a project under here, we would want to work with the groups who are already doing this work, to see if they could kind of add some of the species of interest to the council to their kind of tagging list, that sort of thing. They did recommend adding greater amberjack to the list, and I guess I will leave it at that to get feedback from the group.

MS. DUKES: Trish.

MS. MURPHEY: I just wonder if we need to suggest that you put the little hat there, with some of the projects under these priorities would need a high level involvement or collaboration. That was my only comment on that.

MS. DUKES: Good suggestion, Trish. Thanks. Any others? Tom.

MR. ROLLIER: I just wanted to say Julia captured it really well, and so thank you for that.

MS. DUKES: I agree. All right. We'll keep moving on.

MS. BYRD: All right. Getting close, and so the next one is shark and mammal depredation. Support keeping this as a research priority. There is strong interest in this -- There's strong interest in this issue from fishermen. The research that Jennifer Sweeney-Tookes' team led found this was a topic that fishermen would be willing to gather information on. We have gotten limited ideas submitted through our citizen science project idea portal. The ones we've got have been on shark depredation, and so I recommend keeping this on the list, and so interested in feedback.

MS. DUKES: Trish.

MS. MURPHEY: My only feedback is just based off the recommendation that Sweeney-Tookes says there's people that -- You know, there's fishermen that are willing to gather this info. I just wonder if this should be a high priority.

MS. BYRD: I will note, although it's not a project that's solely focused on shark and mammal depredation, in our SAFMC Release project, we're getting information on shark depredation observations through that project already.

MS. DUKES: Dewey.

MR. HEMILRIGHT: I would say keep it, because it's only going to get worse, and I believe there's some -- The DNA swabbing, there's some work being done by Marcus Drymon down in Mississippi, right, at Mississippi State, and is that it? All right, but I would keep it, because it's just going to continue to get more. If we ever really counted it, probably half of our ACLs in the future will get eat up by the sharks.

MS. DUKES: Thanks, Dewey. I appreciate that information. Anything further? Tom.

MR. ROLLER: Just important to note that this is also something that we hear from stakeholders about more than anything, and so I think it's important, just from that degree.

MS. DUKES: Agreed. This is -- Clay.

DR. PORCH: I think I'm seeing a consistent theme here, in that this one would also be wrapped up in the discard one. I think it's the same kind of study fleet would avail itself very well to providing good information on depredation rates.

MS. DUKES: Just letting Julia catch up here for a minute, but thanks, Clay. Good point. All right. Moving on.

MS. BYRD: Okay, and so the next one is habitat characterization. The APs recommended, or supported, keeping this as a research priority, but they also noted some concerns about kind of how the data would be collected, and the quality and usefulness in particular of photos, but noted it would be really important to work with researchers, or whoever you would --

The data end users, who you would want to use this data, to ensure the data would be collected in a context that could be informative to management, and so, you know, again, we would have a design team that could help with that if we were to develop a project under this priority. They also noted it can be valuable in supporting kind of broader ecosystem understanding. They recommended keeping this on the list, but did note this was a lower priority for them, and so interested in feedback.

MS. DUKES: Trish.

MS. MURPHEY: Not me in habitat. So my thought is -- I think this is good. My thought was I was wondering if, within that habitat characterization, that we have live bottom as a priority in this characterization, because I guess, from reviewing the red snapper preliminary study, it sounded like some of the lack of -- You know, there was a fair amount of uncertainty in that Bayesian study, because there was a lack of information of that live bottom habitat, and so I just wonder if, within that, that live bottom might be a priority habitat to try to characterize.

MS. DUKES: Thank you for that. Any others? All right. One more.

MS. BYRD: The last one is spiny lobster. The group supported keeping this as a research priority. We have two very passionate members from our Spiny Lobster AP who serve on one of our Citizen Science Projects APs, and they were very enthusiastic about kind of keeping this on the list.

They recommended adding local and regional movement to the data needed, noting that that was kind of identified as a need in the updated research and monitoring plan that the council reviewed, or adopted, in September, and also noted that the data are most limited Georgia north, and so, if a project were to be developed under this area, kind of that's the kind of area where the data are most limited.

MS. DUKES: Thoughts on this last priority for spiny lobster? Charlie, you look like you want to speak, but you haven't quite raised your hand.

MR. PHILLIPS: Yes, and, I mean, there's been conversation, and I think a spiny lobster amendment for catches Georgia north was in the works many, many years ago, and, as the waters warm up, and the divers are -- They may have less gag grouper to catch, or whatever, and so they may need, you know, to be able to have some catch levels, so they can, you know, help their income, and if we're not going to spend a lot of money, and I wouldn't make it a super high priority for sure, but, yes, I do think it needs to be in there.

MS. DUKES: Thanks, Charlie. We got into a wind tunnel over here. That's a good point. Trish.

MS. MURPHEY: Just kind of -- Really probably to add to Charlie, and just thinking about -- I know Tim Griner, a former council member, he was starting to see increases in spiny lobster catches in his snapper grouper boat, and so I think maybe prioritizing trying to characterize that fishery, and that expansion of that species, up into South Carolina and North Carolina should maybe be a priority within this subject.

MS. DUKES: Thanks, Trish. Others? Okay. This was an amazing discussion, an amazing presentation, by Ms. Julia. Thank you very much. Now that we have gone over all of these priorities, do we want to -- Is there any additional review or discussions that we need to discuss before sort of moving into what our actions looks like for any of these?

Okay. Not seeing any, and so, based on the edits that have been placed thus far, we do need to have a motion to adopt these citizen science research priorities, with the modifications that the APs provided, as well as this council, and this committee, and is anybody willing to entertain this motion for me? Trish.

MS. MURPHEY: Thank you, Madam Chair. **I would like to make the motion to adopt the updated citizen science research priorities, with the modifications as suggested.**

MS. DUKES: Thank you, Trish. Do I have a second? Charlie. Discussion? **Any opposition to this motion? Seeing none, motion approved by committee.** Thank you. All right, I'm going to turn it back to Julia, and we're going to move into the program indicators.

MS. BYRD: All right. Thank you, guys, for that really awesome discussion on research priorities. We're going to kind of switch hats a little bit, and now we're going to talk about citizen science program indicators, and so things that we can use to help monitor how the citizen science program is doing, and so I'm going to provide a little bit of background information before we kind of get into the discussion.

You know, back in 2020, our Citizen Science Operations AP kind of developed specific goals, objectives, and strategies for the program, and so kind of telling us kind of where do we want the program to go, and how are we going to get there, and so, back in December of 2020, you guys adopted those goals, objectives, and strategies.

Since then, we've been using those to guide where the program is going, to guide our work, and Meg and I specifically then use those kind of objectives and strategies to help us plan our workplan of what do we want to accomplish this year, or what are we going to focus on, and so, in order to help evaluate the program, and track our progress, every five years, we're kind of reviewing our programmatic activities under each of these goals and objectives.

We did that for the first time last year, looking at the period from 2019 to 2024, and so our Operations Advisory Panel kind of reviewed the work that we did. They were supportive of us continuing the work that we've been focused on, the objectives and strategies that we've been focused on, and they kind of recommended some kind of new strategies to focus on for our next five-year cycle. That kind of document, that kind of summarizes our activities under each of our kind of goals and objectives, was provided for you guys last December of 2024. It's also included as Attachment 2a.

In addition to doing these five-year reviews, staff are really interested in monitoring kind of indicators, things that can help us measure our progress between kind of five-year review cycles, and so we're interested in kind of identifying specific indicators, which is what we're hoping to get feedback from you guys today on, that we can monitor more regularly kind of every year that would help us not only track our progress, help us figure out things we can improve, but also help us better communicate -- Measure and communicate the impact of the program, which can be helpful in us getting funding for the program moving forward.

We've worked with our APs to try to identify specific kind of indicators that are measuring some of what we feel are the most important aspects of the program, and we're trying to develop indicators under each goal, and so, just as a quick reminder, the program has four goals.

The first goal is all about the program, designing and maintaining and sustaining a citizen science program. The second goal is all about projects. We're developing projects that meet South Atlantic-specific research priorities. The third goal is all about data, making sure they're fit for purpose, making sure they're accessible. The fourth goal is about kind of collaboration and engagement, and so, as we've been having these discussions with the AP, we are wanting to identify a few indicators under each goal that we can regularly monitor to kind of gauge progress.

When we talk about indicators, they're generally kind of two types. One are kind of output indicators. These are kind of things that are easy to measure, the number of outreach activities we've done, things like that, and they're also outcome indicators, which is more measuring kind of changes to groups, or individuals, as a result of participating in a project, an event, or an experience.

These are generally harder to measure. You're measuring kind of attitudes, perceptions, behaviors, things like that. The work that we had been doing over the past several years, that was led by Rick Bonney and Jennifer Sweeney-Tookes' research team, helped us collect baseline information on kind of attitudes and perceptions of using citizen science in a fisheries management context. That

baseline data that they collected is going to help us measure outcomes indicators into the future. Ideally, we would be doing kind of similar work in five years, so to help measure those kind of outcome indicators that are harder to measure.

Today, when we're talking, we're trying to kind of identify output indicators, things that staff can fairly easily count to help us gauge kind of the impact of the program, and the progress of the program, and so we worked with our advisory panels, and have kind of identified fourteen different indicators that we are proposing that we measure on a regular basis.

We've divided the indicators up under each of the four kind of goals. There are two kind of indicators under kind of Goal 1 and Goal 3, and five indicators we're recommending under kind of Goal 2 and 4.

Because we love organization, we've color-coded the presentation, and so we're going to walk through each of these indicators. I'll try to do it quickly, because I know we're running short on time, but, when you look at the slide, there will be a Goal 1 in blue, if it's kind of an indicator for kind of Goal 1. You'll see that switch to kind of a green for Goal 2, when we're talking about projects and so forth, and kind of so on.

MS. DUKES: Hence the handouts that have are right in front of you to remind you of those two previous slides, which contain very useful information and will guide you as she goes through these indicators.

MS. BYRD: The type of input we're interested in getting from you guys on this are, you know, are these the right things? Are these the most important things that we can measure kind of as indicators for the program, or, if you see kind of updates on these indicators, do you think you'll have a good idea of what progress that the program is making, and do you think we need these fourteen? Do you think there any that can be removed, or are there some that aren't on there that you think would be important?

I'm going to go ahead and blaze ahead, since we're running a little behind, but, as we walk through the indicators, the slides are going to be set up in the same way, and so, just to quickly orient you, kind of the goal that the indicator is relevant to will be on the top. It will be color-coded. The indicator itself is going to be on the left-hand side of the screen, and then, on the right-hand side of the screen, you can see how we're proposing to measure that indicator, and then kind of a kind of graphic visualization of how we're measuring that indicator.

The first, under kind of Goal 1, which is all about the program, the first indicator is we want to make sure we have diverse perspectives that are advising our program. The way we're planning to measure this is by looking at the number of individuals, and the individuals by organization type, that are kind of serving on our advisory panels on our ad hoc work groups, and so, you know, since 2017, we've had over kind of thirty-three individuals that have served on our advisory panels, and fifty individuals that have served on our ad hoc work groups.

One of the things that is really important to the program is that we're getting kind of a breadth of participation from a variety of different partners, federal, states, kind of academic, industry, non-governmental organizations, that sort of thing, and so this is kind of indicator one, and how we're planning to measure that, and I guess I'm going to defer to Amy and the committee on if you want

to -- You know, you're welcome to kind of ask questions, or talk about these indicators as we're going through them, or, you know, we can -- I can go through them all, and then kind of have discussion, whatever you guys prefer.

MS. DUKES: Does the committee have a pleasure? Okay. We're going to go through them, and just, while you're looking at them, does this answer those questions? As we look at this, is this demonstrating the success of that program?

MS. BYRD: Okay. The second indicator under the program goal is that we want the program to be seen as a resource or an example for others, and the way we're proposing to measure that is looking at kind of the invitations we've had to share information on the program, and so, you know, we're looking at total invitations by kind of activity type, and what were we asked to -- Kind of how were we asked to share information, and who are we invited by to kind of share that information, and so, you know, we've had fifteen total kind of invitations, and we've been asked to kind of present, to serve on kind of panel discussions, to be on workgroups, to be interviewed.

Those invitations have, again, come from a wide variety of organizations, the federal government, state government, some of the commissions, some non-government agencies, and some kind of other, and kind of that includes kind of academics, or kind of more unusual kind of invitations, that are harder to characterize, but that's kind of the second indicator under Goal 1.

Okay. Switching gears and going to Goal 2, and so this is the goal that's all about project development, and so the first indicator under this goal is number of projects that have been developed by or in collaboration with our CitSci program, and so we've had three completed projects. We developed kind of the SciFish mobile application with the Atlantic Coastal Cooperative Statistics Program, or ACCSP, and in collaboration with the North Carolina Division of Marine Fisheries.

We were a collaborator on the dolphin wahoo participatory workshops, which were led by NOAA Southeast Fisheries Science Center staff, Mandy Karnauskas and Matt McPherson, and then we also collaborated on the program evaluation work that was led by Rick Bonney and Jennifer Sweeney-Tookes' research team, and then we have three projects that are kind of ongoing, SAFMC Release, FISHstory, and SMILE, which is led by the Reef Environmental Education Foundation, or kind of REEF, for short.

In addition to looking at the number of projects, we feel like it's important to measure the diversity of research priorities that are addressed through our projects, and so do we have projects that are touching on different research priorities, and, right now, we have projects that are addressing three different research needs, and then we also feel like it's an important indicator to look at the diversity of FMPs that are addressed through our project. Right now, the projects we have are helping fill data gaps across three fishery management plans, Snapper Grouper, Coastal Migratory Pelagics, and Dolphin Wahoo.

Another indicator we feel like it's important for us to monitor under Goal 2, the projects goal, is looking at proposal submissions by or in collaboration with a program, and so this kind of helps show that we are working and collaborating with partners to try to actively get funds to support our program.

The graphic shows the number of proposal submissions by or in collaboration with the CitSci program, by year, by research priority, and so this captures all of the proposals that have been submitted, and not just those -- So it includes those that have been funded and those that have not been funded.

The next indicator looks at the number of external grants the citizen science priority has received, and so this indicator is looking at kind of the external funding we've been able to get to support our program and projects, and so the graph on the right shows kind of the number of external grants we've received since 2019, by research priority, and so, since 2019, the program has brought in \$1.3 million in external grants to support the work we're doing.

In addition to that, we were really excited that, last October of 2024, we finalized the memorandum of understanding with the Atlantic States Marine Fisheries Commission, and so we are so grateful to ASMFC for this partnership. That's going to provide much more flexibility in the opportunities that we can go for to help fund the program.

MS. DUKES: Julia, I'm going to stop you and ask you to do me a favor and repeat that dollar amount one more time, just to make sure that everybody heard the amount of positive funds that have come in in support of the citizen science program, please.

MS. BYRD: We've been very lucky to receive \$1.3 million in external grants since 2019.

MS. DUKES: Congratulations.

MS. BYRD: Thanks. All right. Switching gears to Goal 3, the data goal, and so we're proposing kind of two indicators here. The first is that projects are considered for use in assessment and management. The second is that the projects are helping inform future research, and so, to date, we've had projects under the citizen science program's umbrella considered for use in three stock assessments.

The first was SEDAR 68 for South Atlantic scamp. The SAFMC Release data was considered for use. That data workshop, or I guess it was via webinars, but that was in spring of 2020. The SAFMC Release project started in June of the year before, and so we had really limited data that were available, and so, although the data weren't recommended for use, the SEDAR 68 panelists felt that the information was useful when interpreting trends in other data, and kind of the data gap that that SAFMC Release project was filling was included in kind of the research recommendations.

SEDAR 90, the South Atlantic red snapper assessment that's underway right now, both the SAFMC Release and the FISHstory length data were recommended for use by the SEDAR 90 data workshop panel, and were included in research recommendations within the data workshop report, and then, the SEDAR 94 Florida hogfish assessment, members from REEF, the team that's leading the SMILE project, presented kind of SMILE data. SMILE data is a pilot project, and so limited data have been collected thus far, and so the SMILE data wasn't recommended for use. However, it was included in a research recommendation.

One other thing the program is trying to do is to not only help serve as an on-ramp to kind of get citizen science data developed under or in collaboration with our program considered for use in

assessments, but it's trying to facilitate and have other citizen science programs' data kind of being used in an assessment, and so the REEF crew has a volunteer fish survey project that's been going on for decades.

Not only did they present information on the SMILE project that we're involved in, but they presented information on their volunteer fish survey project, and it was recommended to kind of - - To form a combined index between kind of the NOAA Fisheries roving visual census survey -- Combining that data with the REEF data to develop an index that would be considered for -- Recommended for use in a sensitivity run in that assessment, and so that's why you see that kind of yellow plus there. That's not a kind of a project that falls under the citizen science umbrella, but it's one that we've helped facilitate and kind of get onboarded into the SEDAR process.

All right. The last goal is Goal 4. There are five indicators under this goal. This goal is all about collaboration and engagement, and so, first, we want to look at the number of volunteers that have contributed to projects, and then also look at the diversity of ways volunteers can engage with the program, and so, to date, we've had just under 5,000 volunteers that have contributed to projects, and they've contributed in multiple ways.

They've helped with project development. They've helped with data collection. They've helped with data classification or analysis, and so that would be like volunteers that are helping kind of analyze photos, historic photos, through FISHstory in Zooniverse, and we also have kind of folks helping with data validation, through our fishery validation team, and so a number of folks have participated, and they've been able to engage with the program in a lot of different ways.

We're also interested in developing or using an indicator looking at the number and diversity of partners who are contributing to the program, and so, in this kind of context, we're defining a partner as someone who is kind of as any entity that has kind of contributed in kind of helping kind of grow, or grow the program in a positive direction, and so, since 2019, we've had, you know, thirty-three partnerships, over a wide variety of kind of organization types, kind of federal, state, NGO, industry, regional kind of groups, academic groups, and so we're looking for kind of number and breadth of partnerships.

Another indicator under this kind of collaboration and engagement goal is looking at kind of the number and diversity of outreach activities, and so, for this context, we're including -- An outreach activity could be, you know, kind of sharing information with some of our key stakeholders. Stakeholders are kind of fishermen, are scientists, are managers, and so outreach activities could be presenting at a scientific meeting, or it could be kind of partnering with a captain to do a seminar at a fishing club. It could be doing a kind of tabling or booth event, like ICAST, and so, since 2019, we've done kind of 155 outreach activities, over a variety of different formats.

Then the last goal is we want to try to make sure we're measuring our online reach, and so shoutout to Nick Smillie, who helped kind of pull the information and figure out kind of how we can track this, but our plan is to track this in three kind of different ways. One is looking at kind of webpage views for citizen-science-related web pages, and we also want to look at QR code scans.

A few years ago, we started using QR codes on a number of our outreach materials, really primarily on SAFMC Release, and we've started integrating them into other things now, and so looking at

those QR code scans over time, and then looking at some of our social media analytics, looking at things like reach, likes, reactions, shares, things like that.

I'll give a shoutout to Meg, because Meg is the one who does all of our social media, and she's been looking into these analytics and is -- You know, by looking at kind of what seems to work well, she has started to develop more kind of video clips, and reels, things that get more engagement, and so she's been kind of working hard to kind of integrate those into our kind of social media posts, to try to increase that engagement.

That was me running through a bunch of indicators over a very short amount of time, and so it's a firehose of information, but what we're really hoping to get feedback on, again, is are these the right indicators? Do you think these indicators assess the important parts of the program? Do you think -- If we present these to you every year, do you think you would have a strong understanding of the progress we're making? If not, what do we need to add to this list that would be helpful for you, and then are any of these indicators not needed, or do you feel like they're duplicative of one another?

We're really trying to narrow these down, with the idea that we could present them to you guys on a regular basis, and we can include them on our annual report that comes out every April. We can also include them and share them with funders, as we're looking to kind of expand funding for the program on our projects.

MS. DUKES: Fantastic presentation. Thank you to Julia and Meg for putting all of this together. That was a ton of work and really does, in my opinion, showcase the success, the reach, and these indicators are a good measuring tool, but I would love to get some feedback from the committee on what you think. Ms. Carolyn.

DR. BELCHER: I think it's a really great job that you guys did, and I know a lot of folks would say do you really need that many, and I'm going to argue, for right now, until you start getting honed-in -- Because, you know, everybody talks about how vital QR codes are. People really love them, but yet, right now, QR codes are kind of not on the same scale as what you're seeing with your likes and your feedback through social media.

I think, until you really start gaining traction, it's going to be difficult to really see which one of these, because, again, if you focus on a number of projects, projects aren't going up by a large number. That doesn't mean anything in that sense, to me.

It's the weight of the project, the output of the project, that's really better at metering that, and so I think, as time goes on, and you start getting, again, that traction, and momentum, things will start showing, and you can probably start whittling it down from there, but I would argue that I don't see anything here that's not necessarily -- I wouldn't say it's redundant. I just think it's a different angle of looking at information, and it's just giving you the right tools to do that going forward.

MS. DUKES: Thanks, Carolyn. Great perspective. Others? Jimmy.

MR. HULL: Yes, and I would just comment that it's awesome. Congratulations, and look at what you've done. I mean, it's amazing. You've really, really done a great job.

MS. DUKES: Absolutely, Jimmy. Others? Tom.

MR. ROLLER: Yes, and I really agree with Carolyn's comments here. I think it's important for us to have a lot of indicators. You know, one of the things we talk about with citizen science projects -- You know, first of all, we always want to look at these sort of things, and have indicators to see what's moving forward, and how things are working, but these are diverse programs, and having a lot of indicators gives us a lot of ideas, like big picture, of how all things are coming together big-term.

MS. DUKES: Thanks, Tom. Trish.

MS. MURPHEY: No, and I think these -- I love these indicators. I think, as time goes, as Carolyn says, you probably can finesse them a little bit more, but I was -- So something that caught my eye just, or my brain, and I think it was the number of projects under Goal 2. Okay. No, and that must be -- You went past. Go down. Down. There, and so I just found that we were kind of matching -- These are kind of matching what we have determined to be high priority, and so I think that's something to take into account, that we must be doing a pretty good job picking what's high priority, because we're seeing projects for those high priorities.

Now, I don't know if one's driving the other, but I think that's cool. I couldn't remember if data-limited was a -- It is a high priority, right, data-limited species? Anyway, I just thought that was an interesting -- I couldn't remember, with data-limited, that it's not considered a high priority, but we have a couple of projects on it, but, anyway, I was kind of thinking of that interplay between when we go through priorities, and what projects we see, that may also help inform at least what project PIs might be interested in as well, and so, anyway, but, yes, I think it's great.

MS. DUKES: Thanks, Trish. Andy.

MR. STRELCHECK: Yes, and I agree with the comments around the table. You know, one thing I did note is a lot of this is kind of a broader summary of the six-year program. Obviously, with what Carolyn said, you know, if you have the snowball effect, and the program is progressing, and accomplishing these goals over time, you're going to see more and more utility of that data and information that's being collected, right, and so I think, even though we may do a small number of projects, looking at some sort of trending data over time, to see how things are improving, or changing, would be beneficial.

I would also be interested, with the volunteers, if -- I'll use the word "retention", right, but I know volunteers change based on projects, but, if people are engaging in citizen science, and they're jumping from one project to the next, are we building, you know, interest in the program enough to where they're being retained and being involved in different projects?

MS. BYRD: Just to respond to Andy, thank you for that feedback, and I think volunteer retention is something that we talked about, and we had a hard time developing kind of a broad indicator for it, because retention is really different between the different projects you have, right? The Release project, you're retaining fishermen that are kind of logging data. The FISHstory project, you have Zooniverse volunteers. It's like crowdsourcing, right, and so we don't have a specific indicator on retention in here, but we are looking at retention within individual projects, and monitoring that kind of that way.

MR. STRELCHECK: That's helpful, and I agree, and I guess one other follow-up is -- You may have mentioned it, but do we get any sort of kind of feedback from the volunteers with regard to, okay, I participated, and how was my data used, or what was the result of that, and, I mean, I guess that's the metrics you were presenting kind of toward the end?

MS. BYRD: So I'll answer that, and then I'm going to -- So we try to make sure that we're providing kind of that kind of feedback loop to our participants, and so if they're -- One of the things we heard loud and clear when we developed the program, from fishermen in particular, is, if I'm going to collect this data, I want it to be used, and so we've tried to give projects their best chance of success by the way we develop them, and the way we're implementing them, and part of that means that if data are like -- We need to let people know how those data are being used. I'm going to pass it over to Meg, because she is running our SAFMC Release program, and she can tell you how she's kind of engaging for that project with those participants.

MS. WITHERS: Yes, and so we kind of engage with our participants in a variety of ways, so that they're not contributing valuable information and then hearing nothing back, and so one of the ways that we engage with participants is, if they submit data to the project, they get a thank-you email from me acknowledging their submission, and then, if I need to follow-up about anything, we have an open line of communication about that.

Then, also, every year, we look at all the data that's submitted to the project, and we create an annual data summary, and that annual data summary, and you all have seen it in previous years, initially is only available to our Release participants, for just like a couple of months, so they can ask questions, and peruse it at their leisure, and then it is made publicly available.

I'll also note that some of that kind of feedback goes both ways, and so we're providing all this information back to our participants about the data that they've provided, and they also are very generous in their feedback, in helping to provide positive feedback to us about their experience, and so what have they liked about the project, because we have our participant recognition program and other kind of initiatives to engage with them, and so they're also able to kind of tell us what their experience has been like with the project, which is incredibly valuable as well.

MS. BYRD: I'll also note that Meg does things like monthly newsletters, where she updates the group on, you know, maybe something cool they saw in the data, or she could update them on the SEDAR 90 assessment, and how their data was considered for use, and that kind of stuff, and so we're trying to keep open communication, and particularly kind of that feedback loop back to our participants.

MS. DUKES: Thank you, ladies. I like those little nuggets of information that kind of pull everybody back and maintain their feet to the ground in support of citizen science. Any -- Dewey, you have a comment?

MR. HEMILRIGHT: Yes, and I don't know where you would put this, or if you do, and you had it in one of your slides, but completed projects. I'm one that looks at the completion of something. You have a lot of things going on here, ongoing projects, a lot of different needs, and wants, aspirational, but I'm kind of, at the end of the day, a completed project, and so I think that that would be good.

You've highlighted here three completed projects. That should be kind of like in the goals, or somewhere like that, to show -- I'll probably be the only one that asks that, but I like to see that, because that tells me from the aspirational part to the completed part. Thank you.

MS. BYRD: Great feedback, Dewey. Thanks for that, and one thing I will note is some of these, you know, projects, like Release, or FISHstory, or kind of SMILE, are kind of ongoing, because they're continuing to kind of collect data. Just because it's not completed doesn't mean that data wouldn't be considered for use in a stock assessment, or management, or, you know, whatever, but so, some of those kind of ongoing projects, we're trying to collect data over kind of a longer period of time.

MR. HEMILRIGHT: Yes, and, also, where you say "considered", I like to hear what was used. Considered is potential, but used, implemented into the stock assessment, is also a good outcome of completion.

MS. BYRD: Dewey, does this graphic on the screen help show that? So what we're trying to do is you're looking at the different projects, the different assessment types, and a green check means it was recommended for use.

MR. HEMILRIGHT: But that don't tell me it was used. It was recommended, and so, I mean, that's aspirational, recommended.

MS. BYRD: I get it.

MR. HEMILRIGHT: But recommended and used is two different things, in my world.

MS. BYRD: Right, and I guess some of what I'll say to respond to that is, you know, the SEDAR 90 assessment is -- You know, I think it's partly because, you know, we're a relatively new program, and have relatively new projects, and so the data are being considered for use in the red snapper assessment, and that's still underway, and so we can tell you whether that data was used, but we have to wait until that assessment is done.

MS. DUKES: Thanks, Dewey. Appreciate that recommendation. Others? Okay. Well, I'm going to wrap this up a little bit, and I just want to sort of reiterate what I've heard, and so it sounds like this committee is in support of the indicators that Meg and Julia have put together and presented today.

In fact, that those indicators are highlighting the success of the program, are providing the reach that the program is making, can be used as a measuring tool to show that success, and that reach, and, most importantly, how we can continue to improve this program, find some additional dollars to continue to support this program, and make these projects bigger and better. Correct? Is everybody -- Great. I love it. All right. Then we're going to keep going to an organizational structure presentation, and we're a little behind, and so we're going to go quickly.

MS. BYRD: Okay. I know we're running out of time, and so I'm going to do this in an abbreviated version, but you all, you know, interrupt, and ask questions, if I'm going too fast. On the screen,

you can see kind of the citizen science program organizational structure, and so this is included in the citizen science program standard operating policies and procedures.

This was developed when the program was initially formed, and back in 2018 is when the SOPPs were kind of reviewed and approved by the council's Citizen Science Committee, and so the organizational structure has you guys, as our Citizen Science Council Committee, kind of providing oversight of the program as a whole, helping kind of guide the direction of the program, and kind of guiding the activities that we do.

We have two citizen science advisory panels that are active. I'm going to skip this kind of middle one right here. We have our Citizen Science Operations AP. That's a group that helps provide kind of big-picture, programmatic, kind of policy-driven guidance. They provide kind of review and update of our SOPPs. They're the ones who are helping us kind of evaluate our activities compared to our kind of program goals and objectives. They help kind of with strategic planning.

Then we have our Citizen Science Projects AP. This is a group that's made up of representatives from the council's other APs, and so there are a lot of fishermen who serve on this kind of advisory panel, and they help us identify kind of research needs across all of the council's different fishery management plans. They help provide information on kind of volunteer engagement strategies, that sort of thing.

Then, kind of under this dotted line here, we have kind of a what we call our Citizen Science AP Pool, and it's basically kind of a group, and we can put together kind of -- We call them ad hoc workgroups, and so, if an issue comes up, and we want to identify a group of people to help us work through that issue, we can put together kind of an ad hoc workgroup to help us address that. These ad hoc groups are typically focused on, you know, one or two very specific issues, and are kind of short-term work groups.

We haven't used kind of these ad hoc committees since our initial program development, when we had action teams in these kind of areas that helped us kind of develop what we wanted the program to look like, what we wanted our policies and procedures, how we wanted it to operate.

There's one group that was included in the citizen science program organizational structure that we haven't formed yet, and it was called the Citizen Science Program Advisory Panel, and so it was meant to be between the Citizen Science Committee, you guys, and our advisory panels.

It was -- There are kind of subsequent slides, but kind of the thought that this group would include kind of technical advisors, and some operational kind of process kind of sort of advisors, that would help provide feedback on -- To help ensure that the program maintains kind of scientific integrity and that we are -- Kind of our policies are kind of helping us kind of develop fiscal support. We're making sure we're staying kind of on the good side of NOAA GC, and other folks, and kind of also helping review our SOPPs and things like that.

We haven't formed this group yet, and we had a discussion with our Citizen Science Operations AP about whether we need to form this group. In other slides, you can see kind of who was proposed to be in this group. Again, we're running out of time, and so I'm not going to go into the details of that, but the way that the program has kind of been implemented is a lot of the duties

that this group is doing are being provided by kind of the other citizen science advisory panels now or through other council advisory panels.

For instance, like the FISHstory length methodology, and the SMILE length methodology, were reviewed by the SSC, to get kind scientific feedback on that, and so, right now, we're interested in getting you guys' feedback on whether or not we need to keep -- We need to form and keep this kind of Citizen Science Program Advisory Panel in the SOPPs.

After talking with our kind of Citizen Science Operations AP earlier this year, they're recommending that the council consider kind of removing this panel, and the reasoning behind that is because a lot of the responsibilities that were originally thought to be given to this panel are provided by other APs, as well as kind of other citizen-science-specific APs and broader kind of advisory groups to the council, and so it's that, and then also just capacity.

There's a lot going on, and, you know, staff are kind of wearing multiple hats, and so kind of forming another committee could be kind of challenging, capacity-wise, and so I'll leave it at that, because I don't -- I want to make sure we don't run over, but are interested if you guys have any questions, or feedback, if you -- It would be great to get feedback on whether you want to move forward with a citizen science kind of recommendation of removing this group from the SOPPs. Interested in your feedback.

MS. DUKES: Carolyn.

DR. BELCHER: Julia, I support that, if that's what the group -- I mean you all have had that experience, to see if you think there's a potential for redundancy, and it don't -- You don't feel it's going to benefit, or provide an extra level of benefit to it, then I would fully support it being removed from the SOPPs.

MS. DUKES: Trish, and then Charlie.

MS. MURPHEY: I was just going to say what Carolyn says. I support -- If you guys -- It sounds like, since you haven't put one together, you obviously haven't needed one, and so I would say I concur with you all's recommendations.

MR. PHILLIPS: Thank you, Madam Chair, and I totally agree with what Carolyn and Trish said, and, if you're making it work now, why add another layer, that's going to possibly slow it down, and so just be nimble. Thanks.

MS. DUKES: Thank you. Others? Bob.

MR. BEAL: Great. Thanks, Madam Chair. If I understand the program AP that is considered not going to be formed, one of the seats on that was going to be for the Atlanta Coastal Cooperative Statistics Program, ACCSP, and so I was wondering, and could an ACCSP seat be added to the Operations AP?

In other words, when you look at the Venn diagram of, you know, citizen science here at this council, and what the ACCSP is doing, and the SciFish app and other things, having that connection seems to be, you know, a good thing to have, and so I don't know if there's the ability

to add a seat to the Operations AP or not for ACCSP, but I think that might be a good thing to consider, and ACCSP can cover travel, you know, if there is a seat there, and so it won't be an expense to the council, and so I don't know what it takes to make that decision, but I thought I would suggest it, at least.

MS. DUKES: Thanks, Bob. I'm going to let Julia handle this, but I would think that, since our membership is reviewed annually, or as needed, then we have the ability to add additional slots in the future. Am I correct in that statement?

MS. BYRD: So I would say that ACCSP and ASMFC have been great partners, and so have provided -- Have made so many contributions to the program . I think that it would be great to have kind of a seat on the operations team for that group. Particularly, I was going to look to the big bosses, to say -- You know, there's funding involved in this, because it involves travel, but, if ASMFC can help front that -- Maybe that's not the right word, but can help support that, then, you know, it's up to the council committee whether you want to add that seat, and not me, but I think we could support that, and put a motion together for that today.

MS. DUKES: I think Jimmy might want to entertain that motion.

MR. HULL: Thank you. Yes, I would, if staff wants to help with it. **Make the motion to add to the Citizen Science Operations AP a seat for the ACCSP member representative.** Sounds good.

MS. DUKES: I'm -- Do you mind if I kind of --

MR. HULL: Go right ahead. Help.

MS. DUKES: Okay. How about that?

MR. HULL: Yes, and that sounds good, and I'll go ahead and read it. **I would like to make the motion to add an AP seat for an ACCSP representative to the Citizen Science Operations Advisory Panel.**

MS. DUKES: Thank you, Jimmy. I've got a second from Carolyn. Any discussion? **Seeing none, that motion is approved.**

MS. BYRD: All right, and, Bob, we can work with you on kind of who that person should be, and kind of get them kind of appointed in the future.

MR. BEAL: Yes, we can do that, and Geoff White is in the back of the room as well, from ACCSP, so we can get that figured out pretty quick, and he is the one coaching me to say all these things, and so --

MS. DUKES: Okay, and so to follow-up the motion from Jimmy, is it the intent of this committee to remove the Citizen Science Project Advisory Panel, now that we've had some restructure? Carolyn.

**DR. BELCHER: Madam Chair, I will move to remove the Citizen Science Program Advisory Panel from the Citizen Science Program Standard Operating Policies and Procedures.**

MS. DUKES: Thank you, Carolyn. I've got a second from Charlie. Any discussion? **Any opposition? Motion approved.** Thank you. Okay. Last item of business, and, Madam Chair, we are right on schedule, and so we're going to try to do this quick, is a quick program update. Julia.

MS. BYRD: So we have put together a short recording giving you guys an update on kind of project activities. That's available, and there's kind of a PDF of it, but there's a recording, where you can hear Meg and I giving you the latest updates on the SMILE, the FISHstory, and the SAFMC Release project, and so I really encourage you to watch that recording, and, in fact, there are a few Easter eggs in that recording, some behind-the-scenes footage from some content creation trips that Meg has helped organize with her, and our Best Fishing Practices gang, and other outreach team members, and so there are a couple Easter eggs in there that might be interesting for you guys to watch, and so hopefully that will entice you to check out the presentation.

MS. DUKES: Thank you, Julia, and those little Easter eggs were cute, but I'm hoping that, since this information was presented to this committee well in advance of this meeting, that some of you may have already watched that video, and so does anybody have an idea of what the big Easter egg fish that Meg caught on her content creation trip was? You get a prize.

No, sir, and it was not a red snapper. Man. All right. Well, so I even had little Best Fishing Practices citizen science descending devices that were going to go to the winner, and so perhaps maybe, if you watch it, you can come to me, and I will have these in my possession, because these two programs work hand-in-hand with one another. I know what it is.

All righty, and is there any other business to be brought in front of this committee at this time? Seeing none, I will close this committee. Thank you guys very much, Julia and Meg. Awesome job. I'll send it back to the chair.

(Whereupon, the meeting adjourned on December 9, 2025.)

- - -

Certified By: \_\_\_\_\_ Date: \_\_\_\_\_

Transcribed By  
Amanda Thomas  
January 22, 2026

Cit Sci  
Tue 12/9/25

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