GULF OF MEXICO FISHERY MANAGEMENT COUNCIL

MEETING OF THE STANDING & SPECIAL REEF FISH, SOCIOECONOMIC, & ECOSYSTEM SCIENTIFIC AND STATISTICAL COMMITTEES

MAY 7-8, 2024

STANDING SSC VOTING MEMBERS
Jim Nance...
Luiz Barbieri...
Harry Blanchet..
Dave Chagaris...
Roy Crabtree..
Douglas Gregory...
David Griffith..
Paul Mickle...
Trevor Moncrief...
Will Patterson..
Daniel Petrolia...
Sean Powers...
Steven Scyphers...
Jim Tolan...
Richard Woodward..

SPECIAL ECOSYSTEM SSC VOTING MEMBERS
Josh Kilborn..
Steven Saul...

SPECIAL REEF FISH SSC VOTING MEMBERS
Jason Adriance..
Michael Allen...
John Mareska..

SPECIAL SOCIOECONOMIC SSC VOTING MEMBERS
Luke Fairbanks..
Cynthia Grace-McCaskey..
Jack Isaacs...

STAFF
John Froeschke....................................Deputy Director
Lisa Hollensead.................................Fishery Biologist
Jessica Matos............Administrative and Accounting Technician
Emily Muehlstein.......................Public Information Officer
Carrie Simmons.................................Executive Director

OTHER PARTICIPANTS
Heather Blough...NMFS
JD Dugas..GMFMC

Christina Package-Ward..NMFS
Cassidy Peterson..SEFSC
Steven Scyphers...
Katie Siegfried...SEFSC
Bob Zales.....................................Panama City, FL

- - -

TABLE OF CONTENTS

Table of Contents...3

Table of Motions..4

Introductions and Adoption of Agenda.............................5

Review and Approval of Minutes from February 2024 SSC Meeting....5

Development of Terms of Reference for Gulf of Mexico Red Snapper Benchmark Assessment...8

SEFSC Progress Report MRIP-FES Steering Team.....................66

Public Comment..87

Assessing Equity in the Distribution of Fisheries Management Benefits: Data and Information Availability......................91

Equity and Environmental Justice Regional Plan..................110

Alternative Assessment Methods for Gulf Stocks..................137

Overview of SSC Reorganization and Application Process for June 2024 to 2027...195

Public Comment...201

Adjournment..202

- - -

TABLE OF MOTIONS

PAGE 132: Motion that the Gulf SSC recommends that NOAA Fisheries request the National Academies of Sciences to follow-up on "Assessing Equity in the Distribution of Fisheries Management Benefits" with a second consensus study report that, as noted in the current report, would build on this contribution by evaluating equity in select, illustrative fisheries using the information available. The motion carried on page 136.

- - -

The Meeting of the Gulf of Mexico Fishery Management Council Standing and Special Reef Fish, Special Socioeconomic, and Special Ecosystem Scientific and Statistical Committees convened at the Gulf Council Office in Tampa, Florida on Tuesday, May 7, 2024, and was called to order by Chairman Jim Nance.

INTRODUCTIONS
ADOPTION OF AGENDA
REVIEW AND APPROVAL OF MINUTES FROM THE FEBRUARY 2024 SSC MEETING

CHAIRMAN JIM NANCE: We'll go ahead and start. I appreciate everyone being here. Good morning. My name is Jim Nance, and I am the Chair of the Scientific and Statistical Committee for the Gulf of Mexico Fishery Management Council. We appreciate your attendance on this webinar and input in this meeting. Representing the council is J.D. Dugas.

Council Staff in attendance are Carrie Simmons, John Froeschke, Lisa Hollensead, and Jessica Matos. Notice of the meeting was provided to the Federal Register and sent via email to subscribers of the council's press release email list and was posted on the council's website.

This meeting will include some of the following topics: development of the terms of reference for the red snapper benchmark assessment, Southeast Fisheries Science Center progress report for the MRIP-FES steering team, assessing equity in the distribution of fisheries management benefits, equity and environmental justice regional plan, alternative assessment methods for Gulf stocks, an overview of SSC reorganization and application process for June 2024 through 2027.

This webinar is open to the public and is being streamed live and recorded. A summary of the meeting and verbatim minutes will be produced and made available to the public on the council's website. For the purpose of voice identification, and to ensure that you are able to mute and unmute your line, please identify yourself by stating your full name when your name is called for attendance. Once you have identified yourself, please re-mute your line. We will use the raise-hand function for this meeting, to help recognize you to speak. Jess will type your name up on the memo pad on the screen, and I will be keeping track of hands in the meeting room as well to add to the list. With that, Jess, let's go ahead and do our voice identification.

MS. JESSICA MATOS: Luiz Barbieri.

DR. LUIZ BARBIERI: Luiz Barbieri.

MS. MATOS: Harry Blanchet.

MR. HARRY BLANCHET: Harry Blanchet.

MS. MATOS: David Chagaris.

DR. DAVID CHAGARIS: David Chagaris.

MS. MATOS: Roy Crabtree.

DR. ROY CRABTREE: Roy Crabtree.

MS. MATOS: Doug Gregory.

MR. DOUG GREGORY: Doug Gregory.

MS. MATOS: David Griffith.

DR. DAVID GRIFFITH: David Griffith.

MS. MATOS: Paul Mickle.

DR. PAUL MICKLE: Paul Mickle.

MS. MATOS: Trevor Moncrief.

MR. TREVOR MONCRIEF: Trevor Moncrief.

MS. MATOS: Jim Nance.

CHAIRMAN NANCE: Jim Nance.

MS. MATOS: Will Patterson.

DR. WILL PATTERSON: Will Patterson.

MS. MATOS: Dan Petrolia.

DR. DAN PETROLIA: Dan Petrolia.

MS. MATOS: Sean Powers.

DR. SEAN POWERS: Sean Powers.

MS. MATOS: Steven Scyphers.

DR. STEVEN SCYPHERS: Steven Scyphers.

MS. MATOS: Jim Tolan.

DR. JIM TOLAN: Jim Tolan.

MS. MATOS: Rich Woodward.

DR. RICH WOODWARD: Rich Woodward.

MS. MATOS: Jason Adriance.

MR. JASON ADRIANCE: Jason Adriance.

MS. MATOS: Mike Allen.

DR. MIKE ALLEN: Mike Allen.

MS. MATOS: John Mareska.

MR. JOHN MARESKA: John Mareska.

MS. MATOS: Luke Fairbanks.

DR. LUKE FAIRBANKS: Luke Fairbanks.

MS. MATOS: Cindy Grace-McCaskey.

DR. CINDY GRACE-MCCASKEY: Cindy Grace-McCaskey.

MS. MATOS: Jack Isaacs.

DR. JACK ISAACS: Jack Isaacs.

MS. MATOS: Mandy Karnauskas. Josh Kilborn.

DR. JOSH KILBORN: Josh Kilborn.

MS. MATOS: Steve Saul.

DR. STEVEN SAUL: Steve Saul.

MS. MATOS: J.D. Dugas

MR. J.D. DUGAS: J.D. Dugas.

MS. MATOS: Thank you.

CHAIRMAN NANCE: Thank you. I appreciate everybody in attendance. Each of us have had the opportunity to look over the agenda. Are there any modifications, or changes, for that agenda, or any other items that need to be added? Hearing none, is there any objection to adoption of the minutes? Hearing none, we'll go ahead and adopt the agenda as proposed.

We've had the opportunity to look over the minutes from our February 2024 SSC meeting. Any changes or updates for those minutes? Hearing and seeing none, is there any opposition to approving those minutes? Okay. The minutes are approved without opposition, also.

We'll go ahead and begin, and we're going to do Item IV, which is Development of Terms of Reference for Gulf of Mexico Red Snapper Benchmark Assessment. Ryan will give us the scope of work for that agenda item, and then we'll turn the time over to Dr. Siegfried and Ryan, to be able to lead us through that discussion. Ryan.

DEVELOPMENT OF TERMS OF REFERENCE FOR GULF OF MEXICO RED SNAPPER BENCHMARK ASSESSMENT

MR. RYAN RINDONE: All right. Great. Katie and I are going to discuss the terms of reference for the upcoming benchmark assessment for red snapper, and this will be SEDAR 98, and this is going to be comprised of an in-person data workshop, a webinar-based assessment process, and an in-person review panel, with an independent peer review to include the Center for Independent Experts.

You guys should consider the CIE review and your own review of SEDAR 74 for red snapper, the contemporary science and data availability when helping to develop these terms of reference, and you'll be asked to specifically address several aspects and provide recommendations to the council, as appropriate. You guys are also requested to volunteer for the data workshop, which is going to be held the week of December 9 in Mobile, Alabama. Data scoping calls are expected to begin in a couple of months, and we expect there to be a couple of those prior to the in-person data workshop, and so, Jess, if you want to bring up the terms of reference, we can start on that, and, Katie, are you unmuted?

DR. KATIE SIEGFRIED: I am.

MR. RINDONE: Great. Do you want to take it away from here, or do you want me to start, or --

DR. SIEGFRIED: I can go ahead and start. I wanted to just make a couple of comments, and so, first of all, this is a nice beginning to this process that we would like to continue, where the Science Center and the council staff work together from the beginning to get these terms of reference together, and so the way it has worked so far is the red snapper team, who are also on the call, LaTreese and Matt, and hopefully they can speak during this as well.

We got together and talked a lot about what happened during the last assessment, how the CIE review went, what things we wanted to revisit, and then what things we thought were important, you know, to list for each of the components, data, assessment, and review.

Then we spoke with, or I spoke with, Ryan, and we worked with other council staff, Carrie and John, to come up with this draft. We fully expect the SSC to, you know, go through it with a fine-tooth comb, but I'm pretty happy with the work so far, and I think the red snapper team has all of the things that we would like to address listed here. You know, I don't really mind leading it, Ryan, if you would like me to, and we just start with the start year and terminal year.

CHAIRMAN NANCE: Katie, if Matt or LaTreese have any comment, please have them raise their hand, and we'll make sure they're unmuted and be able to interact with us.

DR. SIEGFRIED: Great. Thank you. Okay, and so there's a little difference here in the start and terminal year, in that we state, where possible -- There's a few changes that we see coming down the pike for potentially the start year, and then we want to make sure that we get all of the data available, and so, if the 2023 terminal year is not possible, we still want people to bring data as far out as they can, and so that language is there for those reasons.

Particularly, and we'll talk about it later, we have new shrimp bycatch estimates for species, and we don't know how far back yet those will go, and so 1950, where possible, for all of the data streams that were provided for 74, but we do see that that may not be possible for some data series.

We start our data workshop terms of reference with the stock ID, and so we're maintaining the three-area stock ID that was discussed at the last SSC meeting, and the SSC had sort of -- Had already weighed-in on that, and so we were fixing that at the beginning, in order to make the data provision process more -- To make it easier. Jim Nance, would you like to call on Jim?

CHAIRMAN NANCE: Yes, and I see him there. Jim Tolan and Luiz. Jim first, please.

DR. TOLAN: Thank you, Mr. Chairman, and it has to do with the start year. This was a really tough thing at the last data workshop, and there was a lot of questions brought up about why we keep going back to the 1950, and I understand the rationale behind trying to use as much data as possible, but we were pretty convinced, in the data workshop last time for 74, that a lot of the data is just sketchy, and we don't have a lot of faith in it, and so why do we continue to harp on going back all the way to 1950, and I'm just curious about that. Thank you.

DR. SIEGFRIED: Thanks, Jim. It's a good point, in that we're not going back to virgin conditions. We did come up from the 1800s during the last assessment, which is -- So we've got quite a few years knocked off there already. I do anticipate exploration starting at a later year, because of that shrimp bycatch estimate changing, the start year changing, and the uncertainty in some of our catches early on, and so we will have to explore that during this next assessment, but we wanted to start with where 74 started and then justify any movements forward in time, and I don't know if Matt or LaTreese want to weigh-in.

DR. TOLAN: Thank you. I appreciate that.

CHAIRMAN NANCE: Luiz, please.

DR. BARBIERI: Thank you, Mr. Chairman, and thank you for that introduction, Katie. I just have a comment about the stock ID, you know, process there, and just trying to clarify, and I'm pretty sure that I understand what you mean there, right, as written, but I wonder, for the CIE reviewers, if it would make more sense to clarify this, that we're actually dealing with a three-area model for one Gulf of Mexico unit stock, because you may remember, during the SEDAR 74 review, it was difficult, for at least some of the CIE reviewers, to actually understand, when we had the stock ID process, right, to understand that we're still assessing the stock at a Gulf-wide, at least U.S.-Gulf-wide, scale.

I'm wondering if, you know, some edits there, and I thought -- I jotted down some notes, quickly, for that first term of reference that could utilize the three-area model, and then, in between parentheses, west, central, and east, developed through the SEDAR 74 red snapper stock ID process.

DR. SIEGFRIED: Yes, and I'm not opposed to that correction, or adjustment, and I see your point that it needs to be a three-area model that provides, you know, Gulf-wide advice, and so I'm fine with making those types of corrections to the language. It just needs to be clear that three areas are requested of the data providers, and so that seems clear to me, Luiz. Thanks.

CHAIRMAN NANCE: I think -- From my perspective, I think, from that review process, that we have one stock, and we need to make sure that that is clear, that we're assessing that one stock with three different -- A model with three different areas. Ryan, please.

MR. RINDONE: Okay, Luiz, and so I have "utilize the three-area model (west, central, east) developed through the SEDAR 74 red snapper stock ID process for the Gulf red snapper stock".

DR. BARBIERI: Yes, Ryan. Even better. Thank you.

MR. RINDONE: Okay.

CHAIRMAN NANCE: Katie, go ahead, please.

DR. SIEGFRIED: We do address the other CIE reviewers' comments when it comes to issues with the parameter estimation and optimization, and we do talk a little bit more about mirroring later, to clear up any confusion about three areas and all of the issues, and so I'm fine with Number 1 being changed as-is. Thanks.

CHAIRMAN NANCE: Okay. It looks like we have the twins, and I'm not sure which one is going to speak, Steve or Sean.

DR. POWERS: We didn't think that out fully. It's Sean, obviously, and I have a problem with Number 1, in that, again, we have to be cognizant of what the reviewers, specifically the CIE reviewers. You know, essentially, they didn't favor the three-area model, and they wanted to go back to a two-area model, and I'm not going to go through all the lengthy detail, and Katie responded to a lot of that, and, you know, so is there any way -- I know this will come into -- Is there any way that we can give the analysts flexibility on this point?

DR. SIEGFRIED: The way that we can give flexibility is in how we mirror, and so it's the data analysts that we have to think of right now, when it comes to the data workshop terms of reference. They can't provide it to us in three and two areas, without a significantly-longer data process, and then, in order to evaluate both, it would take quite a bit longer to do the entire assessment, which is some of the points that we've brought up before.

I think, at this point, because we have explained that the stock ID was not in the purview of the CIE review, and I went over all of the points of, you know, what we would get out of a three versus two-area model, that the leeway that we would be asking for is -- From the panel, from the assessment panel, is to let the assessment analysts look into the mirroring more carefully, and be more explicit about what's being mirrored later, but I don't think we can do any kind of leeway, with the data providers, with a three versus two-area model.

DR. POWERS: Can I respond, Jim?

CHAIRMAN NANCE: Absolutely, Sean. Thank you.

DR. POWERS: So I just don't agree with that approach. I mean, whether the stock ID was under the CIE reviewers or not, it influenced the assessment that they reviewed, and the rest of panel reviewed. As far as workload goes, again, this is the most important species in the Gulf of Mexico. This is one of the most important species that NMFS manages, as an agency, and I don't see how it's that much more work, given that you can collapse, essentially, into the eastern, for comparison purposes, for going forward.

You know, I just -- I mean, I think, recognizing that the CIE reviewers had a tremendous problem with this issue, and the mirroring, and I just don't see why we can't have the potential for both, or listen to them and just go back to the two-area model, where we don't have any mirroring issues, but it sounds like I'm in the minority, and so, you know.

CHAIRMAN NANCE: I think you're bringing up good points, Sean, and we had that discussion at the last SSC meeting, and it was -- I think we spent probably two hours on going back and forth on a two and a three model, and so, at that meeting, we -- It was certainly not a majority at all, but we had put out that we were going to look at a three-area model, because I guess -- From what I'm hearing from the center, it's that it's either two or three, and there is not going to be -- There's not going to be both, and we talked about that at the council meeting, and some council members went back and forth with whether they wanted a two or a three, and I think they're leaving it to us to look at this through the data workshop process.

Right now, it's proposed that we have a three-area model, one stock, but three areas, and then, with the mirroring process, being able to do that, but I certainly hear what you're saying, Sean, and I would like to hear other SSC members, if we have input on that. Harry, please.

DR. BARBIERI: May I, to that point?

CHAIRMAN NANCE: Luiz, please.

DR. BARBIERI: Mr. Chairman, thank you. Sorry, Harry, but, unless you were going to be talking about the stock ID, I just wanted to weigh-in my own opinion on what we just discussed and Sean's points.

I mean, everybody who heard my input, right, during this discussion at the last SSC meeting, probably knows that I'm not a big fan of the three-area model, right, and I would rather go back to two, but that opinion did not prevail, right, and so we had a motion that was put forth, and I think Will was the person who made that motion, and it was seconded, and we voted, and, as a body, our report reflects, you know, the fact that, yes, we actually voted to agree with a three-area model, and so, Sean, I understand your concerns, and I sort of share some of those concerns, but I think that, as a body, we need to continue with the three-area model, after that motion passed. Thank you, Mr. Chairman.

CHAIRMAN NANCE: Harry.

MR. BLANCHET: Mr. Chairman, my comment primarily was on something else, and so, if you wanted to keep on that two or three thing, put me to the end of the list.

CHAIRMAN NANCE: Okay. I will. Thank you, Harry. Josh, is yours on a different topic, also?

DR. KILBORN: No, and I actually was going to basically say the same thing that Luiz just said, because I -- You know, I do find myself, sometimes, wondering if we had this conversation already, and I feel like déjà vu, you know, all the time at these meetings, but we definitely had this conversation, and we voted fourteen to nine to stick with the three-area model, and so I think we should stick with what we talked about last time.

CHAIRMAN NANCE: Thank you, Josh. Will, please.

DR. PATTERSON: I agree with what Luiz and Josh just said, but I also agree with what Sean said about earlier, about, ideally, we would be able to go forward with the ability to examine both of these, or, as Sean suggested, collapse the central and east into one region, if, you know, as the assessment moves forward, and the diagnostics review, you know, a three-area model at that point isn't feasible, and it seems like that that's an approach that has a lot of merit.

I understand the center's concerns about personnel time, and how much time has already been devoted to this, and will be devoted to the rest of this process, but that has always seemed, to me, like the ideal scenario, but, unfortunately, it doesn't sound like that's possible.

CHAIRMAN NANCE: Thank you, Will. Mike, please.

DR. ALLEN: Not to reiterate what others have said, but I do think that, as Katie said, if the assessment is more explicit about what parameters are shared between the -- Have to be shared between the east and the central regions -- Part of our discussion last time was that it's essentially either a two or three-area model, depending on which datasets are shared, you know, between the two, and the east and the central have a lot of shared data, and I think they can be explicit about that, but I'm okay to continue trying the three-parameter model, even though it wasn't the recommendation of the review. I still think that the dynamics -- You know, down the road, we're probably going to want to go to a three-area model anyway, and so it's probably, you know, a good thing to continue trying.

CHAIRMAN NANCE: Thank you, Mike. Dave, please, Dave Chagaris.

DR. CHAGARIS: I think most of what I was going to say has already been said. You know, I would just remind folks that, you know, a two-area model basically mirrors parameters the same way that a three-area model does, and it's just not explicitly done, and so I think maybe one thing that might help with taking it to review is explaining, you know, why we want to go to a three-area model, and, you know, what's the main purpose for doing so. If it's, for example, to try to partition out these areas of high versus low exploitation, or recruitment, then I think those are good reasons for going to a three-area model, outside of just what we've done in the stock ID process, and so I think maybe trying to make that case could help move this forward as well. Thank you.

CHAIRMAN NANCE: Yes, I agree, and I think Matt, last time, gave us some pretty good recommendations of why, when they were looking at the assessment, the three looked like a plausible way forward. John Mareska, please.

MR. MARESKA: My thoughts are similar to Sean and Will, that, as things get evaluated in the data workshop -- I mean, we talk about exploring differences in the uncertainty, and the accuracy, of those measures, and so, in the data workshop, if it's determined that there's too much uncertainty in the east model, because of borrowing, or mirroring, or just the data itself, it doesn't sound like there's a venue for us -- Or even for the data workshop to recommend going back to a two-area model. Again, we voted to move forward with a three-area model, but I personally didn't fully understand all the issues that were going on between the central and the east. Thank you.

CHAIRMAN NANCE: Thank you, John, and I think we need to leave ourselves open in that data workshop. As has been said, by I think a number of SSC members, the last time we had a discussion on this, we voted to have the three-area model looked at, and that's what we're moving forward to, and I think, as Matt and LaTreese do that assessment, if it becomes implausible to do the three, I think it needs to be said, so we can go back to that two. Okay. Thank you for that discussion. Katie, any input on that?

DR. SIEGFRIED: No. I think it's covered. Thanks.

CHAIRMAN NANCE: Okay. Thank you. Okay. Harry, please.

MR. BLANCHET: I did have a comment on that, and my main comment was on the draft term of reference itself, but, on the two-versus-three-area model, my perception was that a lot of the issue with a three-area model was that a lot of the data was collected with the consideration of a two-area model.

Now, some of that goes back to how you stratify when you're doing your sampling for age structures, and such as that, but, if we have those types of considerations, and we don't address it in the data collection process, and throughout the -- Then we will be continuing to have this argument about which is the better model, and the argument is being driven by the availability of the data, and so, if there is something that needs to be done on the data collection side to better be able to ensure that you have adequate data collection for the three-area model, then I think that should be part of that as well, but that's kind of tangent to the terms of reference here.

The concern that I had with regard to the terms of reference themselves was that, as Ryan read that last version of the terms of reference, I did not pick up on whether it still continued to have the note of the Gulf-wide unit stock. Thank you.

CHAIRMAN NANCE: I will have Ryan read that again, for that clarification.

MR. RINDONE: Thanks, Harry, and so what I have written there was utilize the three-area model, the west, central, and east, developed through the SEDAR 74 red snapper stock ID process for the Gulf red snapper stock, and so the way I wrote that, I guess, was to imply that it's one stock, and I didn't say "stocks", plural, but just the Gulf red snapper stock, one stock. If there's a way that you guys would like me to edit that, to make it more explicit that it is a single unit stock, we can wordsmith this.

MR. BLANCHET: I think, if we had "unit" before "stock", that would work.

MR. RINDONE: Could you say that again, please?

MR. BLANCHET: I think, if you just put "unit" before stock, it would be more clear.

MR. RINDONE: And so it was.

DR. SIEGFRIED: Mr. Chair, to Harry's point, when Ryan is finished?

CHAIRMAN NANCE: Yes, please. Go ahead.

DR. SIEGFRIED: Okay. I just wanted to clarify, Harry, that we did talk about the data issues, with respect to two versus three-area, and the age comp issue, which we'll have an explicit discussion about that at the data workshop, and it's a subsampling issue, rather than a data collection issue, and so, if there's oversampling of the age structures, they have to do some subsampling, in order to, you know, not overwhelm their capacity, and so that consideration was probably done on the wrong -- It could potentially have been done on the wrong, you know, definition of "stock", but we are correcting that for the three-area, and it will be explicitly discussed at the data workshop, and so I just wanted to reassure you that it's not the data collection, but it was subsampling and weighting, which we can take care of.

MR. BLANCHET: Thank you very much.

CHAIRMAN NANCE: Thank you, Harry. Sean, please.

DR. POWERS: So, in your summary, Jim, where you summarized our conversation on this, you said, at the end, that, if the analysts have a problem along the process, they can consider going back to the two-area model. If Number 1 stays as written, they don't. They would fail that term of reference, and there's no flexibility in that first term of reference.

CHAIRMAN NANCE: Okay. Thank you. Ryan, to that point?

MR. RINDONE: So, to Sean's point, and others on the same vein, and, I guess, Katie, I would look for some feedback from you here too about perhaps changing "utilize" to "prioritize", and so, just to read it all to everybody, it would be "prioritize the three-area model (west, central, and east) developed through the SEDAR 74 red snapper stock ID process for the Gulf red snapper unit stock".

DR. SIEGFRIED: To provide the reasoning for that, it's not to limit the assessment analysts in their mirroring, and it's to make sure that data providers are giving it to us in those three areas, and then the assessment analysts don't have any limitation in their mirroring, in order to compensate for any data gaps, or issues, later on. This was just to advise the data providers of what the areas are that they would need to provide data within, and so that's why it's in the data workshop section, but, if there's concern from SSC members about there being limitation, we can explicitly state, later on, in like the assessment workshop section, more about mirroring, but I didn't see this as limiting the assessment analysts.

CHAIRMAN NANCE: Okay. Thank you, and, if I misspoke on that, Sean, because I think it's the -- As Katie just reiterated, it's the data providers that are -- They would have to provide the datasets with two or three, and, once that is provided, then that is the model process that we go with, and so the data providers are putting that at a three-area model, and that will be utilized, and then the assessment group can mirror, and so forth, to provide the assessment with those parameters. Thanks for that clarification. Doug, please.

MR. GREGORY: Thank you, Mr. Chair. I will speak up to maintaining as much flexibility as possible. That seems to be the theme for a large part of our discussion at this meeting, and it first occurred to me in the early years of using SS, and I remember talking to Brian Linton about it, and, just because you can model something more complex, that's better, and that was the beginning of trying to model different fishing fleets in different regions.

That was with tilefish at the time, in 2011, and this is summed up, for me, very eloquently, in the last slide of a presentation later, and I will read it quickly, but more complex models are the norm, but it is likely that some assessments are currently conducted with more complexity than is supported by the available data. I've been waiting for ten years for this statement. Or that the resources needed to support that complexity is unwarranted, given their priority or importance, and I would say effect on the outcome of the assessment.

We may get more complex, and the three-area, versus two-area, fits into this, but it doesn't give us a better assessment. In other cases, increased complexity may be warranted, but tradeoffs may be required. The last comment here was complex models will not be replaced just to simplify. Rather, it will be a data-based decision of how to proceed with stocks not identified as a key stock.

This is the crux of this entire meeting, as far as I'm concerned, of not being complex just because we can do it, but to evaluate whether that's a benefit to the overall process, and so those are my comments, and I'm not going to come to one, or two, versus three, but the flexibility to make that decision during the process is important. Thank you.

CHAIRMAN NANCE: Thank you, Doug. Luiz, please.

DR. BARBIERI: Thank you, Mr. Chairman, and I agree with all of Doug's previous points, and I just want to supplement that I think that these decisions have consequences, right, and so, going back to some of the previous comments, and I think Harry, and then, Katie, you made some statements as well, about data collection, you know, to support this three-area model, versus mirroring, using that mirroring function.

I do feel that, if the decision, after this assessment is eventually reviewed, that the three-area model is the best way to capture the dynamics of Gulf of Mexico red snapper, that the Science Center, based on that decision, would then start investing in data collection to explicit account for this three-area process.

I think what this seems to end up generating is public distrust in the management process, because sometimes we seem to flip-flop, right, and we make some choices at some point, and then eventually we go back on those choices, and so I'm not saying that we cannot ever reverse to a three-area model, but I would expect that the Science Center, given the relevance of the red snapper assessment in the Gulf of Mexico, would then honor, right, this model, this choice, to be based on three areas, and start developing a data collection program that is structured to better inform not this coming SEDAR 74, or 98, but I'm thinking about, you know, additional assessments going into the future, right, because my understanding is that mirroring is something that is done to compensate for not having proper data coming from these three areas, right, or adequate, comparable data coming from the three areas, and that, now that we have identified that this is the best way to proceed, that the center will start developing monitoring and research programs to best inform these going into the future and collecting data at this level of resolution to inform the three-area model. Thank you.

CHAIRMAN NANCE: Thank you, Luiz. I think Ryan's statement for Number 1 I think helps, and we're talking about one stock, and we're going to use a three-area model to be able to assess that unit stock of red snapper in the Gulf of Mexico. I hear the pros and cons of two versus three, and I think we, as a body, as has been mentioned, are moving forward with the three. Without any further discussion, Katie, let's go ahead and move forward with the terms of reference.

DR. SIEGFRIED: Okay. Thank you, Chair. I was going to ask, and I don't know how hard it is logistically, but, Ryan, is it possible to show your edits as we're going, or is that too complicated? Does the SSC want to see that?

MR. RINDONE: What Jess was trying to show me how to do, it doesn't appear as if my version of Word is going to let me do, which is a shame, and, no, it's not letting me. I don't have that ability on mine, but I sent her the language for the first one, so she could swap that out on this Word version, and we can just ask her to edit it on her version.

DR. SIEGFRIED: Okay.

CHAIRMAN NANCE: I think that's good, to be able to -- While Ryan read it, I think it's better to have everybody see it.

MR. RINDONE: Yes, and so, Jess, if you could just take that language for Number 1 and supplant it appropriately there.

CHAIRMAN NANCE: Just paste it.

MR. RINDONE: Then we can work on -- Then we can work from there.

DR. SIEGFRIED: Thanks. Some of us are just visual learners, instead of --

MR. RINDONE: I am as well, and I just have the benefit of having all the visual in front of me, and so --

DR. SIEGFRIED: Thank you, Jessica.

CHAIRMAN NANCE: I think it's good to be able to visually be able to see it, so that we don't come back and say, well, I didn't think that's what we said, and so there it is right there, to utilize the three-area model (west, central, east) developed through the SEDAR 74 red snapper stock ID process for the Gulf red snapper unit stock.

DR. SIEGFRIED: Thank you. I appreciate it.

CHAIRMAN NANCE: Thanks, Katie. Let's go ahead and go to Number 2.

DR. SIEGFRIED: Okay. Here, we were trying to cover any of the age data issues, or length and age data issues, that were brought up during the review. You all can read it, and I hesitate to just read it for you, except for pointing out a few of the important points. The reason that we have summarize, describe, and tabulate, again, is because we want to make clear some of the issues I think that Harry brought up, and that we commented on during the review and at the last SSC meeting, and we want to see, very explicitly, where the age data are collected, and then any kind of ageing methodology, if it has changed, and then any subsampling methods that have changed through time, if that has happened, as well as the weighting of both the length and age compositions.

We bring up the length compositions because, often, the length compositions are weighted by the landings. That allows us to get that three-area representation down, and then the age comps are often weighted by the length comps, and so we probably will explore weighting the age comps by both the length comps in one version, and then potentially do it with just landings. That's been brought up to our data analyst.

Here, we can -- We're just asking to describe any methods that may have changed, any new proposals, and then ensure that samples of either length or age from one survey are not input twice, and this is basically don't use lengths that were used to weight ages or -- That way, we don't have any double-dipping.

That may be a bit prescriptive, and we don't -- We may not need that in the TORs, and it's kind of common practice, but we put it there to be explicit, and then any working papers from the last assessment that need to be updated, and we asked for that in that sub-bullet. We want to explore any differences in our growth parameters, if the length or age sampling methods differed from previous assessments, and so we don't need to get new growth curves if the subsampling doesn't change, and then make sure that we have appropriate models and diagnostics to describe any of the growth curves, if they are new.

The second-to-last bullet is to develop those age-length keys, and we developed them last time, but, if there's differences in ageing, or age subsampling, we need to redevelop those, and then we can rediscuss the conditional age-at-length, if it's appropriate, and then, finally, we want to make sure to evaluate and discuss any sources of uncertainty or error, any data limitations, and that's going to cover those issues that Harry was talking about in time or space, and then provide estimates, or ranges, of uncertainty for length and age data, as a whole and by source. Are there any questions, edits, comments about Number 2?

CHAIRMAN NANCE: That one is pretty straightforward. John, please.

MR. MARESKA: This goes back to, I guess, my point, and Doug said it better, but it's just flexibility, and so what I don't see here is the use of the word "area", and so you're not looking at any of the uncertainty, or the validity, of that data by area, and this is only by the different sources, and so this is where it seems to be limiting our flexibility to evaluate the use of the data within a given area.

DR. SIEGFRIED: Okay. Well, we certainly want to represent the uncertainty by area, and so, if we need to add in by area, instead of just by source.

CHAIRMAN NANCE: I think that would be good, yes. John, that's a good point. I'm glad you brought that up. I think, Jess, it would be "by area and source". Would that be correct, Katie?

DR. SIEGFRIED: Yes, I think so, yes.

CHAIRMAN NANCE: Was that the only place that -- Does that --

DR. SIEGFRIED: Maybe the first bullet, if we're concerned about making the area explicit, "by year and fleet/survey and area".

CHAIRMAN NANCE: Okay.

DR. SIEGFRIED: We went based on the working papers from 74, and they did always provide differences by area, but I'm fine with making it explicit here. I see the point.

CHAIRMAN NANCE: I think, from the SSC's perspective, it's that we want to be able to evaluate uncertainty and error by each of the different areas. I think that was one of the discussions that we had at the review workshop, and also last time, is that, while we've got it partitioned into three areas, we want to make sure that the three areas -- We want to be certain what the error structure is and the uncertainty is for each of those different components. I think that does help. Any other input for this? Harry, please.

MR. BLANCHET: In the general statement for Number 2, it says "processing by region", and, if you change that to "area", does that kind of universalize the rest of the bullets?

CHAIRMAN NANCE: Probably it would help to do that. Just by areas. I think that helps to outline the importance of the three different areas and looking at them individual. Any other comments from SSC members? Okay. Seeing none, Katie, I think that bullet provides -- I think we're satisfied with that one.

DR. SIEGFRIED: Okay. Number 3 is trying to cover a few things that both we and council staff had noticed about a few of our fishery-independent data sources. For this, we wanted to make sure the recommended indices were extended to the new terminal year and then document any known, or suspected, temporal patterns in catchability not accounted for by standardization. I will describe that a little bit once I get through all the bullets.

We want to explicitly evaluate the G-FISHER composite video index for use in the assessment, mainly the composition data, and there were some issues, and, if the red snapper team wants to comment on this, I'm happy to give them the floor, but this is basically the three different surveys that have come into one, as G-FISHER did have different compositions, different modal sizes, and it's been -- It came online at different points in time, and so we did think that we needed to discuss that a little bit more at the data workshop, in order to evaluate those compositions more explicitly.

We want to recommend modifications needed to inform differences in catchability and selectivity of the surveys, if we see something different in compositions through time of the different components.

We want to provide appropriate measures of uncertainty for all of the fishery-independent abundance indices and effort time series that were considered in 74, if there were a few instances that we needed some more information, and then, for the recommended indices, and I think we said this in a bullet up above, and so there might be a little bit of duplication here, in my opinion, but extend the index to the new terminal year and document any known, or suspected, temporal patterns. I think that that last bullet probably can just get chopped off, Ryan, and I think that was just duplicated in our efforts.

MR. RINDONE: Okay.

DR. SIEGFRIED: Is there any -- Are there any comments about G-FISHER? This isn't meant for the Great Red Snapper Count yet, and this is just for the fishery-independent survey information. Any comments?

CHAIRMAN NANCE: G-FISHER is the one where we're combining all three of the indices into one index, correct?

DR. SIEGFRIED: Yes, and so there's issues with -- It's not issues like as a problem, but there's things that need to be explicitly stated about the compositions from each of those three surveys and what they are telling the model through time, when they came onboard, and, you know, they fished at different depths independently before, and now they're all one unit, and so there is -- Usually, with surveys, we're not going to worry about catchability, and it's standardized and all of that, but these were three different ones that came together, and we just need to be more explicit about the comps.

CHAIRMAN NANCE: Yes, and I think, as I read the paper, and looked at when we did the indices workshop with the last data assessment, and I thought it was -- You presented that very well, and so it's pretty straightforward on what's happening in the model that's being used, but I think it helps to be able to look at that. Any comments by SSC members on this Number 3 bullet? Jason, please.

MR. ADRIANCE: Thank you, Mr. Chair, and it's just a minor editorial note in that second bullet, and "G-FISHER" is hyphenated, but, in the sub-bullet, it's not.

CHAIRMAN NANCE: Good eyes, Jason. Okay. Seeing no other hands, let's go ahead and move on, Katie. Thank you.

DR. SIEGFRIED: Sure. Okay. Number 4 is about anything around commercial catch statistics. We aren't actually planning to have a commercial group at the data workshop, because the way that they're providing commercial catches and discards is not -- There's no reason to change those, and so this is just asking that the commercial catch statistics be provided as they were for 74, including both landings and discards, in pounds and numbers, and extended through the new terminal year, and then provide a corresponding working paper that's just updated from before.

There are a few things that are different from commercial catch statistics, but they're still a component of the commercial fleet, and so some of these were just pulled from before, and so evaluate and discuss the adequacy of available data, and they do that, in their working papers, in a satisfactory way now. Provide length and age distributions for both landings and discards, where feasible, and they do that now, and they also provide estimates of uncertainty.

The thing that's new is utilizing the new estimates of shrimp fishery effort and bycatch, as appropriate, based on a peer review of those data from SEDAR 87, and that's, and we do need to discuss that just a little bit, and then document any change in the start year from previous data provisions.

There's two parts to that. The fishery effort, the shrimp fishery effort, is being -- It's been worked on prior to SEDAR 87, and it's being finalized during 87, and that's the penaeid shrimp research track assessment that's being converted to a benchmark. However, the bycatch that relies on those effort data is a separate process that just underwent CIE review in December. The report should be out, if it's not out, very soon.

We do need those bycatch estimates for red snapper to be evaluated in a working group at the data workshop, and so the effort will be finalized through 87. However, the bycatch needs to be reviewed in that group. The reason that there may be a difference in the start year is because of the different methodology, that's utilizing mainly observer data, and how far back the effort data are available, and so that's what we're getting at in this bullet.

We would want to evaluate any existing composition data, recommend whether those data are sufficient to represent the bycatch by the fleet, and it's pretty sparse composition data, and so we would want to evaluate that, and then this is documenting all the new methodologies, what the program objectives are. If we use the observer data of the shrimp fleet, we want to discuss those explicitly. The methods that were used to calculate bycatch, the coverage of the observer program, sampling intensity, and any other relevant characteristics.

We will have the CIE review to go on, but the CIE review evaluated bycatch estimates -- I think it started in 2014, and so we will need explicit discussion for data prior to that. Then we will request maps of the shrimp fishery effort that had been provided, for instance, to the 87 process, and any other changes to any of the fishery-independent survey coverage that is informing anything about fishery effort, and so I think that needs to be changed to "fishery-dependent survey coverage", or maybe "observer coverage", but that was what we were trying to get at with that bullet point.

Any questions about bycatch or commercial catch statistics?

CHAIRMAN NANCE: I understand certainly the shrimp fishery effort component. I was -- I guess I haven't seen, and I need to look for it, the review of the bycatch, and so that's been done now, Katie, that model?

DR. SIEGFRIED: Yes, and the CIE review report -- I've seen drafts of it, and we're supposed to get it through the CIE review program. If it's not out already, it will be out in a short time, and so it will certainly be available for the data workshop.

CHAIRMAN NANCE: How many species -- Just out of curiosity, how many species were you able to estimate bycatch for?

DR. SIEGFRIED: I'm not -- It wasn't actually species-specific for anything besides on the sheet that's identified during the observer program, and that's still under evaluation by that group, but red snapper for sure, and so that will be available.

CHAIRMAN NANCE: Okay. Okay. Thank you. Any comments by SSC members on this bullet, Number 4? I think the bycatch one certainly is important for this particular stock. Seeing none, we'll go ahead and move to Number 5.

DR. SIEGFRIED: Okay. Thanks, Mr. Chair. This one we'll have discussion about, and I expect this to be one of the most lively workgroups at the data workshop, and this is the rec catch statistics, and this is -- Some of these are pretty standard, and we want the statistics provided for each fleet, which is each mode, including both landings and discards, for open and closed seasons, in both pounds and numbers.

If the state survey landings data are used, or provided, is what the point is there, and not used in the model, and this is still the data workshop, but, if they're provided, for instance private boat mode from state surveys, we would need a fully-calibrated time series, and council staff and I talked a lot about the wording here, and so I anticipate lots of SSC discussion.

The point here is that we need a common data unit for each mode, private boat mode, charter boat mode, and headboat mode, and, for the states that provide the private boat mode, there is no inter-state calibration. The only calibration that's available, at this time, is to FES, in order to provide a historical time series, and then to make them all in that common data unit.

The next bullet is just evaluate and discuss the adequacy of available data, whether it's FES or state surveys, for characterizing landings and discards for open and closed seasons, by fleet, mode, or gear. Specifically discuss the potential for bias and uncertainty in the data sources, provide length and age distributions for both landings and discards, open and closed season, where feasible, and we do state open and closed in every one of these, because there are explicit open and closed entries into the model. Then provide estimates of uncertainty of everything, for landings, discards, open and closed seasons, everything that's provided. Questions or comments about our intent of any of these bullets? I welcome any edits that people have around our intentions and discussion. Thanks.

CHAIRMAN NANCE: Thank you, Katie. Ryan, please.

MR. RINDONE: I would just note here that any individual survey is not explicitly listed here, and that's to try to allow for as much flexibility as possible, knowing that the states, and the Gulf States Marine Fisheries Commission, and the NOAA Office of Science and Technology, and everybody is working on multiple things continually, and will be continually, leading up to and through the data workshop, and so this was written explicitly with flexibility in mind, but still trying to hammer home that need for a common data unit to be used for those catch statistics.

CHAIRMAN NANCE: Carrie.

EXECUTIVE DIRECTOR CARRIE SIMMONS: Thank you, Mr. Chair. Just a question, going back to the areas, the three-area model, and, Katie, do we need to be more explicit for the data providers in that aspect, because it's not just going to be about the states providing the data.

DR. SIEGFRIED: Yes, that's a good point, and I'm fine with adding something here that says we need to consolidate into three areas the information provided, or if it's different states, or whether you need to separate it out, if it's the FES units. What language would you prefer? Something in the first statement about provide recreational catch statistics by area for each fleet, and will that suffice?

EXECUTIVE DIRECTOR SIMMONS: Yes, I think that makes sense, but I still think there's going to be a lot of discussion about how we get there, because we're kind of splitting Florida, and I guess the data providers will have to figure out, when we decide what units, and how we're going to, I guess, go forward with that process, based on the pilot study with FES for the three eastern states, and I don't know, and it's going to be tricky. I think by area, so it kind of puts everybody on alert, but, I mean, the states are going to be providing it by state, and that's my understanding.

DR. SIEGFRIED: We can add it to that second sentence as well. If state survey landings are used, provide a fully-calibrated and consolidated as necessary, something like that, so that we know? I mean, it's Florida that needs to split, and I know that Bev -- Maybe Luiz can speak to it, but they had -- They were able to provide those data in a way that we included them last time.

What we did for 74 was the calibrated -- It was the state survey data calibrated to FES, with different calibration factors by state, and taken back in time, and so everything was in a common currency. I think a lot of this discussion will be guided by what was done last time, but, if there's something else about splitting Florida that needs to be stated here, and I see Luiz has his hand up.

CHAIRMAN NANCE: Luiz, please, on that topic.

DR. BARBIERI: Yes. Thank you, Mr. Chairman. Just to reinforce what Katie just said, and, I mean, the SRFS survey has additional stratification, geographic stratification, and so I think, Katie, like what you're saying, because, the last time, it actually worked out well, because it basically aligned, right, with that central area extending into the Panhandle of Florida, and so I think that, if we just follow the same process that we used last time, at least for integrating SRFS into this discussion, I think it should work. Thank you.

CHAIRMAN NANCE: Thank you, Luiz. Jason, please.

MR. ADRIANCE: Thank you, Mr. Chair, and, just for clarification, and this may be something that can be done offline, and I don't remember how we handled it last time, but we do have one of our basins on the east side of the river, and I can't remember if we split out those landings the last go-round or not, but if just someone lets us know beforehand, for Louisiana, if that's the case, and then we can make sure that we get that the right way.

DR. SIEGFRIED: We can certainly talk a lot about this during data scoping, to make sure the states are aware of anything that they may need to do, and I think everybody was overwhelmed at the data workshop for 74. There's a lot of folks that I've talked to that are like we need to do something a little different in the way we provide data, and so I don't think that you'll be alone in making slight changes.

CHAIRMAN NANCE: But we did it at the last data workshop, correct, Katie?

DR. SIEGFRIED: Yes, and it was a new thing that we were putting together, and there was a whole bunch of discussion, by state, of what to do, and we also -- It was a common theme across every group at the data workshop, that this is a research track, and we were going to have a second go at making this perfect, and I heard that a lot, and so I think that there will be quite a bit of fine-tuning from data providers at this data workshop, like we anticipated as an operational.

CHAIRMAN NANCE: The key is it’s been done once, because that was the data, how it was split out, and so it’s just a matter of each of the states fine-tuning how they did it last time, to be able to have it for this review. Any questions by any of the states? Okay. Jim, please.

DR. TOLAN: Thank you, Mr. Chairman, and I will bring this up again, and I’m sure it’s common knowledge that Texas is not really comfortable with that eleven-times number for the common currency. I’m not sure how we’re going to get around that, but I just wanted to throw that in there, to be on the record saying we’re still not real comfortable with that, especially what I heard at the transition team meeting, that that number would be utilized for the assessment, but, for the apportionment, we would go back to the state survey data, and I left that meeting quite confused, but I just wanted to be on the record to say that Texas, as a whole, is not really comfortable with our data being converted to FES currency. Thank you.

CHAIRMAN NANCE: Thank you, Jim, and I think that -- At the data workshop, I think those are important, so there’s not any -- At the end, during the review process, we have states bringing up here’s what we thought was happening, and here’s what really happened, and that type of thing, and so we’re all consistent and understand and have expressed our concerns during that data workshop, so that they’re not being expressed at the very end. Ryan, please.

MR. RINDONE: Just to hit on the MRIP transition meeting that was had recently, there was a comment made there that that 10.81 multiplier for calibrating the Texas landings was made prior to the estimate of the bias correction that was needed, that came out in August of 2023, and so, in light of that, it would seem that calculation of that 10.81 multiplier would need to be revisited by S&T, based on data explicit to Texas, if they have those data, and so, Katie, I don’t know if that’s something that we could -- Or if we should add here, to reevaluate that explicitly for the State of Texas, if it’s necessary to put that in explicitly, and probably it should necessitate some reaching out to S&T to have them explore that.

DR. SIEGFRIED: Thanks, Ryan. What I’m hoping to get is for S&T to send someone to the data workshop. Last time, we had someone on the phone, which we made do with, but I would like to have someone there, and so I will make an effort to do that.

I did say, during the transition team meeting, that it’s very important that we address this Texas issue, but it’s not just Texas. We need to make sure all the states’ calibrations are satisfactory, and justified, and that’s why we put the evaluate and discuss adequacy, and specifically discuss the bias, and, you know, all of these things need to be done for all of them, right?

I hesitate to put Texas specifically in here, because it needs to be done for all the states, but I do also -- I do want to state that the red snapper team and I plan to show some sensitivity runs of the previous model, to illustrate the effects of not calibrating to -- Not just to Texas, but to other states, to try to explain this sort of productivity argument that we’ve been making, and also to show what might happen in example projections, so that this point is better illustrated, and we want to do that before the data workshop, so that everybody that’s going into the data workshop understands the effort.

If there is a new calibration that needs to be provided, and we have provided fully-calibrated time series in here, and so everything needs to be brought to the table. If you want to list something more explicitly, that’s fine, but I think it needs to be all states, and we need to make sure everybody can have any reevaluation that is necessary.

I also, you know, am happy to talk with the Texas folks that came to that transition meeting, you know, separately too, to sort of go over these results of the sensitivities that we’re doing, but I want everybody to understand what we’re saying, and have all the illustrations, so that it’s not an argument, and it’s more of a discussion of what we need for the assessment, to make sure we’re modeling the whole stock and not, you know, having a sort of lopsided productivity based on location and survey, and so I will stop there.

CHAIRMAN NANCE: Yes, I agree with you, and, with that phrase of “evaluate and discuss the adequacy of available data”, that’s --

Each of the states have the opportunity, and the requirement, to do that, to make sure they're satisfied with and fully understand what data are being input into the model, and so I don't think we need to separate out each of the five, but just making sure that each of the five realize that they have to be able to understand that data. Jim, please.

DR. TOLAN: Thank you, Mr. Chairman. I will yield. You pretty much covered what I was going to say. I think, for the terms of reference, it's pretty explicit what we're going to do, and everybody knows the issues, and not just Texas, but the other states, and I don't think that Texas needs to be listed in here specifically, like Katie was saying, and so thank you.

CHAIRMAN NANCE: Perfect. Thank you. John and then Ryan.

DR. JOHN FROESCHKE: I guess -- I was thinking about this, and I guess my concern is that, if there really is legitimate scientific concern about going to a common data unit, which is FES, I almost think we should deal with it right now, because, based on the way the Term of Reference Number 5 is written, I don't see how it could be satisfied if you did anything but calibrate to MRIP-FES, because it says, "if state survey landings are used". Well, they're going to be used. They have to be. Like there is -- For Texas and Louisiana and things.

The only thing is MRIP-FES, and there's no research ongoing to find something different, and so, unless there was some external effort, outside of this process, to get a different calibration, which I just don't see it, but, even if there were, I mean, to that point, there is going to be that.

Then the other thing, to my knowledge, is we've never done that for any other assessment, for example amberjack or something, and I think the Texas landings has always just gone in as it was, and this is the only assessment, to my knowledge, that we're doing it this way.

CHAIRMAN NANCE: Ryan.

MR. RINDONE: Pass.

CHAIRMAN NANCE: Okay. Katie, do you have any comment on what John was --

DR. SIEGFRIED: Yes. Thanks, Chair. I wanted to make sure that I addressed Ryan's point too, and I might have said a bunch of stuff around it, if I didn't answer it, and hopefully he'll say something, but I -- I understand what you're saying, and I agree that there's not a common currency, because there is no interstate calibrate factors available yet, and, at the last transition team meeting, we are trying to come up with, and we did not finish that discussion, but come up with plans for what to do for assessments, sort of from red snapper on, and so, yes, it wasn't done for greater amberjack, prior to 70, and then, you know, for 74, it was when we started to explore how do we calibrate these state survey landings to a common currency.

That is the transition team's plan, to start doing that for assessments, going into the future, and they had to -- You know, they're having to do all of this sort of piecemeal, and everything is not done at the same time, but they're sort of -- We're trying to come up with a sort of plan at each stage, right, and so we can't wait until the very last -- When everything is fully transitioned.

We can't ignore everything, because we have too much information available to just put blinders on and ignore it, and so that's why we're trying to come up with this common currency, and I think the calibration factors can be rediscussed at the data workshop, and that seemed to be the sticking point, and not necessarily using FES to go back in time, and that didn't seem -- Please correct me if somebody disagrees, but that didn't seem to be the problem. It was the calibration factors themselves, and so it seems like that is the thing that needs to be discussed, and so it's really more of the state survey landings of data are provided, because this is just a data workshop, than provide that fully-calibrated time series.

CHAIRMAN NANCE: Jim, to that point, please?

DR. SIEGFRIED: Did I forget something that Ryan asked for, before he --

CHAIRMAN NANCE: I don't think. Ryan, did she cover -- You're fine with Ryan.

DR. SIEGFRIED: Thanks.

CHAIRMAN NANCE: Jim, to that point?

DR. TOLAN: This goes to what John was talking about, and basically addressing the 800-pound gorilla in the room, and everyone is familiar with a congressional letter that was sent out last month, signed by a bunch of senators and state representatives, that specifically addresses this MRIP-FES conversion and how -- The fact that we’re still calling it BSIA, when NMFS acknowledges that it overestimates recreational effort consistently, and so, again, we’re -- As a state, we’re really apprehensive of this, and so I don’t know if everybody has seen this letter or not, and, if not, I can forward it to the group, and it can go out, but, again, it’s a fairly recent letter, and it’s signed by a bunch of different senators and state reps. Thank you.

DR. SIEGFRIED: Chair, to that point?

CHAIRMAN NANCE: Yes, please, Katie.

DR. SIEGFRIED: Yes, and that’s great to send that around. There’s also an S&T, and a NMFS, response, because there was issues listed in there about using the Great Red Snapper Count, and so make sure that the response from the Science Center to that point gets sent out too, because I think that there were some points that needed to be addressed.

CHAIRMAN NANCE: I think that would be great, and I would like to see both of those, and I haven't seen them, but I think that would be good, so that we have both the letter and then if there’s any response from National Marine Fisheries, and that would be great to see, and so if you could provide both of those, Katie, that would be perfect. Harry, please.

MR. BLANCHET: This may be getting a bit too much into the weeds for this, and I’m not sure, but my concern is that, with Louisiana’s LA Creel survey, practically every document I have seen regarding that says something to the effect of there is just a single year of data available for calibration between LA Creel and the MRIP survey, and that that’s not the best solution.

I would hate to have something as trivial as that be one more hole in the hull in this stock assessment, but I can see how that might end up being there, and my curiosity is, is there anything in this process, or in the MRIP transition process, that would be able to be addressed as part of this assessment that could improve that set -- That -- How do you say what’s determined? The inadequacy, and that does not seem to be a state issue, and this is a state-federal coordination issue.

DR. SIEGFRIED: Chair, to that point?

CHAIRMAN NANCE: Yes, please, Katie.

DR. SIEGFRIED: Harry, if you’re suggesting that we put in a bullet about, you know, the transition process, that guidance from the transition process here, I would certainly welcome that. I think we're doing that through the bullets, but, if you want to explicitly state it, we can do that.

MR. BLANCHET: I don't know that I really want to get that deep into the weeds, because then you end up with a terms of reference that's forty-seven pages.

DR. SIEGFRIED: Yes, and I understand that point too, and we were trying to be succinct, but clear here, and it's such an important issue to all of us, and I'm not upset at adding a few extra bullets, and it's just -- It's ironic too, because the CIEs did not discuss this almost at all, the CIE reviewers, and not the SSC members, and it matters very much to them, and, in fact, some of the things that the CIE reviewers stated completely went over the heads in a content way, but it sort of blew us away that they would just say act like you know all of your landing exactly.

We don't know our recreational landings exactly, and so I think it's important for us to characterize all this uncertainty, and that goes against some of what the CIE stated, and not the SSC members, and so I'm completely open, and I welcome an edit here to add in the transition process, so we have that additional guidance that the other folks that are weighing-in on this, and the acknowledgement that this is important, but we're sort of in the middle of a big process.

MR. BLANCHET: I agree, and I don't know that we can really -- Anything that I would come up with would tend to constrain what's really a very open-ended process right now, and so that's why I'm -- That's where I was going with it, is I don't know if this is something that's appropriate to be tacked into here, but it does seem that it -- I see it as a potential weak spot as well, if it is not explicitly addressed.

To the point of the CIE review, yes, I was fully expecting that some of those calibration issues were going to be, how do you say, beating us around the head and shoulders with that, and it didn't happen, but I expect that the next one probably will, and so how do we address it now? Again, that's probably not for this, but it is something that we need to talk, between the states and the feds, on getting something specific to this assessment, if possible. Thank you.

CHAIRMAN NANCE: Without wordsmithing this to death, because I do think the first two bullets of evaluate and discuss, and the second is specifically discuss potential -- I think it's there, and, if we start to overprescribe this, I think we do ourselves the disservice, where I think each of the states, and I think the center, and the SSC, are all aware of the issues with this particular topic, and so I think -- The way it's outlined now I think covers it, in my view, and I don't think we have to get down into the weeds and make it where we're wordsmithing this thing down to each individual state. That's my view.

MR. BLANCHET: I agree.

CHAIRMAN NANCE: Thank you, Harry. Jim, did you still have a comment, or you're done?

DR. TOLAN: I'm done. Thank you.

CHAIRMAN NANCE: Okay. Thank you. Trevor, please.

MR. MONCRIEF: We have belabored this point pretty well, and so I think it's there, but I was just going to say that I think it's written broad enough that it should be -- At the end of the day, MRIP-FES is the common data unit that's there, and so I don't think there's much getting away from that, and there's a lot of moving parts on this one, and a lot of heavy lifts that are occurring to try to make it better, and, at the end of the day, it will be a weak spot for a while, and there's just nothing that we can do, outside of continuing to work and trying to essentially get us to a framework that works best for everybody in the region, and so I was just going to say that I think it's adequately written. I am not going to belabor it any more, and I think it's good as-is.

CHAIRMAN NANCE: Thank you, Trevor. Seeing no other hands for this particular topic, let's go ahead and go to Item Number 6, Katie, and I greatly appreciate that discussion on Item Number 5. It's an important one.

DR. SIEGFRIED: Thanks, Mr. Chair. Okay. The next data workshop TOR is to consider the data available from external surveys, and we said "external", instead of just Great Red Snapper Count, because there is also the Louisiana LGL study that supplemented the Great Red Snapper Count, and so we want to take a look at the estimates of absolute abundances, the length composition data, the tagging data, to inform catchability, region, and fishing mortality, and this has to be done in coordination with the PIs of each survey, and this is directly in response to the review.

There were SSC members, including Sean, who is a PI, and CIEs that made these points, but Sean, and Jim, and Mike, and Steve, if you want to tell the group more about the discussions here, and maybe wordsmith a bit, that would be really helpful.

What we got from them is that there was a need to consider and evaluate the data and analysis available to estimate the catchability, and the selectivity in particular, for each survey.

Where possible, because they suggested that we form a whole research team that would help us get priors for catchability, and so, where possible, we need additional analyses to determine priors for the catchability of each sampling gear by area, and their argument was that, say in Florida, versus Texas, or Louisiana, versus Alabama, that there was a difference in catchability of the gears.

Then consider the usefulness of the length composition data, which we've outlined which data we received, and what it's used for, including the spatiotemporal coverage. Some of the length comps that we received were not just the years that the count, or the LGL study, occurred. If there's more, or new, information, that just wasn't provided before, then that would be necessary here. Take a look at the sample size, and the sample units, and then which gear the composition data represented.

Like I said, the point here is to get at the idea of catchability of the survey, and the whole review argued that we should not use the Great Red Snapper Count as an estimate of absolute abundance, even though that was, you know, what was intended, according to the title of the project, and so, in order to not assume it's an absolute abundance, we would have to change the catchability from one.

When we tried to estimate that in the model, we didn't have good enough information, and so, in order to get an estimate, we would have to provide -- We would have to be given a prior, or assume a prior, and so that's the point of this TOR, is to get at those specific review comments, and so I will stop there, and hopefully we can have discussion about this point.

CHAIRMAN NANCE: Thank you, Katie. That was a very good explanation. Sean, please.

DR. POWERS: I agree with the great explanation. Thank you, Katie. If we had to do it over again, semantics-wise, we would just have "estimate abundance", as opposed to the word "absolute", and they beat us up, and rightfully so, on the "absolute" part. We could have just stayed with estimating abundance, but, largely, that's a semantics issue, and it is abundance.

As far as they -- After harping on the "absolute" term, they really harped on the catchability, and I -- I disagreed with them, and I stayed out of the voting on this, obviously, but I think assuming a catchability of one is conservative.

They brought out -- They used some of Will's comparisons, which we used sidescan and ROV to suggest that catchability may be greater than one, which is unlikely, I think, and I don't think they fully understood the results of that part of the experiment and the areal differences between the ROV and the sidescan coverage, but we don't need to get in the details, except for that, yes, we need to have a separate, defined group that works on this, the analysts with the PIs, and I will do whatever I can to encourage the PIs to get you the size frequency information in the right format.

I mean, Greg did send a bunch of the stuff, but we need to make sure it's in a useable form for them, and so as well as incorporate the LGL study, since the Great Red Snapper Count didn't have direct observations for Louisiana, and so I'm fine with the suggestion. You know, I don't think there needs to be any more wordsmithing on it, and I think it captures what we need to do.

CHAIRMAN NANCE: Thank you, Sean. I'm going to skip Harry for right now. Will, please.

DR. PATTERSON: Thanks, Jim. I don't really have much of a hang-up here of absolute abundance versus abundance. I think, you know, you're estimating abundance, and it's not a relative measure, and we're not trying to examine relative trends across time, or trends in relative abundance, and, I mean, it's an estimate of abundance.

I think calling the study a count, you know, implies a census. Therefore, maybe that's where absolute came from, and I'm not sure where that actually -- If that was in the original language from Congress or not, but, you know, we're estimating abundance.

The issue of catchability -- You know, I don't see an easy way around it. As Sean pointed out, in the eastern Gulf, we did some paired ROV and splitbeam sonar surveys, and apparently the CIE reviewers picked up this, and they saw the discrepancies in the estimates between those two as an indication that, you know, it was pointing to issues with catchability.

As Sean pointed out, there's a difference in the footprint that the multibeam was sampling versus the ROV, and, if we had it to do over again, I think, if you're going to use optical gear and sonar gear, what you need to do is conduct the sonar survey -- Whatever footprint that is, you need to go in and subsample at the scale of the ROV samples, which is at about a thousand square meters, instead of a square kilometer, which is the footprint of the areal coverage of the splitbeam, and then examine what the spatial variability of whatever species you’re dealing with, here red snapper, within that.

You know, we weren't thinking about that at the time, and we thought we were covering our bases in the east with this comparison, and the other studies, that I won’t get into, where we actually tried to estimate the behavior of red snapper relative to the gear, but I don’t know how you can go back now and do that for this study, unless there was, you know, funding, and, with the timeline, it just doesn’t seem possible to go back and produce those data that would be necessary to examine how those different gears interact in the estimates of catchability.

I do think that the other work that we did in the east, and the visibility of the water, makes it a fair assumption that you have a catchability of one in the east, but, to Katie’s point about putting a prior on that, I think you can do that, and set it less than one for the camera gear in the east, and not speaking for the other methods that were used, but, if there’s conflict in the model, and the model doesn’t want to go up to that value of abundance estimate coming from the Great Red Snapper Count, and the likely reason for that would be, if the catch-at-age data is coming from shallower waters to the age comp, which is really important, and the fit of the SS model is coming from the shallower waters, and there’s this other portion of the stock that is basically not targeted, and it’s unfished deeper, then that could have a big impact on how the assessment is estimating population biomass.

If the model can’t -- Otherwise, without the red snapper, you know, count data, it doesn’t want to actually fit to that higher abundance estimate, then, if you put a prior on catchability, it’s probably just going to hit the bound of that prior, you know, whatever the dispersion measure that you put on that prior, and it's probably just going to hit the lower bound, and hit there, and, I mean, it’s worth pursuing, and looking at, but that’s my bet.

I just don’t see how we have any other data to readdress this. I mean, we were asked this before, in the first workshop, and, you know, this was considered, and discussed, but, you know, unless there’s something I’m missing, I just don’t see how we go back now and, you know, estimate catchability. The reason it was set to one is because we didn’t feel like we had the data to challenge that in any meaningful way.

CHAIRMAN NANCE: Thank you, Will, and I think, in my opinion, the way it's written now, I think consider and evaluate, those types of things, I think it gives us the flexibility to be able to have a discussion about it and look and then make some determination. Harry, please.

MR. BLANCHET: I will try to reassure you that this is not the epitome of wordsmithing, but it's going to sound like it. In the first line, change "i.e." to "e.g.", because there could be other external surveys, and I'm aware of one, and Katie reminded me of that, because of the mention of the age and length comps that were provided outside of the time range of the Great Red Snapper Count or the LGL survey.

LGL had done a previous survey of oil structures, oil and gas structures, in the western Gulf for BOEM, and that was not included as part of their survey that they contracted with us, and my guess is that is the source of those additional length comps, but, essentially, that is an additional survey that was not included as part of the -- Of our survey, but it is relevant to the discussion of abundance of red snapper in the Gulf of Mexico, and so, therefore, the "e.g.".

CHAIRMAN NANCE: Thank you, Harry. Any other comments on this item? Okay. Seeing none, we'll go ahead and go to Item Number 7, Katie, please.

DR. SIEGFRIED: Thanks, Mr. Chair. The rest of the data TORs are pretty standard, in that we just asked for research recommendations, and we do -- It is important here to state that we're trying to be -- We would like not the kitchen sink thrown in, and we would like some actionable items as well, and perhaps we can be thoughtful about highlighting these as either short-term or long-term research recommendations, but that's a pretty standard TOR.

To include guidance on sampling intensity and appropriate strata and coverage, we added in light of the issues that came up with a variety of topics, like the indices for the three areas, age comps and all of that, and so I think that's particularly pertinent toward actually -- Or addition, and it actually goes along with what Luiz asked for before in better sampling by our strata, proposed strata.

Then the last one I don't think is up for debate, but we can wordsmith, if necessary. It's just a data workshop report providing our complete documentation of anything that we did at the workshop and then any decisions, and then make sure we're on time with that, and so that's the rest of the data TORs.

CHAIRMAN NANCE: Okay. Any comments, input, for the data portion of these TORs? Okay. Let's go ahead and go into the assessment portion.

DR. SIEGFRIED: Okay. Thanks, Mr. Chair. Quite a bit of what's already been discussed was not just for the data workshop, and like, for instance, what Will was just talking about, and we anticipate he's probably right, and, you know, if we assign a prior, what's going to happen with that, and so some of these things probably need to be either added or make sure that we've highlighted where we would do those things.

First, we just -- This is standard, to review any changes in data, or analyses, following the data workshop and make sure that those are -- That all the data are summarized, which ones -- Which data series we're using in the assessment, and then provide any justifications for deviating from the data workshop recommendations. I hope there's not debate about that one. That's pretty standard.

Number 2 is to detail the model-building procedure, including any modifications for -- That are -- Sorry. Including modifications from the previously-approved stock assessment, which is SEDAR 52, and characterize the effects of new data and methods in the model performance, and we did not have this for the research track, and it was one of the things that I know people wanted to see.

This will be somewhat difficult, and it may not -- Well, it will be difficult, and it will not look like what you're used to seeing with our model building, because we're going from a two to three-area. SEDAR 52 was two, and 74 is a three-area, and so we're going to have to be creative in what metrics we show as we're building the model in that standard table that we provide, but we are open to suggestions about quantities of interest to folks as we provide that model-building table.

CHAIRMAN NANCE: I would like to hear any SSC recommendations on this, because it's not going to be where we see the 52 model run and then the new model run side-by-side, to be able to evaluate, you know, what the new -- Just by adding years, and those types of things, and there's not going to be that type of run, and so I think any input we can provide the center at this point would be helpful.

DR. SIEGFRIED: We have some ideas, and we can certainly entertain more ideas about it.

CHAIRMAN NANCE: Katie, if you have any --

DR. SIEGFRIED: Sorry, Jim, and I didn't hear the end of what you were saying.

CHAIRMAN NANCE: I was just saying if you have any idea for -- Go ahead and I guess present what the center is thinking about showing, and I think that would help in the discussion.

DR. SIEGFRIED: Okay. Well, our -- I can actually pull one up, to make sure my statements aren't quite off, but normally what we would look at are things like the likelihood, and we would look at things like number of parameters, and we would look at -- I mean, those are just not going to be relevant between a two and three-area model, right, and there's going to be differences in likelihood, for reasons other than just the standard model building.

One of things that we were thinking of presenting, and the red snapper team and I haven't come to a full decision about this, but showing maybe the levels of SSB, or, you know, some sort of quantity like that, some magnitude of abundance, something about R zero, something like that, to show sort of how those things change as we model build, but all of the other diagnostics won't be relevant between the two and three-area model. It would really be more like looking at those sort of standard quantities, something about abundance.

CHAIRMAN NANCE: Yes, because, in my mind, the three-area model is a brand-new model, and it's not just adding upon what was done in SEDAR 52, but it's basically presenting a brand-new model, and so the comparison between the two is -- I won't say it's irrelevant, but it's going to be very different, and so I think each of -- Go ahead, Katie.

DR. SIEGFRIED: The point of showing the model building is to make sure that we understand the directional effects and the effects on the magnitude of certain key quantities and then whether we're introducing something that's causing the model to say go berserk in between different steps, and so we're going to have to show sort of the beginning of a three-area model, and then the model building there, and then just show those metrics of abundance between the 52 final model and as we move along, and there's really nothing else, that I can think of, to show.

CHAIRMAN NANCE: Yes, I agree with that. Okay. Seeing no hands, let's go ahead and go to Number 3, please.

DR. SIEGFRIED: Okay, and so what we're stating here is that we would start with the SEDAR 74 model that went up for review, and then we would modify that, as appropriate, for the available data, and so we would do an evaluation of start year, and we would evaluate the selectivity and retention functions for all directed, discard, and bycatch fleets, as appropriate, and we'll have to do quite an extensive evaluation of the effects of any bias correction to our fishery-independent or dependent data on reproduction and age-length compositions, and what we see there is sort of keeping an eye on the effects on reproduction, or rec devs, as we fit our age and length compositions. Can you say "age and length compositions", Jessica? Sorry. I missed an "and". In the first bullet, between "age" and "length", just put an "and".

MR. RINDONE: It would be "age and length compositions".

DR. SIEGFRIED: Thanks. Then we would investigate fitting recommended length composition data, as well as developing age-length keys and converting length frequency to age compositions external to the modeling process, and these are some recommendations of the review. We would investigate the use of nominal and weighted, as recommended by the data workshop age compositions for our directed fleets, either independently or along with the length compositions for the same fleets.

There were suggestions from the reviewers, as well as some of our ADT, and our red snapper team is already kind of looking at this, because this all matters very much to them, and this is what they do, and looking at combining length and age compositions, and what happens to the model, and then also looking at nominal versus weighted, which is a big problem that the CIE reviewers had.

Then explore whether available data supports the estimation of growth parameters within the model, and we do kind of do that as standard practice, and so we'll explore that, and then evaluate the effects of any bias corrections, and is that a -- Did I duplicate that, too? Yes, and that's a duplicate bullet. Sorry about that. The second-to-last bullet is also the first bullet.

Then document assumptions made when mirroring between west, central, and eastern Gulf parameters. Determine the validity of those assumptions using diagnostics, and so what we can do is show justification, explicit justification, for the need to mirror and then how it improves the model when we do mirror, and what we're actually explicitly doing when we mirror, whichever parameters we suggest doing. That's the first sort of meaty TOR, and it's a lot. It's a lot of work, but those are all things that were recommended from the CIE review.

CHAIRMAN NANCE: I think this is a very good one, and it does provide a lot of reflection upon what's going to be done and to look at the data, and the outputs, and any biases and those types of things. Any input from the SSC on this particular TOR? Harry, please.

MR. BLANCHET: Thank you, Mr. Chair. Katie, in the intro, you said that you were going to be starting with the SEDAR model set that came out of the assessment, or that went into the review process, and is there going to be some method in there to also consider the work that was done within the review process, within the CIE review, because it seemed like it was an awful lot of work that has to happen there, and I don't know -- I assume that there was some sections there that could be appropriately carried forward, but I just don't know, and is that just implicit? Thanks.

DR. SIEGFRIED: That's what we're intending to do with this whole TOR, Harry, and that's a good point. Our 74 model didn't change during the review process, and it was very strange, in my experience, to not have multiple iterations of the model explored during the review. Usually the assessment analysts are holed up, you know, every day, for the whole process, doing multiple runs, and they didn't ask for anything different.

MR. BLANCHET: Okay.

DR. SIEGFRIED: So, if we had a final version as a result of the review, we would start with that, but we didn't have any additional runs during the review.

MR. BLANCHET: Not being in the room, I guess I missed that.

DR. SIEGFRIED: No problem. There are just all the things that we got from that review that we would want to go ahead and explore. Any other questions about 3?

CHAIRMAN NANCE: It doesn't look like it, Katie. I think it's well written, and I think it provides what we want to have there, because, basically, we're starting with the three-area model, and then evaluating it, from the assessment standpoint. Okay. Let's go ahead and go to Number 4.

DR. SIEGFRIED: I'm really happy with the way this is going, because we spent so much time with, you know, council staff, and then our group spent so much time, and so I do think that a lot of it is written here, and it's all the stuff we wanted to hear from the SSC, and so I'm happy with the --

CHAIRMAN NANCE: Yes.

DR. SIEGFRIED: Number 4 is, if external surveys were recommended during the data workshop, and so that's the Great Red Snapper Count, LGL, and any other external surveys, and work with the survey PIs to incorporate the survey in the model, as suggested, and where possible, and so this is the extension of sort of what Will was concerned about, in his comments, and so we want to demonstrate any effects to other data fits and evaluate the fits to the surveys directly.

You know, what happens if we have a prior that informs the model that catchability is not one? We're not going to fix it at one, at the advice of the group, but this is where we would evaluate all of the things that Will had mentioned. If fits to any external surveys are determined to be unacceptable by the assessment panel, then we would discuss, and explore, other ways in which the data from those external surveys might inform, even if indirectly, other aspects of the assessment. This was taken directly from the review report, where the panel, as a whole, stated that, well, even if you can't put it in the model, can you think about other ways to use the data.

It's expensive data, right, and it's important data, and so can we try all different ways to consider it, and that's the point of Number 4. Any comments?

CHAIRMAN NANCE: It doesn't look like it, Katie.

DR. SIEGFRIED: Okay.

CHAIRMAN NANCE: Let's go ahead to Number 5, please.

DR. SIEGFRIED: Okay. Thanks. The next one is about providing estimates of our stock population parameters. Some of these are pulled from other TORs, give or take, benchmark-style assessments, and so we want to provide fishing mortality, abundance, biomass, selectivity, stock-recruit relationship, where possible, and other parameters, as necessary, to describe the population.

We are stating that we'll run appropriate sensitivities of key parameters, like steepness and natural mortality, to demonstrate their effects on the stock population parameters, and this is sort of -- We do these sensitivities to make sure that the model is behaving the way we think when we move natural mortality up or down or change steepness values.

Then explore sensitivities of other biologically-relevant estimates of steepness, based on species with similar life histories, and this came from other CIE reviewer comments, and I think it was for scamp, where there's basically congener values. We can either apply a prior or we can fix it at the steepness of similar species. Any comments about 5? It's pretty standard, but, if you're thinking that we missed something, just let us know.

CHAIRMAN NANCE: This is, obviously, our ability to input -- It looks very straightforward to me.

DR. SIEGFRIED: Okay.

CHAIRMAN NANCE: Okay. Go ahead, Katie.

DR. SIEGFRIED: Number 6 is about uncertainty, and this is where we highlight what types analyses we'll do to characterize the uncertainty in the assessment and estimated values, and so explicitly consider uncertainty in input data, the modeling approach, and the model configuration, and so we want to get at -- If we can, get at things like process error and observation error and model misspecification here. Provide appropriate measures of model performance, reliability, and goodness of fit. We would provide our standard diagnostic array, and then provide measures of uncertainty for estimated parameters. Any questions about that one?

CHAIRMAN NANCE: It doesn't look like it.

DR. SIEGFRIED: Okay. 7 is where we would provide estimates of population benchmarks, or management criteria, consistent with available data, applicable FMPs, proposed FMPs and amendments, other ongoing or proposed management programs. Jessica, can you place an "and" before the "other" at the end of that first sentence for 7? So "and other ongoing or proposed management programs".

CHAIRMAN NANCE: Thank you.

DR. SIEGFRIED: Thank you. Evaluate existing or proposed management criteria, as specified in the management summary, and then recommend additional proxy values, when necessary. I think that's pretty standard as well, and we just didn't have this for the research track.

CHAIRMAN NANCE: Yes, I think that's great. Okay. Luiz, please.

DR. BARBIERI: Thank you, Mr. Chairman, and thank you for this, Katie. Just to confirm, right, this second bullet, recommend additional proxy values, when necessary, and so I'm thinking about how this would be done, right, and how this ties against this Number 4 above, right, and whether we decide, for the assessment process itself -- Decide that you can incorporate data from the Great Red Snapper Count or other external surveys.

I'm thinking about the scope, you know, the geographic inference area that we are applying that for the stock estimates, right, in terms of stock size, right, and so I'm thinking that what you mean there, in that second bullet in Number 7, is, you know, potentially, if we decide that we're going to incorporate at least the abundance part of the Great Red Snapper Count, or other external surveys, that we're going to actually reevaluate what the proxy values would be, you know, related to the productivity of the stock, correct?

DR. SIEGFRIED: If we incorporated something that hadn't been used prior, when the F 26 percent was determined, something where we include abundance on areas that are not necessarily fished now, that would be one reason to consider additional proxies. Another would be if we redid that analysis and came up with a different number that was provided for 52, and I shouldn't say "we", because I didn't do it, but the Science Center staff.

Those would be reasons to recommend different proxy values, but we would provide the ones on the books and then determine if there was a need, based on the final model configuration, to recommend additional proxy values, yes.

DR. BARBIERI: Perfect. Thank you.

CHAIRMAN NANCE: Thank you, Luiz. Okay, Katie. Let's go ahead on to 8.

DR. SIEGFRIED: Okay. I think this one is pretty standard too, and we can go over it quickly. This is the projection TOR. We want to project our future stock conditions using the model, and we would project biomass abundance and exploitation, including our PDFs, and develop rebuilding schedules, if warranted, and fingers crossed not, and include estimated generation time.

Develop stock projections for the following circumstances, in accordance with the guidance, and that's, if it's overfished, then we do the standard suite, the no fishing, the F current, the FMSY, and the rebuild, and then also the fixed landings equal to ABC. If it's overfishing, then we have a set of standard projections.

If the stock is neither overfished nor undergoing overfishing, then we would do the F at F current, our FMSY proxy, or MSY, and then a 75 percent for the ABC projection.

CHAIRMAN NANCE: Do you want the "fingers crossed" added? I'm just kidding.

DR. SIEGFRIED: Yes. I want people to know that that's --

CHAIRMAN NANCE: No, absolutely, and this one looks pretty straightforward, too. Any comments or corrections? This is typically very straightforward, but, if there's any change, or input, that we want now, let's do it. Okay, Katie. Let's go ahead.

DR. SIEGFRIED: Okay. The last two are pretty standard, the provide any future research recommendations, or, sorry, provide recommendations for future research and data collection, anything that came up during the assessment that we did not include in the research recommendations from the data workshop.

We're going to emphasize items that will improve our future assessment capabilities and the reliability of our management advice, consider things like data monitoring and assessment needs, and then the last one is just complete assessment webinars, write the assessment report in accordance with project schedule deadlines, and we have our standard automated scripts and everything now to provide that assessment report, and so that just says do our webinars and make sure we're on time with our report.

CHAIRMAN NANCE: Okay. Any comments, changes, or suggestions for the assessment portion of the terms of reference? Harry, please.

MR. BLANCHET: Thank you, Mr. Chair. This is actually going back to Number 8, and I didn't get my hand up in time. One of the things that we have often seen in other assessments is that we have a stock that historically has been overfished, and we have a new assessment, and suddenly we have found, or discovered, revealed, an excess above the threshold, above the minimum of this biomass that is harvestable stock, and, if we do the typical FMSY, we then drive that stock back down to what the current estimate is of the minimum, which, of course, is then subject to the variance that goes into the next assessment, so that you flip-flop back and forth.

I know there's been a lot, a lot, of research regarding how you address this, but, right now, what we've got, in terms of outputs, if a stock is neither overfished nor overfishing, you've got F current, FMSY, and 75 percent of FMSY, and is there a -- Is there some additional way that you can frame options, going into the future, that might be more recognizing the inter-assessment variability, and just thinking in terms of --

So we don't end up with this flip-flopping effect, where we say we've got additional stock to harvest, and then, the next time we come back, we say, oh, we don't, and we kind of overshot that mark. It just seems that, under C, there might be some other provision there that might be available, or that could be incorporated. Thank you.

CHAIRMAN NANCE: I think we put this in as a standard one, because this is what we see at the end, and we always want to see an F equals 75 percent of FMSY, as a run that the center does, but that hasn't stopped us, in the past, from asking for a change in that, once we've seen the output from the assessment.

MR. BLANCHET: Yes, I agree with that, and I just don't know if this is something that you want to put this as a -- Whether we want to do it as an ad hoc thing when we review the assessment.

CHAIRMAN NANCE: From my perspective, it seems like that's a better way to do it, as opposed to trying to think about every possible scenario and putting them in here, and that's just me. Roy, did you have anything on that specific recommendation?

DR. CRABTREE: It's kind of along those lines. If the stock is neither overfished nor undergoing overfishing, it seems like what you would do is fish at FOY. Now, I'm assuming that F equals 75 percent of FMSY, that represents FOY, and I don't remember what OY is for red snapper.

MR. RINDONE: It's 90 percent of MSY.

DR. CRABTREE: Wouldn't we have something in here then to fish at FOY? That's really the long-term objective of the Magnuson Act, is to achieve OY. Then, if you did fish at that reduced level, you wouldn't fish the stock back down to the minimum that Harry is talking about, and you would actually be above BMSY.

MR. RINDONE: We can add in "90 percent of MSY" also, but you guys have been leaning pretty hard on 75 percent of F at MSY for the last few assessments, and so that's why we put that one in there.

DR. CRABTREE: It's just I think that, to be consistent with --

MR. RINDONE: It would end up being so dissimilar.

CHAIRMAN NANCE: Go ahead, Roy.

DR. CRABTREE: Yes, we would normally want to fish at OY, and so it seems like that should be reflected somehow.

CHAIRMAN NANCE: John, please.

DR. FROESCHKE: The fundamental challenge is, a lot of times -- I mean, when we went through and developed Reef Fish Amendment 48, which established the status determination criteria and all that for all these stocks, and, you know, we got pretty explicit legal advice that you can't set OY, because it's a long-term value, towards equal to your ACLs, which, obviously, are annual, and so, to the extent that you have to abide by the annual catch limits, you likely cannot achieve the OY, based on that on an annual basis, and that's a fundamental problem, as I see it, but it's not unique to red snapper.

DR. CRABTREE: The poundage of OY would be a long-term average, right, but there is an F associated with achieving that long-term, and that you can calculate an annual catch specification. Now, whether that would be your ACL or not is a whole different issue, but that would be the target catch that you're trying to achieve. Anyway, I guess that's something more for you guys and the Regional Office to sort out.

CHAIRMAN NANCE: Thank you, Roy.

DR. SIEGFRIED: Mr. Chair, to that point?

CHAIRMAN NANCE: Yes, please.

DR. SIEGFRIED: Ryan, I was looking at the 52 report, and the F target, and, in other words, FOY there is 75 percent FMSY, and so I thought that's what we were doing with that, is it was FOY for red snapper. Is that --

CHAIRMAN NANCE: Ryan.

MR. RINDONE: I'm looking at -- I think it's Amendment 44, when we redid all that SDC, and OY was defined as 90 percent of MSY.

DR. SIEGFRIED: Okay.

DR. FROESCHKE: I don't think that's right.

MR. RINDONE: We didn't do that for red snapper? Red snapper wasn’t included in that?

DR. FROESCHKE: (Dr. Froeschke’s comment is not audible on the recording.)

MR. RINDONE: Okay.

CHAIRMAN NANCE: We’ll check specifically on that, Katie.

DR. SIEGFRIED: Okay. It’s the management history section of the previous report, and it was in 2018 that that was written, and so I don’t know when the other amendment was, but that was the intent. If there’s a different OY, we would want to capture that.

CHAIRMAN NANCE: Yes, I agree. Doug, please.

MR. RINDONE: We can’t hear you.

MR. GREGORY: I said let me follow Will. I think he was going to say something to --

CHAIRMAN NANCE: Okay. Will, go ahead, please.

DR. PATTERSON: Thanks, and thanks, Doug. I think where the FMSY, the 75 percent of FMSY, came from is that, when we were trying to use our control rule, we didn’t think that it fully captured the uncertainty in a previous assessment, and so that was actually how ABC was estimated, the OFL estimate at FMSY, and then the ABC estimated at 75 percent of FMSY.

If my memory is correct there, B and C are the same things, except this idea of fixed landings equal to ABC, versus C doesn’t say anything about fixed landings at F equals 75 percent FMSY, and so those -- I think that’s where the 75 percent of FMSY came from, was our previous estimate of how to -- Our previous approach of how to estimate ABC.

CHAIRMAN NANCE: Okay.

DR. BARBIERI: Can I say something to that point, Mr. Chairman?

MR. RINDONE: So the yield -- 75 percent of the yield at F at MSY is the current OY definition for red snapper also.

CHAIRMAN NANCE: Luiz, to that point, please?

DR. BARBIERI: Ryan, can you repeat what you just said? I’m sorry, and I missed that.

MR. RINDONE: I said all of us go out for pastries.

DR. BARBIERI: Oh, that's wonderful.

MR. RINDONE: I said that the yield at 75 percent of the fishing mortality at maximum sustainable yield is the current OY definition for red snapper.

DR. BARBIERI: That's good to hear, and, in that case, just one, you know, minor recommendation that might help people understand, even people who are thinking external, right, to the SSC, or are very familiar with the council process, that we can put F equals, and OY equals, 75 percent of FMSY, because, that way, we are explicitly saying that we're going to be estimating that for OY as well, and that will keep us in line with Term of Reference 7, right, which explicitly says that --

CHAIRMAN NANCE: (Dr. Nance's comment is not audible on the recording.)

DR. BARBIERI: I'm sorry, Mr. Chairman?

CHAIRMAN NANCE: Are you suggesting a change in A, that addition there, so that Jessica can put that in?

DR. BARBIERI: Under letter C, at the very end, "F equals OY equals 75 percent". I mean, just so we are explicit that we estimating this, so people will know that F at 75 percent of FMSY equals FOY.

DR. CRABTREE: Luiz, it would be "FOY". The way it's written doesn't really make sense, at the moment.

DR. PATTERSON: I think a way to simplify this is to say, if the stock is neither overfished nor undergoing overfishing, F current, FMSY, and FOY, and then you can say, which equals 75 percent of FMSY.

DR. BARBIERI: Yes, that's exactly what we meant to say. Very good suggestion.

CHAIRMAN NANCE: Ryan is going to come up and help you, Jess.

DR. CRABTREE: We just need to remove that "75 percent F".

DR. BARBIERI: Exactly. Yes.

CHAIRMAN NANCE: Is it the yield at?

DR. FROESCHKE: Yes.

MR. BLANCHET: I don't believe that's correct.

DR. CRABTREE: Well, if I could, Jim?

CHAIRMAN NANCE: Yes, please.

MR. RINDONE: That was based on what Will had said, I thought.

CHAIRMAN NANCE: This one, in the -- Yield at 75 percent of F 26 percent SPR.

DR. CRABTREE: Well, so 75 percent of the yield at FMSY would be pounds, and so FOY is an F value. The yield at FOY would be the yield at 75 percent of FMSY, but we don't want to confuse Fs and yields, because we have a long history of doing that in our documents.

DR. BARBIERI: Roy, that's exactly what --

CHAIRMAN NANCE: So will this right here correct?

DR. BARBIERI: We have FOY equals F 75 percent of MSY, 75 percent of FMSY, yes.

DR. PATTERSON: I would take out the "of" in the middle there, and just say 75 percent FMSY.

CHAIRMAN NANCE: Is that good in parentheses like that, Luiz, or do you want an equals sign?

DR. BARBIERI: No, I think that this covers it, and it's just to be explicit of the fact that we are going for FOY and then have the definition of FOY right there, yes.

CHAIRMAN NANCE: Okay. Roy, does that meet your -- Are you okay with that one?

DR. CRABTREE: Yes, I think that's fine.

CHAIRMAN NANCE: Okay. Will.

DR. PATTERSON: Yes, that's good. I think, for A and B, the third and fourth Fs in A should just be FMSY and F rebuild, instead of F equal to, and so just delete the "F equal to" in A. It has to be done in B as well.

CHAIRMAN NANCE: Okay. I think that fixes it. Thank you. Okay. Thanks. Doug.

MR. GREGORY: Okay. I was going to comment on the confusion of OY being in yield or fishing mortality rate, and it happened in January of 2020, at a council meeting, when I was presenting the SSC report, that -- In the status determination document, our recommendation of OY was in percentage of F, like we're talking about here, but it was changed, in the document, to a percentage of yield, and I raised the point to the council, and they kicked it back to the SSC, and, if my memory is right, in that discussion, it was Will that was referencing some work done early on, by Mason and others, that equated a percentage of FMSY to a yield.

I think the number that came out was that 75 percent of FMSY is equivalent to 90 percent of MSY, but that doesn't need to be in here, but that is what we decided at that meeting in 2020, that the two were kind of equivalent, depending on which way we wanted to go, and we've used them in different circumstances. Thank you.

CHAIRMAN NANCE: Thank you. Any comments on Doug's comment? Okay. Seeing none, I appreciate that comment.

DR. CRABTREE: Jim, I have one.

CHAIRMAN NANCE: Roy, please.

DR. CRABTREE: That's getting into the whole issue of equilibrium estimates versus year-specific estimates. At equilibrium, over a long-term, it did show that fishing at -- I think it was 75 percent of FMSY gives you about 90 percent of MSY, but, in any given year, if you're fishing at FMSY, and you decide to fish at 75 percent of FMSY, then that's going to be a 25 percent reduction, but, in the long-term, because the biomass builds to a higher level, it becomes less.

CHAIRMAN NANCE: Okay. Thank you. Okay. That takes care of the assessment part of the terms of reference. I'm going to go ahead and take a fifteen-minute break now, before we get into the review, and I don't know how long the review one is going to go. It could go for two minutes, and it could go for fifteen, and so we'll see, but let's go ahead and take a fifteen-minute break, and so we'll come back at 11:05 Eastern Time for the Shrimp AP meeting. No. For the SSC meeting. Thank you.

(Whereupon, a brief recess was taken.)

CHAIRMAN NANCE: We'll go ahead and get ready to start, and, Katie, I think we were on the review workshop terms of reference, and so we'll go ahead and start there.

DR. SIEGFRIED: The first one is about the data explicitly, evaluate the data used in the assessment and include discussions of the strengths and weaknesses of data sources and decisions and then consider the following bullets. Are the data decisions made by the data workshop, and assessment workshop, justified? Are data uncertainties acknowledged, reported, and within normal or expected levels? Is the appropriate model applied properly to the available data, and are input data series sufficient to support the assessment approach?

These are going to be the TORs that guide the CIE reviewers, as well as the SSC folks that are on the review panel, about the data used, and the sufficiency explicitly. Any comments about that one?

CHAIRMAN NANCE: Any comments from the SSC? Okay, Katie.

DR. SIEGFRIED: Okay. Number 2 is about evaluating and discussing the strengths and weaknesses of the methods used to assess the stock, and so the model explicitly, considering the available data. Are the methods scientifically sound and robust? Are priority modeling issues clearly stated and addressed? Are the methods appropriate for the available data, and then are assessment models configured properly and used in a manner consistent with our standard practices?

CHAIRMAN NANCE: Okay. I think just keeping going through each one, and, if I see a hand, then we'll go ahead and stop it there.

DR. SIEGFRIED: Okay. Sure. Number 3 is about uncertainties, and so how are the uncertainties addressed, and what are their potential consequences, and we are asking the reviewers to comment on the degree to which the methods used to evaluate uncertainty reflect, and capture, the significant sources of uncertainty in the population, the data sources and the assessment methods, and we're also asking that they comment on the relationship of this variability with ecosystem or climate factors and mechanisms for encompassing this into management reference points. Admittedly, this second bullet is going to be harder to address, but it's just there for them to comment on any efforts that we've made.

Number 4 is asking that they provide, or comment on, recommendations to improve the assessment, and so, first, we asked that they consider the research recommendations provided by the data and assessment workshops, in the context of overall improvement to the assessment, and then make any additional research recommendations that they see fit.

If applicable, we're asking that they provide recommendations for improvement or for addressing any inadequacies identified in the data or assessment modeling, and we ask that they describe these recommendations in sufficient detail for application and should be practical for short-term implementation or that they list them as longer-term recommendations.

This was carried over from the research track, because, actually, in the past, when we've had benchmark reviews, it would have been helpful to get their short-term and long-term research recommendations.

The next one is about the stock projections, and we're asking that they evaluate the stock projections, including a discussion of the strengths and weaknesses, while they consider the following four bullets. Are the methods consistent with accepted practices and available data? Are the methods appropriate for the assessment model and outputs? Are the results informative and robust, and are they useful to support inferences of probable future conditions, and then are key uncertainties acknowledged, discussed, and reflected in the projection results? I see some hands up.

CHAIRMAN NANCE: Yes, I do too. Harry, please. Go ahead and bring up the section that you wanted to discuss.

MR. BLANCHET: This is related to the ecosystem, or ecological, impacts, or metrics, and that has not been addressed in either the assessment or the data workshop terms of reference.

CHAIRMAN NANCE: That's Number 3, Jess.

MR. BLANCHET: Yes, Number 3. It just seems, to me, that that at least should be brought up in those prior terms of reference, for either the data and/or the assessment workshop.

DR. SIEGFRIED: Yes, that's a good point. We did carry this forward from the 74 TORs for the review, and we explicitly had some TORs for environmental, or ecosystem, factors that we did not include here. Let me see. Let me take a look at those, really quick. I do agree that, if we don't address those earlier, we probably should remove that bullet here.

Are there ecosystem, or climate, factors, and mechanisms, that folks want us to consider, that need to be brought to the data, and then an explicit TOR for -- Or at least a bullet point in one of the assessment TORs, or would they prefer to leave this out?

CHAIRMAN NANCE: I would think we would want to bring that up in the data portion. Wouldn't that be the place that it was brought up that there were some environmental parameters, or data, that would be useful in putting into the assessment, as opposed to having it in the assessment, without having those reviewed in the data workshop, and that's my suggestion.

DR. SIEGFRIED: Let me look at what was included previously, while other folks comment.

CHAIRMAN NANCE: Okay. Harry, thank you. Steve Saul, please.

DR. SAUL: Thank you, Mr. Chair, and thanks so much, Katie, and to the analysts and Science Center staff, and the Gulf Council staff, for working together on this. I think this is really great. One question, or point, that I was curious to make was if it's worth adding any language into the TOR that, for the review panel component of this, that somehow guides the reviewers to look at, or assess, or rather evaluate, the assessment, based on sort of the regional context, and what I mean by that is the data sources -- As we're all aware, the data sources that we have in the Southeast region, for the Gulf of Mexico, are very different from the data sources that are available in many other regions.

Each region, you know, across the United States, has different sort of data sources, different levels of sort of sampling across those data sources, et cetera, and so I'm wondering -- I know that was, at least for me, as a participant in the research track review panel, that was sort of a point of dissonance, somewhat, among the reviewers, and so I'm wondering if it's worth having a conversation about -- Or if it's even possible to include language that -- Some sort of guiding language about that. Thank you.

DR. SIEGFRIED: Mr. Chair, to that point?

CHAIRMAN NANCE: Yes, please, Katie.

DR. SIEGFRIED: I think that's a great idea, as far as making sure that the review panel is giving us -- Or is reviewing in light of our data availability, instead of what could be done if we were in a region that had more data, or something like that, and maybe we can come up with another TOR, or an overarching TOR, at the beginning of the review TORs, to evaluate the data used in the assessment in the context of data availability in the Southeast, something like that, for Number 1.

CHAIRMAN NANCE: I think that would be very helpful, yes, and, Steve, I'm glad you made that point. Ryan, do we want to -- Katie, can you suggest a -- And Jess can type it in, for Number 1, just an overarching one? We'll just put it as Number 0 right now, under review workshop, and not that it's not important.

DR. SAUL: I was just going to say that I think that this would be really important, and I think we lost some opportunities to provide more informed feedback, because we were just -- Because some members of the review panel were trying to look at the field of dreams -- What I would call the field of dreams approach, right, and it was like, well, why we don't have this, and why don't we have that, and, well, we don't, and so -- But this is what we have. I think that will hopefully yield more constructive feedback. Thanks.

DR. SIEGFRIED: Yes, sure, and I would recommend, even as the first bullet, to consider the following, and maybe something like consider the context of the data availability in the region, and this, of course, needs to be wordsmithed, but what are the data limitations, and are the procedures appropriate for our data limitations, something like that.

DR. SAUL: Yes, and essentially something that provides a mechanism to move forward, despite those data limitations as well, or at least provides enough latitude to the review panel, or ensures that the reviewers kind of focus on, okay, this is what's available, and let's evaluate the assessment based on that. Otherwise, it's like giving an exam to your students where you only -- You know, giving them a final exam, but you only taught half the semester, that type of thing.

DR. SIEGFRIED: Yes, and I agree with that.

CHAIRMAN NANCE: Okay. I think we can wordsmith that one later, but I think that certainly provides a placeholder for what's being discussed. Dave, please, Dave Chagaris.

DR. CHAGARIS: Thank you. I like including this additional TOR, and I'm wondering if maybe something could be added, in the data workshop terms of reference, or maybe there's a good point to actually sort of summarize, you know, what the data conditions are for this region at the end of the data workshop, and that might just more on the top of everybody's mind, but, also, just to remind -- It sounds like what we sort of need is like a synthesis of like the data quality in this region that can easily be, you know, grasped by the potential reviewers, and so potentially maybe developing that, how the data workshop would work.

I was also going to comment on what Harry mentioned about the ecosystem considerations. Even though we haven't really, you know, thought about that much for this species, where it has -- Where that information has been brought forward, it usually has gone through the data workshop stage, and so I think having some reference in the data workshop on the ecosystem considerations would be good to set it up for these other considerations, for the review workshop terms.

CHAIRMAN NANCE: Yes. Thank you. Jess, can you -- That part that we just added, can you make that a bullet, under 1? Perfect. Thank you. Dave, thank you for that suggestion. Luiz.

DR. BARBIERI: Thank you, Mr. Chairman. I just want to go one step further here, and, you know, this may not be the best place to finalize this discussion, but I just wanted to put this out there, since this topic is on the table right now, but on whether it would be possible, actually, for NOAA Fisheries, as it works with the CIE, right, the actual administrative portion of the CIE, in developing the scope of work, right, that we approve in the contract with the CIE reviewers, if that can be explicitly presented in that scope of work, you know, this issue that Steve Saul brought up, which I agree completely.

You know, it’s very, very relevant, and it takes this into account, and, obviously, it caused problems for the SEDAR 74 review, and I’m wondering -- I know that NMFS tries to stay, you know, more than one degree of separation from the CIE, you know, to avoid the perception of a conflict of interest, and that’s understandable, but I do feel that, as their reviews are supposed to be addressing reviewers that work with different council regions, that the scopes of work should be written in a way that reflects, right, what are the realities for that specific region.

To Dave Chagaris’ point -- Katie, just something there to discuss, right, with the center leadership, or perhaps NMFS leadership, in terms of discussions with the CIE, in terms of development of the scope of work, right, and then, to Dave Chagaris’ point, which I think is a good one as well, right, that information about the data availability across regions, and the data challenges that exist for different regions -- I just want to put this out there, that the Government Accountability Office, the GAO, actually issued a report, in 2022, on this exact topic.

“Federal Fisheries Management”, and this is the title, "Overfishing Determinations Vary Across Regions and Data Challenges Complicate Management Efforts", and I can send that to Jessica, after we finish talking here, and she can distribute it to the committee, but I think there's a lot of good information there about those differences, and that they actually need to be taken into account. Thank you.

CHAIRMAN NANCE: Thank you, Luiz. I look forward to seeing that. Okay, Katie. Let's go ahead, and I think those were very good discussions, very good input, and I think adding that one little bullet I think helps. So we've got Number 1, and I think were on the -- Go ahead.

DR. SIEGFRIED: To Luiz's point, I do have a plan to help write the performance work statement for our reviewers, and that would be a process -- That would be at the point at which I could actually influence who would be in our panel, as far as their technical expertise with more data-poor methodologies, and not that red snapper is data-poor, in our opinion, but, in other regions, maybe it's considered data-poor, and so that would be a place that we could also say, okay, technical expertise with data-poor methods, technical expertise with modeling discards, those sort of things that may not be recreational catch, all of that that may not be a universal qualification, and hopefully that will help, along with this extra bullet point.

CHAIRMAN NANCE: Yes. Thank you.

DR. BARBIERI: If I may, Mr. Chairman, just quickly, that's so good to hear, Katie, because I think that this is needed, and so I'm glad that you have the opportunity to provide input there, and I think that will be a big help. Thank you.

CHAIRMAN NANCE: Okay. Let's continue on, Katie. I think we were on maybe 5, and I can't remember.

DR. SIEGFRIED: I think so. Just one second.

CHAIRMAN NANCE: Will, go ahead, please.

DR. PATTERSON: I was just going to add a comment about what Katie just said about whether red snapper is data-poor or not, and I think the issue that we run into with red snapper is not that it's data-poor, but it's that we have a little bit of information about a lot of things, and so we have data breadth, but, in some places, we don't have quite the depth of data, and that's when we have things like mirroring going on, or other issues to try to fill in all of the cells of the matrix, but, yes, it's an interesting species, because, you know, it's not data-poor like amberjack, but it's not -- We don't have the depth of information you need in every single one of these parameters that you're trying to model, and I think that's where the problem arises.

CHAIRMAN NANCE: That's a very good point. Okay, Katie.

DR. SIEGFRIED: Thanks for that, Will. I agree, and we do need people with expertise about diagnostics and all of that. That would help with that portion of it as well. Okay, and so we're on Number 5?

CHAIRMAN NANCE: Yes.

DR. SIEGFRIED: Okay. This is where we ask them to -- I feel like I said this, and maybe it's just similar wording, but this is where we ask them to evaluate stock projections.

CHAIRMAN NANCE: We may have gone over it.

DR. SIEGFRIED: Yes, and I think I went over this one.

CHAIRMAN NANCE: Yes.

DR. SIEGFRIED: The main point here that I thought there may be discussion about, based on what we talked about before -- The main thing here is the key uncertainties. Normally, we provide an envelope of uncertainty, but Nathan's RESTORE project is going to add to what we can produce here for uncertainties, and so we do plan to do quite a bit of work on the stock projections, and we're hoping that it's a better product for you all and that the CIEs can give us some feedback on that.

For 6, it's just standard issue, to prepare a review workshop summary report describing the panel's evaluation, and it's not an ADT, and it's a panel, and it's going back to a panel approach. Their evaluation of the stock assessment, as well as the CIE reviewers, and then making sure that we've addressed each term of reference, and so our assessment report will be added to their review workshop summary, just as has always occurred, and so that -- I think that's the last one for all of our terms of reference for review.

CHAIRMAN NANCE: Yes, and that's good. Okay. I think that's one of our better discussions on TORs. Usually we kind of gloss over them real quick, but this I think we did a very good job on, making sure that this one is satisfactory to move forward, and so I appreciate all of the discussion.

DR. SIEGFRIED: Thanks, Jim. I forgot something.

CHAIRMAN NANCE: Go ahead, Katie, and then Carrie.

DR. SIEGFRIED: I didn't address Dave's request for a component in the data workshop TORs, and we still need to put that bullet point, and I guess, Ryan, if you want to pull what we had from 74 to consider, and there was a CMS index that we could include, but that's the only thing I think that's outstanding.

CHAIRMAN NANCE: Let's go back up to the data one, Jess. We could either do it now or do it -- If the SSC would be agreeable to just have Ryan and Katie put that into the data section, and I think we all know what we want in there, if that's agreeable.

MR. RINDONE: I am pulling up the old one now.

CHAIRMAN NANCE: Okay. While he's looking for that, Katie, let's go ahead and go to Harry and then Carrie.

MR. BLANCHET: Mr. Chairman, my point was to the ecosystem, and I think that's what you're dealing with right here.

CHAIRMAN NANCE: Yes, it is.

MR. RINDONE: So it was develop an updated connectivity modeling simulation recruitment index for recruitment forecasting and explore potential hypotheses to link the ecosystem and climatic events identified to population and fishery parameters. Is that what you want to add in? This was in the data workshop.

CHAIRMAN NANCE: David, is that a little bit too much?

DR. CHAGARIS: I think that's fine. I like that specificity, but I do think maybe some more broader language would be good as well, you know, or any other relevant ecosystem information that may be available, but it should be brought forward at the data workshop stage.

CHAIRMAN NANCE: Yes, I agree.

MR. RINDONE: So explore potential hypotheses to link any relevant ecosystem and climatic information identified to population and fishery parameters, something like that?

CHAIRMAN NANCE: That sounds good, and, Jess, we'll have Ryan put that in, or have you got it?

MR. RINDONE: I just sent it to Jess.

CHAIRMAN NANCE: Okay. While Jessica is putting that in, Carrie, please.

EXECUTIVE DIRECTOR SIMMONS: Thank you, Mr. Chair, and so, Katie, could you just remind us again of the working groups you're thinking, so we're all clear, for the data workshop? That was one item, and then I have one other.

DR. SIEGFRIED: Yes, and so we have a life history group, that will focus on age comps, with the necessary views of length comps, and we're not going to revisit maturity and all of the other things, and then also growth, if there is any need to update that, and we'll have a recreational catch statistics group, and we'll have an external survey group, which will cover the Great Red Snapper Count, LGL, and any other external work. I am pulling up my -- That will be -- The shrimp bycatch will have to get discussed, along with the indices, and so those are the four groups, and so life history, and, Ryan, correct me if I'm deviating from what we talked about, but life history group, rec stats group, bycatch/indices, and then the external surveys.

CHAIRMAN NANCE: Those four groups are for the data workshop?

DR. SIEGFRIED: Yes, and so it's basically not having a commercial workgroup and not having a full examination by the life history group. All of their other decisions seem to hold.

MR. RINDONE: Or discard mortality.

DR. SIEGFRIED: Right.

MR. RINDONE: Jess, for life history, rec statistics, external surveys, and indices and shrimp bycatch.

CHAIRMAN NANCE: Okay. Jessica is --

MR. RINDONE: What?

CHAIRMAN NANCE: No, and you're fine. This is just discussion on the data workshop.

MR. RINDONE: For the thing that I sent you, Jess, that -- Let's put it after -- Let's make it the new Number 7, and then 7 becomes 8, and 8 becomes 9.

CHAIRMAN NANCE: Yes, and that's a good place. So the part she just added here is going to be the new Number 7, and so take a look at that, and it looks --

MR. RINDONE: We are supposedly being supported by AI, and the smartest version of Word yet.

CHAIRMAN NANCE: Yes, and so that will be the new Number 7, is develop an updated connectivity modeling simulation and recruitment index for recruitment forecasting and explore potential hypotheses to link any relevant ecosystem and climatic information identified to population and fishery parameters. I think that gets at the point where we're trying to integrate -- See any data that are available and integrate that into the model, which would then be reviewed during the review. Dave, please.

DR. CHAGARIS: I'm sorry. I must have still had my hand up.

CHAIRMAN NANCE: Okay. Did you have any problem with that one though?

DR. CHAGARIS: I think that's fine. It covers it all, and I like that it is tied to the parameters, because this is, you know, an assessment model that would need a type of integration.

CHAIRMAN NANCE: Okay. Thank you. Okay. Carrie, please.

EXECUTIVE DIRECTOR SIMMONS: Thank you, Mr. Chair, and so one of the things that I wanted to bring up, that we spent some time talking about at the SEDAR Steering Committee, and one of them was already discussed, which was the CIE involvement, with the performance work statements and the center being more involved with that, and so I think we've covered that.

The other thing that was kind of discussed, you know, that we kind of uncovered during this research track process, but now we're going back to benchmark, but we're also making some other improvements, with SEDAR and the Science Center and partners on this whole reimagining process, is just better communication with the SSC.

Internally, we've kind of started trying to think about what that would entail, and we don't want to rehash what was done at this various workshops, but we want to keep everybody informed and engaged, and so one of the things we were thinking about is, if you're involved in one of these workshops, or serving on the panel, we would maybe ask an SSC member to provide an overview of those outcomes, and we would have to figure out what the timing would be on that, as far as like do we wait until the working papers are done, or what the appropriate timing would be, but have a public forum where we're discussing what those outcomes were from the various workshops, and not to rehash them, but just to keep everyone informed. Thanks.

CHAIRMAN NANCE: That's a good idea, because I think, while we all have the opportunity to listen-in on things, sometimes we may not take that opportunity, and then to have that brought back, for those that were there to bring up any issues that may be pertinent, I think is important to do, and so I certainly agree with that concept. I think that concludes going over the TORs for red snapper. As I said, it was a good discussion. We want volunteers for the data workshop, and do we bring up for the assessment, and also the review, at this time, Ryan, or do we do that later?

MR. RINDONE: Can you say that again? Sorry.

CHAIRMAN NANCE: For the data workshop, for volunteers, do we do any for the review, for the assessment and the review?

MR. RINDONE: So Julie is still working on finalizing the schedule, and so, right now, we're just going to do the data workshop, and so, for now, just the data workshop, and so we'll hit up the people for the rest of it later.

CHAIRMAN NANCE: Okay. I think that would be good. I would like to --

MR. RINDONE: The data workshop is in Mobile, at The Renaissance Battle House Hotel.

CHAIRMAN NANCE: It's December 9, it looks like.

MR. RINDONE: I think it's the 10th through the 13th, are the actual dates.

CHAIRMAN NANCE: Okay. I would like to put my name for the shrimp effort bycatch. Jason.

MR. ADRIANCE: Thank you, Mr. Chair. I was just volunteering for the data workshop.

CHAIRMAN NANCE: Did you have a specific one to be under, or just in general?

MR. ADRIANCE: I might as well stay where I was the last time, in the rec group.

CHAIRMAN NANCE: Okay. That will be a fun one. John.

MR. MARESKA: Life history or external surveys.

CHAIRMAN NANCE: Okay. Jim Tolan, please.

MS. MATOS: Jim, you're unmuted, but we can't hear you.

CHAIRMAN NANCE: I know there's a couple that Jim wants to be at. While we're waiting for Jim to get his voice back, Trevor.

MR. MONCRIEF: Rec workgroup, please.

CHAIRMAN NANCE: Which one, Trevor?

MR. RINDONE: He said rec working group.

CHAIRMAN NANCE: Okay. Thank you. Will, please.

DR. PATTERSON: Thanks, Jim. I just have a quick question about the ADT. Was that only specific to the previous process, or does the ADT stay in place for the actual assessment?

MR. RINDONE: That was just for the research track process, which has been abandoned, and so this will be a benchmark-style assessment.

CHAIRMAN NANCE: Did you want to be at the data workshop, Will?

DR. PATTERSON: How many folks do you need? I didn't catch that.

CHAIRMAN NANCE: I don't know. Right now, we're just soliciting names, and then it will be cut down if we have the need to do that.

MR. RINDONE: There are -- We get eighteen spots for the data workshop, and, of course, we'll need to make sure to appoint some fishermen and AP members and whatnot in there also, but, by all means -- You know, everybody that wants to be considered for it, you know, please volunteer.

DR. PATTERSON: Okay. Yes, please consider me, and you can stick me wherever there is a need.

CHAIRMAN NANCE: Okay. Perfect. Jim, can you --

DR. TOLAN: Thank you, Mr. Chairman. I was just saying, being one of the original cheerleaders for the three-stock, or three-area, model, I would like to throw my hat in the ring for the life history group, and so please consider me for this one, too.

CHAIRMAN NANCE: Okay. Thank you. Sean.

DR. SCYPHERS: This is Steven. I was going to volunteer for --

CHAIRMAN NANCE: Steven. Okay. Sorry.

DR. SCYPHERS: No, you're good. Either rec or external, if needed.

CHAIRMAN NANCE: Okay. Perfect. Thank you very much. Did your twin want to be on it too?

DR. SCYPHERS: I am not volunteering him.

CHAIRMAN NANCE: I'm just kidding. Okay. Julie, please.

DR. JULIE NEER: Hi, guys. Sorry I'm not with you today, but I just wanted to follow-up with something that Ryan had said about the ADT. Yes, that assessment development team approach has been abandoned. It was part of the research track, but what that does not mean is -- We would actually love it if we had a few folks that, who volunteer and participate in data, would also be interested in participating in assessment.

You can participate in both pieces of the puzzle if you want, and, like Ryan said, I am still working on getting a schedule together, and so just think that -- Don't think that, if you volunteer for data, you can't then volunteer for assessment, because that's not the case, and we would love to have some crossover between those two groups. Thanks.

CHAIRMAN NANCE: Thank you, Julie. Okay. If, after lunch, any of you think about wanting to be on the data workshop, please let Ryan or myself know, and we'll put you on that list. We'll go ahead and break, and we'll come back at 12:30, Eastern Time, and, when we come back, we'll do Item Number V, which is Southeast Fisheries Science Progress Report MRIP-FES Steering Team, and Dr. Peterson is going to give us that presentation. Thank you.

(Whereupon, the meeting recessed for lunch on May 7, 2024.)

- - -

MAY 7, 2024

TUESDAY AFTERNOON SESSION

- - -

The Meeting of the Gulf of Mexico Fishery Management Council Standing and Special Reef Fish, Special Socioeconomic, and Special Ecosystem Scientific and Statistical Committees reconvened at the Gulf Council Office in Tampa, Florida on Tuesday, May 7, 2024, and was called to order by Chairman Jim Nance.

CHAIRMAN NANCE: Okay, and so we'll go ahead and reconvene here. I hope everybody had a good lunch, and we'll go ahead and do Item Number V, which is the Southeast Fisheries Science Center Progress Report MRIP-FES Steering Team, and Dr. Cassidy Peterson is going to give this presentation, and, Ryan, would you go over the scope of work for us, please?

SEFSC PROGRESS REPORT MRIP-FES STEERING TEAM

MR. RINDONE: Dr. Peterson is going to present the results of an independent exploration by the Science Center which evaluated the utility of managing fish stocks using a percent change in reliable indices, as opposed to relying on fishery landings and discards, and so this desk management strategy evaluation, or MSE, examined the impacts of landings data of unknown magnitude -- Examined the impact of landings data of unknown magnitude may have on management performance for Gulf fish stocks and sought alternative management approaches that may perform better against uncertain recreational landings.

Specifically, the Science Center tested combining aspects of a model-based management procedure with an empirical-based management procedure on a hypothetical fish stock to project catch based on a single index and a single fleet.

The experiment demonstrated that catch can be scaled based on percent changes in the representative index, given certain assumptions. The Science Center can now explore increased complexity and realism in the presented framework, which, you know, would include things like adding in a sector allocation and some other things, and the Science Center expects this work to prove useful for data situations like that presented by the current overestimation issue inherent with MRIP-FES. You guys should consider the information presented, ask questions, and make any recommendations to the Science Center, as appropriate.

CHAIRMAN NANCE: Thank you. Dr. Peterson, you're on and ready?

DR. CASSIDY PETERSON: Thank you so much for sharing some time with me today. I'm Cassidy, and I'm the Management Strategy Evaluation Specialist at the Southeast Fisheries Science Center, and I'm here to present some work that we have been focused on at the Science Center, looking at how we might be able to manage in the face of some biased landings data.

Of course, I acknowledge all of my coauthors on this work, and I especially want to thank the technical team that's been in the weeds doing the coding, Skyler Sagarese, Nathan Vaughan, LaTreese Denson, Matt Smith, Kathryn Doering, Katie Siegfried, and the steering team, which is the technical team, including John Walter, Shannon Calay, and Sarah Gaichas, and all of the Gulf assessment team, whose stock assessments we're eventually going to be using for this work, Francesca Forrestal, LaTreese Denson, Lisa Ailloud, Matt Smith, Molly Stevens, Nathan Vaughan, Skyler Sagarese, and Katie Siegfried.

In light of the MRIP-FES pilot study, we're anticipating that stock assessment uncertainty might increase, or might be exacerbated, and, of course, estimating absolute abundance, and absolute reference points, is notoriously challenging using a stock assessment, and to demonstrate that, I want to reference Katie's January 2023 SSC presentation, where she calculated a sigma of about 40 percent for Gulf stocks, and so absolute abundance, and reference points, are particularly challenging in the Gulf.

We are expecting this scientific uncertainty to be exacerbated by biased, unknown, or changing landings estimates, and so our question here is, if we have catch data that only gives us a relative trend, rather than accurate magnitude of total removals, can we still develop a management approach that works?

Long-term, our questions are can we examine the impact that unknown recreational landings, and discards, have on the management performance for Gulf stocks, and can we identify alternate management approaches that might perform better when those absolute values are unknown?

I do want to circle back to the MRIP-FES inventory discussion, back from October, I believe, where the report stated that this working assumption is that the potential changes to MRIP-FES would be a scaling issue only, rather than having a direct impact on stock status, and so, for example, for greater amberjack, if estimated effort is reduced by 40 percent, the daily catch rate would also decline by 40 percent, and so we would not anticipate any effects on recreational season duration. Using this, we're also going to look at our percent change, or ratio, approach to catch limit changes.

To do this, we're going to use a management strategy evaluation. Here's sort of a diagram of the process. MSE is basically a framework that we use to build and stress test alternate management approaches. We make sure that they meet pre-agreed-upon fishery management objectives, and we make sure that they are robust to the types of uncertainties that we are expecting to encounter, and so a clear uncertainty, in this case, would be unknown magnitude of removals.

This is a Science-Center-led initiative, and this slide sort of shows a spectrum of MSE activities presented in Walter et al. in 2023, and sort of the spectrum of MSE from the most complex, which is the full stakeholder MSE, the most resource-intensive, all the way to the least resource intensive, which is scenarios where we would not need a full MSE, and we could apply simpler approaches, and this is going to be sort of on the lesser-resource-intensive side of the spectrum. We're going to be doing a desk MSE.

This is an MSE where there is no stakeholder input, and it's often used to answer general research questions or to develop management procedures, where management objectives are already known or specified in an FMP, for example, and so this is sort of a good way to still conduct these analyses, on the scale maybe of months, as opposed to on the scale of years, which would be required with a full stakeholder MSE. Depending on how much groundwork is already laid to be able to conduct a desk MSE, that can speed up in the future.

We're going to use Stock Synthesis MSE, or SSMSE, and this was a generalized tool that was developed jointly by the Southeast and Northwest Fisheries Science Centers to take existing Stock Synthesis assessment model and convert them into operating models that you can then run the full MSE closed loop on, and it's bundled into an R package, and the link is here, and this is an effort that was led by Kathryn Doering and Nathan Vaughan, who are both on our team as we do this work.

Again, this is an appropriate tool to use for the Gulf, because we use Stock Synthesis to do assessments in the Gulf, and here's a list of all of the most recent SEDAR assessments, and the different species that were assessed, and they've already gone through the SEDAR process, and so they've received extensive review already, and a benefit of using Stock Synthesis is that it allows for the complexity that we need to assess Gulf stocks, and so Gulf stocks have a lot of tricky aspects that are challenging to model in a stock assessment, things like discards, shrimp bycatch fleets, episodic natural mortality events, and so we can accommodate all of this with the Stock Synthesis that we're using.

We still need to do some SSMSE model development, to make sure that SSMSE can accommodate the complexity that we need to build in for Gulf stocks, but this is something that we're actively working on. We're actively developing this approach to allow for a mismatch in catches between what we're observing in the estimating model versus what we're simulating in the operating model, but we're getting there.

Management procedures are sort of the fisheries thermostat. They're the pre-agreed-upon recipes for how we adjust management advice, based on our observed behavior of the stock, and so, in this figure, the management procedure is everything highlighted in green, and it includes how we are generating data, and the quality of those data, and it includes the way we analyze those data, which we call the estimating model, and, oftentimes, this is thought of as the stock assessment model.

It includes a control rule that takes our estimating model outputs and uses that to adjust management advice, and that management advice is then implemented back into the true stock, which we're simulating with our estimated model, and so everything in green is part of the management procedure, and there is fundamentally two different types of management procedures that we tend to look at, and it's based on whether or not there is a population dynamics model, or a stock assessment model, that underlies the management procedure.

A traditional-stock-assessment-based management procedure is a model-based management procedure, but we can also use empirical management procedures, and, in these simpler management procedures, instead of having a stock assessment model to give us stock status, we rely on an indicator of relative abundance. Often, this is a survey index, and we make the assumption that the behavior of the survey index is proportional to total abundance, and so, when the survey index goes up, abundance has gone up, and we can go ahead and increase total allowable catch in the next year, and vice versa.

Empirical management procedures are sometimes also called data-limited approaches, and so, if you remember from SEDAR 49, lane snapper used a data-limited assessment approach, and we are also using empirical management procedures in ICCAT, for Atlantic bluefin tuna, and we're developing one for dolphinfish in the South Atlantic.

Empirical management procedures rely on this fundamental assumption that our index is proportional to our total stock abundance. In this case, we're going to go ahead and make the assumption that the index is proportional to spawning stock biomass, and our spawning stock biomass at maximum sustainable yield is constant, or relatively constant, over these five time periods, and this graph here is showing spawning stock biomass ratio, or SSB, relative to SSB MSY, in green, and we're making the assumption that the index is sort of tracking the behavior of the SSB ratio.

Something to note is that we have this Time 0 reference period, which is really useful, because we have an SSB ratio equal to one, and so we now know what the index value is when the spawning stock biomass ratio is equal to one, and so, in an empirical management procedure, we take our index, which is still in blue, and we adjust total allowable catch advice in the next year to try to maintain this ratio that we have of the index value, versus total allowable catch, that we observe in this reference time period when the spawning stock biomass ratio is equal to one.

Essentially, when the index goes down, the total allowable catch advice that we recommend for the next year goes down. When the index goes up, the catch advice for next year also goes up.

This new percent change approach, or ratio MP approach, is sort of borrowing the intuition behind the empirical management procedures and adding the value that we can get from a model-based management procedure, and so we're running a stock assessment to update our SSB ratio, or SSB relative to SSB MSY, and we're going to go ahead and adjust last year's total allowable catch by this year's spawning stock biomass ratio, and so, essentially, if our SSB ratio is 1.1, then our spawning stock biomass is 10 percent greater than spawning stock biomass at MSY, and we can assume that we can go ahead and increase total allowable catch in the next year.

We don't need to worry about a reference period, because we're running our stock assessment model and updating our reference points, and a benefit of this approach is that we're using relative reference points, instead of absolute reference points, to adjust total allowable catch, and so we're getting rid of that scientific uncertainty issue, and we're grounding the management advice that we're providing in the same scale, or the same metric, that we're using to measure total allowable catch.

This is what the ratio MP, or the percent change MP, looks like, and this plot, again, shows the SSB ratio, as we're measuring it from the estimating model, in this green line, and apologies, and this dashed line is supposed to be at one, and so it got shifted a little bit, but pretend it's at one, and, basically, this total allowable catch line, in orange, is saying, when the spawning stock biomass ratio is equal to one, the total allowable catch that we're suggesting for next year stays the same as it was this year. If the spawning stock biomass ratio is greater than one, then we increase total allowable catch, as recommended, for the next year.

We're building in a couple of options here, and, I mean, there's no need to worry about the equations, but, basically, we're adding a multiplicative constant, so that, if the constant is equal to one, there's a one-to-one change in SSB ratio and percent change in total allowable catch. If it's less than one, then a 10 percent increase in SSB ratio is going to result in less than a 10 percent change in total allowable catch advice recommended in the next year, and we're putting these arbitrary 20 percent up or down limits, and so total allowable catch can't change more than 20 percent each management cycle, and these are arbitrary values that we can change in the future.

We're looking at a simple proof of concept MSE design to demonstrate what's going on in this presentation right now, and we have two operating models, and one is the base case operating model, where we're assuming that there's no mismatch in landings, and so the magnitude of estimating model landings is the same as we're measuring for the operating model.

In our second case, we're looking at a mismatch, and so the scale of landings in the operating model is half as much as the scale that we're measuring in the estimating model, and we're looking at two different management procedures. The first management procedure is sort of the status quo approach, and we run the stock assessment model, and we run the forecast, and use that to provide catch advice. The second approach is this ratio, or percent change, management approach, and so run the same stock assessment model, but we adjust next year's catch based on our measured spawning stock biomass ratio.

We made some assumptions in this proof-of-concept design to present today. Notably, we're assuming that allocations are constant. We're assuming that there is no data management lag, and so we have data up until the year that we're providing management advice, and we're assuming that there's no implementation error, and so whatever the management procedure total allowable catch recommendation is, that's being fed back almost exactly into the operating model.

We're assuming that this mismatch in landings is constant over space and time, and we're assuming that our projections are stationary, and so we're not building in any kind of climate impacts or non-stationarity.

We are providing a proof-of-concept for a simple cod model, and this is a very simple, quick model that's often used to develop Stock Synthesis, or Stock-Synthesis-related code, and it runs really quickly, and it's currently the default in the SSMSE package, and so this is the only code that we have running confidently right now, but we are getting some Gulf models running, but, for today, we're just going to present these simple results.

The simple cod model has one survey and one fleet. We're running a ten-year projection, with a three-year management cycle, and so we're running stock assessments every three years. We're assuming no implementation error, and we're running fifty simulation iterations for each operating model-management procedure combination. Our forecast management procedure is trying to maintain a B target of 40 percent, and so it's fishing based on the F that would give us a B target of 40 percent, B target being current relative to virgin biomass level, and we're not building in any scientific or implementation uncertainty, and so we're assuming that our overfishing limit is equal to our total allowable catch.

For the bias management procedure, we are assuming that the landings in the operating model are half of what we're measuring in the estimating model, and this is sort of an arbitrary choice that we can play with later, and, for the dynamics of the ratio management procedure, we're assuming -- The first damping option, our multiplicative constant is 75 percent, and so, basically, a 10 percent increase in SSB ratio would result in a seven-and-a-half percent increase in total allowable catch, and we're building in those 20 percent allowable change buffers in total allowable catch from management cycle to management cycle.

We're using the same estimating model for each management procedure, and so I want to take a minute to kind of present what those estimating model results look like, and we're showing relative error. The blue violins are the base operating model, and the green violins are showing the bias operating model, where catches are lower, and we're looking at relative error in these different stock assessment reference points, relative to their true values that were specified in the operating model.

This top row of plots, we're looking at SSB MSY, and we're looking at biomass in the year-100, and we're looking at maximum sustainable yield, and these are all sort of absolute reference points, and we can see that there is a very clear, obvious bias in the bias operating model.

However, on the second row, when we're looking at sort of relative reference points, we're looking at F at MSY, and biomass relative to virgin biomass, and that error goes away, and so these axes of relative error are fairly small, and so now we see that the relative reference points, even when we have biased data being fed into the model, are still correct.

These plots are showing absolute biomass. The top row is looking at the base operating model, the lower row is looking at the biased operating model, and the first column is looking at the status quo management procedure, and the second column is looking at the ratio management procedure, and so here we can see that, when we're looking at the biased operating model, there is a bias between the observed, or estimating, model biomass values, and these are plotted in red, and there's one line for each model run, and so there's fifty of these red lines, and the blue lines are the true biomass trends that we simulated in the operating models.

We can see that there's a mismatch, and so the scale of the estimating model results is much higher than it is in the true operating model. With the base operating model, the scale is correct, as we would expect. However, when we're looking at relative biomass, and so now we're looking at biomass relative to virgin biomass, we see that, when there's a biased operating model, the scale is now corrected for, and so we're still appropriately able to measure the relative trends in biomass over the years, because now the cloud of estimating model lines is on the same scale as the true operating model lines.

This plot on the right is just showing catch and biomass, and so, again, there's no implementation error, and so the catch is matching from the OM to the EM, and we're seeing that the catches match exactly in the base operating model, but the catches are, obviously, of a different scale in the biased operating model.

When we look at these catch recommendations and relative biomass trends, we basically are seeing that both of these management procedures are performing well for this really simple scenario, and so our new proposed percent change ratio approach is something that we can consider using in the future.

What are our takeaways from this simple proof-of-concept? Basically, we're finding that the stock assessment is capable of measuring relative stock status and relative stock reference points, even if there is a mismatch between the operating model and estimating model catches, and we're finding that the forecast and ratio management procedures are both capable of managing, with or without this catch mismatch, but these timings are assuming that we're using this simple model, with only one fleet, and it's assuming that this mismatch between OM and EM catches is constant over space and time, and so, basically, the proof-of-concept was successful.

It produced results that we sort of expected to see, and now we're looking forward to conducting these same analyses on Gulf stocks that have increased complexity and realism, and so where are we, in terms of our work progress?

To-date, we've been working on developing SSMSE. I mentioned before that it needed some additional development to accommodate the complexity that we have in our Gulf assessments. That work is ongoing. We have needed to update the code a little bit to allow for these biases in measured versus observed -- Or true versus observed catches, and that is all done. There's still some work to be done, and we're working to get all of these Gulf assessments functioning as operating models within the SSMSE code.

The next steps are we plan to continue this SSMSE development, where we need to, and we've made some really good progress, and so I'm feeling really encouraged about that. We want to apply this simple two-by-two operating model management procedure grid to a real Gulf of Mexico stock, and we want to expand on the operating model and/or management procedure scenarios that we explore in the future.

Some ancillary benefits of this work is this is one of the first few uses of SSMSE. It's a relatively new package, and so this work is sort of serving as a beta test of that package, which I think has been very valuable thus far, and, really importantly, this is sort of building a foundation that we can use in the future to more readily conduct MSEs to ask a variety of different research questions, and so I think this work will certainly pay off in spades.

Some of the potential research directions that we are considering following with this work, and we do want to note that we do have a desire for conducting analyses where these results could be broadly useful to other regions, and we want to measure management performance when there is maybe some sort of spatiotemporal trend in the FES conversion, and so maybe if the mismatch between true and observed catches changes over time or space, and we want to, of course, apply this framework to a more complex assessment, where there is multiple fleets, where there is discards, and not all of the fleets are biased, and some of them are, and see if that changes what we're finding.

Some additional ideas are to consider the performance of alternate management procedures, which could include interim analyses, empirical management procedures, et cetera, and another option is to sort of explore the optimal tuning configuration of this percent change ratio MP for both stocks, and we could also consider exploring some of the simplifying assumptions that we listed above, and so that includes, you know, should we expect, or should we build in, some implementation error, non-stationarity, et cetera.

The discussion questions that we are really looking for feedback on today include what is your response to this ratio percent change management procedure approach? What research directions should we prioritize, what continued development, and what species should we prioritize for this work? That's all I have, and I will go ahead and -- Thanks.

CHAIRMAN NANCE: Thank you very much. We very much appreciate that presentation. Any comments from the SSC on this approach? Paul, please.

DR. MICKLE: Thank you, Mr. Chair. Dr. Cassidy, I really appreciate the presentation, and I have a couple of questions before -- I appreciate those questions at the end that you want feedback for, but I guess my first question is it seems like this process is -- Like you said, it's dependent upon a fixed application, and fixed catches, and so I guess I'm having a hard time understanding how do you overcome that with the fisheries that we see in our country, and specifically the Gulf.

Then I guess my second question is are there other areas in the country where this is being considered, other councils, maybe some simpler fisheries, with maybe less fleets, or dominant commercial fleets, in some of the northern waters, where this could be piloted in a way that could be a little bit more easily taken on, by meeting some of the assumptions that you presented here today? Thank you.

DR. PETERSON: Thank you for that great question, and so I'll start with the allocation, and that's something that is sort of a simplifying assumption that, from my understanding, was agreed upon to sort of get this work rolling, and so we're kind of making that simplifying assumption for now. If that's something that we need to revisit, then we'll need to kind of go back to the drawing board and have some more in-depth discussions about what that looks like.

We do have Sara Gaichas, who is at the Northeast Fisheries Science Center, as part of our steering committee, and so this is something that she's really interested in for the New England and Mid-Atlantic Councils, and it's something that we could talk to her about implementing, but she is on the steering committee for this work.

CHAIRMAN NANCE: Okay. Cassidy, thank you. David, please.

DR. CHAGARIS: Thank you, and thanks for the great presentation. I'm excited to see this work continue, and I think there's, you know, a whole lot that we can get out of it. Just a couple of points or, you know, comments on -- Going back to your proportionality constant, and so the relationship between the index and the spawning stock biomass, and it sounds like, currently, it's just assumed to be directly proportional, but it might be worthwhile to think about some ways to test that assumption.

You know, we don't have a lot of really strong surveys, for a lot of our species, and so, you know, oftentimes, it looks like the assessment status is maybe driven more by composition data, and so maybe thinking about some ways to relax that assumption about, you know, the proportionality between the index and the stock, and then another thing, and maybe this was in your previous slide, thinking about kind of implementation error, but, on this issue of scale --

I mean, as you would expect in the relative sense, the model performed well, but, when you implement an ACL with the higher -- With the biased high landings, for example, on a stock that has a lower abundance, is that -- Like what effect would that be, if, for example, they were able to achieve that ACL? I think that might be where the scaling, you know, becomes important again, is on the implementation, and so I'm wondering if that is something you guys have the capability to do, or are thinking about maybe exploring that in the future.

DR. PETERSON: Thanks. Yes, that's a great note, about assuming that the proportionality is a linear relationship, and we have one other option built in right now, where it's a little bit less linear, but that's a great point, and I've noted that, and that could be something really interesting to build into these analyses.

On the issue of scale, so our approach, the way that we've simulated it, assumes that whatever the operating model total allowable catch units are, they are converted into the measured units during implementation, and so we assume that, if the catches that we're assuming are biased, they will continue to be biased, and so we will still meet sort of the, quote, unquote, true total allowable catch recommendation from the operating model, because we're measuring in a biased scale. That's the assumption that we're making here.

If we wanted to try and ask, you know, what if we could switch to measuring in a different -- With a different mismatch, I think that would go back to assuming that this is a spatiotemporally constant value, and we can explore that more in the future.

DR. CHAGARIS: Mr. Chair, if I can follow-up, just --

CHAIRMAN NANCE: Yes, please.

DR. CHAGARIS: So, if you are -- In the simulation, if you run the management procedure, and it gives you a fishing mortality rate based off the biased landings, and then you plug that F rate back into the operating model for the following year, then your removals will be based off the operating model units, and so you wouldn't actually be removing the magnitude of landings that you would be if the ACL was biased, right, because you're plugging the rate back into the model. Does that make sense?

I guess what I'm trying to say is I think there might be a potential risk of the associated -- You know, of the units, as they're implemented back into actual removals when the population is at a lower level.

CHAIRMAN NANCE: Yes, and I know, if you're using a rate -- I can see your point, Dave. Cassidy, do you have any --

DR. CHAGARIS: I'm not trying to imply that the whole system is broken, by any means, and, I mean, we're thinking about future research directions, and, you know, I think this is a potential impact that needs to be explored along those lines.

DR. SIEGFRIED: Mr. Chair, did we lose Cassidy?

CHAIRMAN NANCE: Maybe.

DR. PETERSON: No, I'm still here.

DR. SIEGFRIED: Okay.

DR. PETERSON: I don't have anything to add.

CHAIRMAN NANCE: Okay. Thank you. Dave, thanks for those comments. Luiz.

DR. BARBIERI: Thank you, Mr. Chairman, and thank you, Cassidy, for the presentation. I am going back to your discussion questions, that slide, if we could put that up there, Jessica, and I am trying to think about that, Cassidy.

For your first bullet point there, general feedback on this ration MP, or percent change, approach, I am trying to understand what is the destination, really, that you are trying to get to here, right, and how would this translate, and suppose that everything is being modeled properly and that you can incorporate multiple fleets, multispecies fisheries, and account properly for landings and discards, but I'm still trying to understand -- I mean, why -- Looking at this from that FES potential bias perspective, how is this more helpful, for example, and help me understand that, more helpful than, for example, when we look at the assessment, right, that is run with and without FES, that we can see that scaling difference caused by the higher landings associated with FES? I will stop there for a second, Cassidy, just thinking about, you know, if you can help clarify, for me, how that --

DR. PETERSON: Yes, absolutely, and so, with a management strategy evaluation, we're really focused on measuring the management, the effect on management, versus the difference in the stock assessment results, and so we're asking how should we be expecting management to be affected if such a bias exists in a Gulf stock, using our sort of status quo management approach, and we're trying to see if this percent change approach can do any better managing the stock, and I don't know if that answers your question.

So we're looking at sort of how should we structure and what sort of research priorities should we focus on, and are we more interested in measuring, you know, what if there is some change, over time, in this conversion factor, between what we're measuring, versus what is true, or should we focus on, you know, how can we measure with non-stationarity in the future, but the overall goal remains the same, is we want to know the management effects of this uncertainty in our data and how that translates to impacts on management performance. Is that helpful?

DR. BARBIERI: Yes, that is helpful, and I'm just thinking -- Because, then going forward with the second bullet, what research directions do we prioritize for continued development, and which species should we prioritize, and I'm trying to think about, you know, all the discussions going on presently, and I think Katie is going to give a presentation later, right, about the whole revisioning, perhaps, or changes in direction of our entire stock assessment enterprise in the Southeast region.

The fact that we most likely are going to be conducting these more complex SS-based statistical catch-at-age-type assessments for the priority species, and we are going to go to other more simpler approaches for some of those stocks that perhaps do not have the appropriate data to support those kind of assessments, or perhaps are not as high on the priority list to be looked at in that level of detail.

I think that one of the things that, you know, we're going to have to do is, the more that we start applying other data-poor-type approaches, or less complex -- Even if you just talk about, you know, biomass dynamic models, things of that sort, at some point, right, we're going to have to -- As we develop MPs, we're going to have to test, right, what the potential outcomes of those MPs might be to inform how we choose amongst them, right, and so I'm thinking -- Do you think -- You know, you and the team, do you see the direction of this here being more focused on addressing, you know, changes in the FES survey, and how you see that relative to these other uses of MSE that I believe are going to have to become more common in the Science Center? Does that make sense, Cassidy?

DR. PETERSON: Absolutely, and it's a great question, and I -- From some conversations I've had with the technical team, we are fairly hopeful that, once we have this MSE up and running for Gulf species, to ask this MRIP-FES question, we can keep this framework up and running to ask a lot of different questions, and so getting at, you know, estimating model complexity, testing out simpler, or maybe even empirical management procedures, and we want to save this sort of framework and ask all of those questions as well.

I think the focus of these discussion questions are, you know, what are prioritizing immediately for the FES, and are we looking for this, you know, catch mismatch, and what are the other factors that we want to build into this FES MSE at the moment.

DR. BARBIERI: Okay. Gotcha. Thank you.

DR. PETERSON: Thanks.

CHAIRMAN NANCE: Thanks, Luiz. Ryan, please.

MR. RINDONE: Thanks. You know, just thinking some about, you know, what some of the effects are that we've been discussing, about there being -- About how far off some of the landings might be, and what sorts of effects that there might be, and, of course, you have, if the landings are in fact lower than are being projected, then it has some effect on productivity, but it actually ends up being more than that, right, because you also have to factor in how that fleet is operating from a selectivity and retention standpoint, because they're not all selecting for the same ages and lengths of fish.

If the magnitude of removals differ from what we currently think, then that's also going to have an effect on what we're projecting is going to be available for spawning stock biomass in the future and future estimates of reproduction, et cetera, and so, while using a percent change method is -- You know, by comparison, it's pretty brute force, I feel -- I mean, I would be concerned, especially for the species for which we would be most concerned about this bias correction, and it kind of paves over a lot of the other -- You know, maybe they're nuances, but, you know, in the long run, they have material effects on how we'll ultimately be left to manage the stock.

We tend to be very reactionary, from a fisheries management perspective, and like we tend to respond to the things that have happened, and just because there's a lot that has happened, and it kind of limits how much we can respond to the things that might happen, and so, before we even get to, you know, which species we might prioritize, I feel like there is -- This is completely ignoring, right now anyway, you know, the sector allocation part of this, but I feel like there is some other important components that would need to be figured into this. I worry that a straight change like that kind of ignores some important information.

DR. PETERSON: That's a great point, and that's why I think it's going to be really elucidating to run this same proof-of-concept on a real Gulf stock, because then we will have those complexities of different selectivities, discards, all of that, that we're going to need to consider, and that will give us a clearer picture of whether this ratio percent change approach is worth considering in the future. I think it's a good point.

CHAIRMAN NANCE: Thank you, Cassidy. Doug, please.

MR. GREGORY: Thank you, Mr. Chair, and thank you, Cassidy, for the presentation and the work, but I've got to admit that I don't understand this that well. On the one hand, it seems like this is proof of -- Not proof-of-concept, but justification for interim analyses, but I also get the impression that this is a replacement for projections from an assessment, and if you can enlighten me a little bit, but I realize that I'm not up-to-speed on this at all.

DR. PETERSON: That's -- I mean, that's exactly it, and so I don't think that this would be a replacement for projections, but this would be a different mechanism for specifying management advice, and so we would no longer be using the projections to specify TAC advice. Instead, we would take last year's TAC and just adjust it by this year's stock assessment results.

MR. GREGORY: Okay. As I think someone said before, unlike the Alaska area, or the Bering Sea, and the Northeast, we don't -- We've been building an independent fishery survey system, but I just don't have confidence, given the variety of habitats that we have in the Gulf, of survey being consistent enough, year-to-year, to base catch advice on.

I think they're consistent enough for being included in the stock assessments, and providing insight into potential long-term trends, but not in providing catch advice, and so I have always questioned the interim analysis approach that we use, but thank you very much, and I will keep studying this, and I will catch up.

DR. PETERSON: So that's a good point, and so this approach that we're using is a little bit different from the empirical approach, and so what we're describing is more like an interim analysis, or an empirical management procedure, where you're just adjusting total allowable catch based on an index.

What we're doing is we're still running a full stock assessment model, updating our current stock status information, and adjusting last year's total allowable catch with this year's stock assessment results, but, with this framework, we could still explore interim analyses or empirical management procedures too, but that's a little different than what this percent change approach is doing. Did that help?

MR. GREGORY: I appreciate it.

CHAIRMAN NANCE: Any other -- Carrie, please.

EXECUTIVE DIRECTOR SIMMONS: Thank you, Mr. Chair. Thank you, Cassidy, for the presentation. I just had a follow-up question. I think you said that the fixed allocation approach and the fixed catches were agreed upon, and is that -- Do you mean by your committee? Is that what you mean?

DR. PETERSON: I believe that John Walter got agreement from the council to start this research assuming fixed allocations. This is my understanding, but maybe Katie knows better.

EXECUTIVE DIRECTOR SIMMONS: I think there may be some confusion there. I don’t recall us discussing that explicitly with the council, but I was just curious. I guess another kind of naïve question, and so sorry about this, and so, if you do not have an approved stock assessment, or an assessment that has gone through some type of process, and like I think you mentioned you didn’t go into 49, which is a data-poor assessment, and can you do an MSE? From the paper that I read, it didn’t sound like it was really appropriate, or applicable, in some cases. Thanks.

DR. PETERSON: Thanks. That’s a great question. Absolutely you can do a management strategy evaluation if you do not have an accepted stock assessment, and so one of the really great things about management strategy evaluation is that you can account for any unknowns that you have, and so, if you are in a situation where, you know, you don’t have enough data to build, you know, a peer-reviewable stock assessment, any uncertainty that wouldn’t pass peer review can be built out into multiple operating models, and so you can test the validity of different management approaches across all of those axes of uncertainty that may get challenging to build a stock assessment.

An MSE is more about how do we manage, and less about understanding exactly what our best estimate of stock status is right now, and it’s more about saying, in spite of all the things that we do not know, can we still manage successfully, through all of those uncertainties.

CHAIRMAN NANCE: Carrie.

EXECUTIVE DIRECTOR SIMMONS: Okay. Thank you. Just a final question, and so, based on that, and this is a desk MSE, could you give an example for say an assessment that may not have been done in a lot of years, how you would engage the managers, such as the council, for a desk MSE to try to get at the management objectives that you would try to accomplish through this process, just something high-level, and, if you could give us an example of that, that would be appreciated. Thanks.

DR. PETERSON: Absolutely, and so the first thing I think it would -- If the fishery management objectives already exist, they will probably be in a fishery management plan, or something like that, and, if they don’t already exist, then we would approach the council and try to work with the council to structure some sort of stakeholder workshop, probably, or stakeholder feedback opportunity, to get input on what those fishery objectives are, and we would, of course, work with the SSC to make sure that we also have sort of the legal MSA-related fishery management objectives included in an MSE analysis as well.

CHAIRMAN NANCE: Carrie.

EXECUTIVE DIRECTOR SIMMONS: So, Cassidy, I think we do have a lot of high-level fishery management objectives in our various FMPs. What I was thinking is, and maybe this is clearly not my understanding of -- Or a good understanding of this process, but is you would kind of get into the nitty-gritty and kind of do a deeper dive into the things that the managers may want to consider through this process, because, I mean, many of our FMP objectives are very pie-in-the-sky.

DR. PETERSON: Absolutely. Yes, one of the big steps in management strategy evaluation is to take conceptual objectives, something like maximizing allowable catch, and operationalizing it, and so that takes it from, you know, maximizing catch to saying we want to ensure, with at least a 75 percent probability, that, each year, total allowable catch, and appropriate landings, exceed, you know, X number of metric tons over the course of a fifty-year projection period. Throughout the MSE, we really need to force the specificity in what we're trying to measure, and that's helpful in terms of formalizing what our management objectives are.

CHAIRMAN NANCE: Ryan.

MR. RINDONE: I guess, just building off of that example, I would be concerned that the degree of conservatism that would have to be exercised to make something like that realistic, given the different environmental variables that we deal with, and shifts in fishery dynamics, as, you know, one stock happens to be overfished, or perhaps, you know, like in the case of king mackerel right now, they're just not there, and you have shifting fishery dynamics, and you have unexplained, and unexplainable, because the data don't exist, and environmental variables, and, I mean, you would end up having to set catch limits at extremely low levels to realize a high probability of maintaining that catch level for an extended time period. Again, this is just picking on this one example that you gave, and so sorry to do that explicitly, but --

DR. PETERSON: No, not at all, and it's a great point.

MR. RINDONE: I struggle to see the council wanting to throw a lot of support behind that.

DR. PETERSON: So a couple of -- You bring up a couple of different points. One is, in MSE, it's really hard to fully operationalize management objectives for a specific case study until you have some preliminary results that sort of outline what the tradeoff space looks like, and so, once you have a general understanding of what the tradeoff space looks like, and, by that, I mean, you know, an increase in total allowable catch results in an X percent reduction in stock status, or safety metrics, and, once you sort of understand what the tradeoffs for a given species are, that's when we think about operationalizing.

In terms of incorporating uncertainty into the operating model grid, we can do that in a couple of ways. So, one, it's important to be mindful about what levels of uncertainty we feed into that operating model grid, because, again, like you mentioned, if we say, you know, natural mortality can range from, you know, one to 0.2, then that's going to be too extreme. There's going to be too much uncertainty built into the operating model grid to provide any sort of useful tradeoffs, and so it's important to be mindful about sort of what level of uncertainties you build into the management procedure operating model grid.

Then we also have two levels of operating models. One is a reference set, and so these are the uncertainties that we're most concerned about, or that are most relevant, for our species of interest, and then we can also test robustness operating models, and so these are uncertainties that maybe we don't want to tune our management procedure for, but we still want to measure how our management procedure would perform in those uncertainties, and so we have sort of two levels of uncertainties that we build in, and we want to make sure that they're well defined.

A third point is that we don't have to include all of the uncertainties on the frontend, because, after we build -- After we implement a management procedure, we build on these safety metrics, so that we're continually checking for whether exceptional circumstances have occurred, in which case the management procedure is being applied in situations that were not simulation tested, and that's grounds for revising and updating the MSE and the management procedure, and we're continuing to conduct stock assessments, to make sure that our stock is still in a healthy place, and so we build in a lot of sort of safety nets, after we implement a management procedure, to account for the fact that we can't include every single uncertainty into the operating model grid.

There are some sort of safety metrics that we build in throughout the process, so that it doesn't get too uncertain, but we can still make sure that the management procedure is robust.

CHAIRMAN NANCE: Thank you, Cassidy. Ryan, to that point?

MR. RINDONE: Thanks. I guess my last point, to follow-on, is then, talking about all of these different safety measures that can be built in, and I totally appreciate recognizing that, you know, you can't account for everything that you don't know, or, otherwise, you won't have anything left to fish for, but how does this all parlay into managing towards optimum yield, as you keep having to build in additional safety measures, and you're thereby, presumably, further decrementing your catch to try to account for the uncertainty that you are explicitly trying to address, and you're still continually -- You're going to end up continually lowering that catch limit, as you try to include more things, and does that -- I mean, does all of this end up necessitating us having to take another look at what we actually interpret optimum yield to be, from a functional perspective?

I mean, we all kind of recognize that like it's something that is -- You know, that we try and strive for, but it's not explicitly attainable, but there is also the social and the economic side of optimum yield, that, as the council, we're supposed to consider, and not just the biological side, but the -- Just think about it like from my seat.

Like, when I've got to write an amendment, and I've got to use all this information, and we've got to present this to the council, and they've got to make a decision, and I just -- I am left with more questions and I-don't-knows than I am answers about how they would use this.

DR. PETERSON: Yes, and it's a totally reasonable concern, and I will say that, in practice, that's not usually how things happen, right, because we're still trying to maximize all of the management objectives, and, you know, it's not that all of those management objectives are to, you know, maintain stock status. We're balancing that desire to maintain stock status with maximizing catch, increasing the quality of the catch, or length of the catch, increasing the stability of regulations from year-to-year, and all of those fishery management objectives are operationalized, and we're measuring how to maximize, to the best extent possible, given the limitations of the fishing system.

The full stakeholder MSE is a way to explicitly define, and maximize, and our ability to achieve optimum yield, and so MSEs are a really great tool to think towards managing optimum yield, and, in practice, increasing uncertainty in our operating model reference grid -- It's not just one directional, and it's both directional.

If we're thinking about what if stock productivity declines, we typically are also thinking about what if stock productivity increases, and so it doesn't necessarily mean that, if we're looking at a lot of uncertainties, we're going to force ourselves into a precautionary management approach. Just, in practice, I haven't seen that to be the case, and I don't know if that's reassuring.

CHAIRMAN NANCE: Thank you, Cassidy. Jim Tolan, please.

DR. TOLAN: Thank you, Mr. Chair, and thank you, Cassidy, for a really nice presentation. I think it's a very different way to look at the problem that faces us all, and I won't belabor this point too much, but all I could see, in my head, was all the analysts at the Science Center, on the year-to-year percent change approach, their heads collectively exploding, and so that's my only thought, but thank you so much for the presentation.

DR. PETERSON: Thank you.

CHAIRMAN NANCE: Thanks. Any other SSC comments or questions? I do think, from my perspective, Cassidy, you know, the ratio management procedure -- I think it's an interesting approach, and I enjoyed that presentation. I would like to see, and I think, from a research direction, and how we prioritize this work, and I would think -- I would have to see this approach used on a species that had a stock assessment, and I don't know how you would do it with something that's never been assessed, but a stock assessment, and then we could look at a real species in the Gulf, and see how this develops with it, to give us a little more knowledge about this works on a particular species, and that would be my recommendation.

DR. PETERSON: Thank you. Yes, that's absolutely our plan for right now, is to focus on previously-assessed species.

CHAIRMAN NANCE: Okay. Thank you. Without any other SSC hands, I guess -- We sure appreciate your presentation. Thank you for being with us today.

DR. PETERSON: Thank you for the time. I appreciate it.

CHAIRMAN NANCE: We'll go ahead, and we're going to go to public comment now for today, and I'll just kind of outline what we're going to do tomorrow morning. We have two presentations on equity, and the first one is by Dr. Thomas Miller and Dr. Steven Scyphers on assessing equitability and distribution of fishery management benefits, and, tagging along with that, we also have an equity and environmental justice regional plan that's going to be presented by some staff at the Southeast Regional Office.

We'll do those early in the morning, and then, after that, we're going to have Dr. Katie Siegfried give us the presentation on alternative assessment methods for Gulf stocks, and I think that will be a -- We'll be able to discuss that, and then, following that, we'll have -- Our final presentation will be an overview of SSC reorganization and the application process for June 2024, and so be in attendance for that, and we'll know how to -- If you would like to reapply for the SSC, or simply apply for the first time for the SSC, and Dr. Simmons is going to go over that tomorrow, and provide some input on that, and we'll have a discussion. With that outline, we'll go ahead and open it up to any public comments, and Bob Zales, please. We're glad you're on the line with us.

PUBLIC COMMENT

MR. BOB ZALES, II: Bob Zales, II, representing Southeastern Fisheries Association. First off, I don't know if you all have seen it, and, if you haven't, I have sent the thing to the council last night, and they need to send you a copy of it.

There's been a letter, a congressional letter, sent to Janet Coit, the AA, and it was sent out on the 18th of April by several senators and several representatives, and it concerns my most favorite subject, that you all know of, FES.

The nice thing about this letter, in my opinion, is it pretty much agrees with what I have talked to you all about now for, what, three or four years with FES, because they clearly have an issue with it being considered the best scientific information available, since the Fisheries Service has come in and said, on their own, that the information is not correct, and so it's an interesting read, and I think it would benefit you all to read through that letter, because this FES issue is not going away, not until it's eliminated, in my mind, but you all need to see it, just so you can do it, and so if we can get Carrie to send you all a copy of it, I would be most appreciative.

On this issue that was just discussed, I like the fact that somebody with the Science Center is kind of thinking outside the box, because it appears, to me, they're trying to find a way to expedite stock assessments so that we're not, you know, going three or four years at a time between stock assessments, because, I mean, I heard several comments by this lady about how you're going to look at last year's catch, and then adjust it for this year's catch, based on this model, which is, to my mind, kind of similar to what they do with halibut in Alaska, right, because they gauge what they did last year, and then they project what they're going to provide for regulations for the coming year. It's kind of a yearly thing, which it would be nice to try to get into that, if we could, whenever that can happen.

A key thing that I would like to see, in that process, would be stakeholder involvement, because, as all of you all know, when it comes to fish, and fisheries, the first people to recognize whether or not there's a problem, or whether or not a fishery is recovering to a good state, are the fishermen who are on the water and see the fishery every day.

Those people have a wealth of knowledge, and they need to be included in all of this stuff with stock assessments, and everything else, and so I would encourage the use of stakeholders, and stakeholder advice, in all the management of our fisheries, because -- Somebody brought up king mackerel a while ago, and I've been discussing king mackerel now for five years, because that's how I first got involved in this stuff over thirty years ago, and we've got a problem with king mackerel.

The council now is beginning to say, well, gee, maybe Bob has been right for the past five years, and we need to look at this. I don't know that the fish, the king mackerel fishery, is in bad shape, or if they've just relocated somewhere else, but there's an issue with we're not seeing the fish that we've seen in normal places, and I don't know if anybody has found out where they're going yet, but there's clearly an issue, but that's the classic example of stakeholders recognizing a problem when it shows up, and they recognize the success when it shows up, and so, if you all have got any questions, I will be glad to try and answer, and, other than that, thank you very much, and I will listen-in tomorrow.

CHAIRMAN NANCE: Bob, thank you. I always appreciate you being on. You always provide some good input for us. Any questions, or comments, from the SSC? Jim, please.

DR. TOLAN: Thank you, Mr. Chairman, and thank you, Mr. Zales, for mentioning that letter. I too got it, very recently, and I think it was spot-on, and I think your analysis of it is spot-on, and I made sure that it was presented to all of the SSC, via email, this morning. I think you're right that the MRIP to FES conversion is a problem, and it's not going away until -- I don't know when, but it's definitely a problem, but I appreciate you bringing that up to the group today. Thank you.

MR. ZALES: I appreciate that. Thank you, and I will tell you all too that I was in D.C. this past week, and I actually got to meet with Janet Coit for over half-an-hour, and apparently it has hit home with her, according to our discussions, and so the Fisheries Service is recognizing that, you know, not only fishermen, and people like me, but now Congress is getting actively involved in this whole thing, to see if we can get this stuff recognized. There's got to be a better way to collect this data, as we all know, because clearly what's being done right now with the private rec sector is just a nightmare.

CHAIRMAN NANCE: Thanks, Jim and Bob. Paul, please.

DR. MICKLE: Thank you, Mr. Chair, and thank you, Bob, for the comments. I read the letter, as I received it today, and it definitely brings back some memories about calibration, and some potential hurdles that don't seem to be overcome in the last probably three years, and so I just wonder if maybe there's a point at which we all need to maybe get some new folks to look at calibrations, and folks outside of our little world, and look at more quantitative approaches of calibration, because I know that SSC members, including myself, have questioned other ways of doing that, and we haven't had any success on garnering support on those efforts.

Quantitatively, it seems like there are other ways for calibration, probably some better ways that account for such uncertainties by all the different surveys, more of a standardized approach, instead of a piecemeal approach, as it is now, and, also, procedurally, we did receive the letter from Congress, but we did not receive, I think, a letter that NMFS, or the Southeast Fisheries Science Center, sent out, and Katie mentioned this morning approaching that letter and the Great Red Snapper Count details, and I don't know what is in that letter, but it seemed like someone this morning mentioned that both letters would be sent out, and I think the SSC members have only received the congressional letter. Thank you.

CHAIRMAN NANCE: You're right, Paul, and I think Katie was the one that mentioned the NOAA response, the Southeast Fisheries Science Center response, back to that letter, and so I will leave it up to her to send that out, because I have not seen that, and I think it's available, but, when it is, I'm sure that Katie will send that to us.

DR. SIEGFRIED: Mr. Chair, may I comment?

CHAIRMAN NANCE: Yes, please, Katie. Yes, ma'am.

DR. SIEGFRIED: I didn't want to jump in during public comment, but, since you brought it up, we did just receive an email from Evan Howell, and he sent it to council staff, and a number of folks on the line, as far as the FES answer, and I was also specifically addressing -- We are all one NMFS, but I was actually addressing the things that Shannon and I commented on, which were the Great Red Snapper Count assertions in that, and I will certainly send that around, or I will send it to council staff, so that they can disseminate it, as soon as I have the final version.

CHAIRMAN NANCE: Perfect. Thank you, and I do see that Dr. Howell -- His response was just sent out to the SSC. Each of the SSC should have received both -- At this point in time, both the congressional letter and also a response from NOAA, National Marine Fisheries Service, by Dr. Evan Howell. Doug Gregory, please.

MR. GREGORY: Thank you, Mr. Chair. I know the meeting is over today, but since we've kind of digressed a little bit, I would like to circle back to the calibration thing, particularly, as Dr. Froeschke has said, in Slide 5 of the presentation that we just saw, where calibration is simply a scaling issue that doesn't really affect the overall stock status, or trends, or even harvest level, and I question that, but I don't believe that this is the time to delve into it, but, at some future time, I would like to.

CHAIRMAN NANCE: Okay. I think that we can certainly add that to the agenda in the future. I'm not sure that John said that, but I know that, when it was presented, he had his name associated with it, but we'll try to figure that out and certainly add that to an agenda item in the future. Thank you, Doug. John, to that?

DR. FROESCHKE: Yes, and I just was the staff lead on that item, when it was discussed, but I believe that was either Dr. Walter or Dr. Porch that is response for the quote below, and not me.

CHAIRMAN NANCE: Thank you. Josh, please.

DR. KILBORN: I just wanted to request that those letters that you were saying have been emailed to the SSC -- Can we get those on the -- Those of us on the special SSCs, can we get them too, because I don't think I have received anything.

CHAIRMAN NANCE: Okay. I will make sure that those letters that were sent to the SSC are also sent to the Reef and the Ecosystem, and I know there's another one. The Socioeconomic. Those other groups of the SSC, we'll make sure that everyone that's on this call, that's an SSC member, gets those. Thank you for bringing that up, Josh.

DR. KILBORN: Thank you.

CHAIRMAN NANCE: Bob, thanks for that, for being on the call, and we'll go ahead now and adjourn. We'll see everybody, or hear everybody, tomorrow at 8:30 Eastern Time, and I'm looking forward to a good discussion tomorrow. Thank you.

(Whereupon, the meeting recessed on May 7, 2024.)

\- - -

MAY 8, 2024

WEDNESDAY MORNING SESSION

\- - -

The Meeting of the Gulf of Mexico Fishery Management Council Standing and Special Reef Fish, Special Socioeconomic, and Special Ecosystem Scientific and Statistical Committees reconvened at the Gulf Council Office in Tampa, Florida on Wednesday, May 8, 2024, and was called to order by Chairman Jim Nance.

CHAIRMAN NANCE: Okay. Good morning, everybody. We'll go ahead and start our webinar this morning for the SSC meeting. Our first topic is going to be Topic Number VIII, Assessing Equity in the Distribution of Fishery Management Benefits: Data and Information Availability, and we have Doctors Thomas Miller and Steven Scyphers that are going to give us this presentation, and I think Dr. Scyphers is going to be the one giving the presentation this morning. We'll have Ryan do the scope of work for it, and then we'll turn the time over to you, Steve.

ASSESSING EQUITY IN THE DISTRIBUTION OF FISHERIES MANAGEMENT BENEFITS: DATA AND INFORMATION AVAILABILITY

MR. RINDONE: All right, and so Steven is going to present the findings from the National Academies of Sciences study on equity in the distribution of fisheries management benefits. This report focuses on identifying necessary data categories to assess benefit distribution, the existing data within those categories, and potential obstacles in data collection and assessment methods, and we'll highlight key recommendations, such as the need for a contextual place-based and participatory approach to equity considerations and decision-making processes. You guys should evaluate the information presented and ask questions. Dr. Scyphers, are you ready?

DR. SCYPHERS: Yes, sir. Thank you. Good morning, everybody. Thanks very much for the opportunity to share some of this report on behalf of the committee. For those that may be less aware of the National Academies, and how they function, I will just start with kind of a quick overview what the National Academies of Sciences is a private nonprofit that's over 150 years old, and it largely functions as a scientific advisor to the government.

They do multiple different types of studies, and one of those types is a consensus study, which is what this particular one is, and some of the kind of important characteristics of a consensus study is that a committee is assembled and tasked with writing a report that is evidence-based and can include findings, conclusions, and recommendations, but they're on behalf of the entire committee, and so they're not on behalf of any one person or any particular context.

That should tell you a little bit, you know, about how the committee functions, and how the writing occurs, and how to interpret it. Another element of these consensus reports is that they are peer-reviewed, and so they're sent out, usually to quite a lot of peer reviewers, and the committee is not aware of who the reviewers are during the process, and really finds out when everyone else does, when the report comes out, and it's printed, who the reviewers are.

As an initial thank you, thank you to Dr. David Griffith for being one of the reviewers of the report, but you can see the others. They're all listed within, and we'll unpack that a little bit more as we go.

Just to kind of start with the statement of task, and so the National Academies works with the sponsor of the project to develop a statement of task of what the report will become, and it's worth noting that these reports can be generated from a few different pathways. One way is they can be congressionally mandated, and so Congress can pass some legislation that says that the National Academies should complete this report, and they will go down that route, and it may tell them which agencies to work with in that pathway, but it's congressionally mandated.

That's important to point out for this particular study, because that's not what happened. In this particular case, this study was initiated by NOAA asking for it, and so, you know, you'll see, in the intro to the report, that the committee really wanted to commend NMFS for thinking forward into this area and asking for this report, and so that's where it started. It came from

Sustainable Fisheries, and these were the four kind of primary aspects of the statement of task.

The first one was to determine categories of information that would be required to adequately assess where, and to whom, the primary benefits of commercial and for-hire fishery management benefits occur, and I want to unpack a few things here that are really important to understand for interpreting the report.

The first is where and to who, and so these can be interpreted in various ways, but it's really important to recognize that this is within just commercial and just for-hire, and so this is not overall all fisheries, and it's not private recreational, and it's just those two sectors, and then the second phrase that you see bolded there is "primary benefits", and the committee spent a lot of time talking about this, in open meetings, and you will see a lot of conversation about this in the report, and what is essential to understand here is the way that the committee viewed this in terms of primary, and what "primary" means is first in sequence, and so not first in importance, and so don't consider primary beneficiaries to be the most important beneficiaries, because that's really difficult to determine, and the committee didn't feel comfortable saying who was most important or less important.

As we get later into talking about the allocation of permits and quota, really, it's who are the initial recipients, or the initial folks, that benefit from those, and it has no implications really beyond that, and that's why you'll see that one chapter of the report really expands this view to look at other aspects of fisheries beyond what might be first in sequence.

The second point about this is that this is really focused on distribution, and so the distribution of these benefits, and you'll see where that becomes important in the next slide, but looking at this alone was very, very complicated, and so looking at the distribution of benefits, where and to whom, for these first in sequence primary beneficiaries was that first task.

To do this, the second statement of task was to determine what information currently exists that would allow those analyses to be possible and what information, if any, would be needed to be collected by NMFS. The third task was, thinking through these information needs, where would the obstacles be, and then the fourth one would be what are the methods that the agency could use to gather this information and assess the equitability of this distribution of benefits.

Some of these obstacles are just going to be very practical things that the agencies deal with all the time, like the Paperwork Reduction Act, that requires a long lead time on surveys, and a lot of, you know, agency staff time to move through them, and others sometimes can just be more contextual, which is a good transition to the next slide.

With that statement of task, the National Academies assembled the committee that you see here, and I won't go through and introduce everyone, but I will say that, first, a tremendous amount of credit goes to our leader, and chair, Tom Miller. Tom is a fisheries scientist that many of you probably know, and are familiar with, and the rest of the committee covered a wide variety of social sciences, from sociology, anthropology, fisheries economics, and they really spanned the regions of the country with experience and many of the different councils and fishery regions.

I also can't transition here without saying a huge thank you to the NAS staff that coordinated this. When you look at the timeline, this report was a very short timeline, and it came together very fast, with a lot of staff effort there, particularly Stacy Karras, who I know that others on this committee have worked with on past NAS reports, but Darryl, Leighann, Erik, and then Susan Roberts' leadership really helped this report come together in the fast timeline that it was working under.

Again, thank you to the reviewers, and, also, you know, some of the public committee meetings that this committee had, there were a wide variety of presenters that came in and shared information from within the regions, and so we were grateful to have some Southeast and Gulf representation in those meetings. Mike Travis presented to us at one of them, and we had quite a few others attend, and so thank you to all of you all.

To kind of start off with that task, and then the committee assembled, you can imagine that there was a lot of conversation on how to work through the statement of task in way that is effective and efficient, and so I want to start by just reading a quick quote from Tom Miller's intro here in the preface of the report, to kind of give you a context of where every bit of the rest of the presentation is going to go, and the overall report, and so Tom writes: "This committee's report does not provide simple answers. As has become clear through our process, equity is not a simple concept. Its measurement and assessment are not straightforward either. Instead, equity is multidimensional."

That is ultimately what you see here in this top figure, is that equity is viewed as having multiple dimensions. Our statement of task for this committee focused on distribution. The distribution is just one axis of this, and it's often considered, you know, distribution, recognition, and process, or procedure.

Another element of the committee's consideration is that, even when you're considering these three axes, they're always contingent upon whatever fishery context, social context, economic context that you're working in, and the regions of the U.S., and the extremely diverse fisheries we have, make this really obvious to us, but it just goes without saying that the challenge of coming up with a standardized, simple way of assessing equity is not something that you're going to get out of this report. You're going to get more of the complexity of how to work through, you know, understanding and assessing what equity is.

After, you know, recognizing -- You will see, in Chapter 2 of the report, that really unpacks what equity is, and how it has these multiple dimensions, and then the committee kind of moves forward through the other parts of the statement of task.

The next step in this, ultimately though, is to begin to determine what criteria are most important, and, even within this, if you're looking at say distributions of permits and quota, which was largely the focus of this statement of task, there are many different ways of looking at this information.

Equity, in its simplest sense, is often defined as fairness, but fairness doesn't always mean equality. It doesn't mean an equal distribution. There can be ways of distributing equity in a by-need basis, and need is often measured against some sort of baseline of what basic needs are, and so are these basic needs being met, or is this baseline need being met, and so distribution may not be equal.

It may be need based, and, in the equity literature, which there's quite a bit of it in fisheries throughout the world, there's a lot of different ways that looking at how fisheries benefits, and resources, are distributed, and so, really, this box opens up more questions. What is the historical context? What have been the historical goals of the fishery? That can push you towards what criteria are most important.

Then you move over to the bottom-left box, which is who are the subjects of these equity considerations, and, as I mentioned before, this report really took the first in sequence approach, and so the individuals who have access to the permits, and access to the quotas, but we all know that that's not the only individuals that make up a fishery, or a fishing community, and, for instance, fisheries rely on crew, and crew are an important part of the system.

Future generations, and so in multigenerational fisheries, and it might not be just the considerations of the current permit holders, and it might be the next generation of permit holders, and so defining what your equity subjects are, and what criteria you're going to measure equity by, are essential steps towards the analyses that you would want to make.

With that kind of context on where the committee went in approaching the report, the committee decided to take two different approaches, and you can find these in chapters in the report. The first was a zoomed-in, narrow lens on just the distribution of benefits for the issuance of permits and the assignment of quota, and so this is the narrowest interpretation of the statement of task.

Then the second was a broader view, and so, in the next one, the committee zoomed-out and said let's take a more inclusive view of the statement of task and say equity is holistic, equity is multidimensional, and expand a bit on who the beneficiaries are of the fishery, and try to think through both of these scenarios, and one of the things you'll find in the report is a mix of trying to pull from very short, brief case studies, or examples from fisheries within the U.S., and within other regions, but, also, there is this stylized fishery.

One of the elements of the report, that the committee focused on doing, was saying what if there was this stylized fishery that had many of the characteristics that we have in commercial and for-hire fisheries in the U.S., but it also has almost an ideal data scenario, and it has a lot of the information that one would want to have for doing an equity assessment, and how would you work through that.

Just for kind of a quick explanation, this is a new fishery, and so it's a fishery to where you're able to assess things from the very beginning. There's not a historical period to where you don't know who the participants were, or you don't know the distribution across the fishery, or you don't know the characteristics, and so it's a new fishery.

It is a single-vessel owner-operator fishery, and so it's one to where you can track individuals having permits, and those individuals fishing, and there's this relationship between the single vessel and the owner. Some of the equity considerations get very complicated when you have individuals who are not associated with vessels, or you have large groups, or institutions, that are owning permits in fisheries, and it makes it difficult to assess individuals versus institutions.

Through the report, the report goes through chapters -- There is five chapters all together, and each report, each chapter, has a series of findings and then a series of recommendations, and so, as I mentioned earlier, you know, Chapter 2 focuses largely on equity is not a simple concept that is easy to measure, and it's multidimensional, and contextual, and Chapter 3 really goes into the very narrow definition of the statement of task.

Chapter 4 is broadening, and thinking about other beneficiaries, and then Chapter 5 is really a forward-looking chapter of what could be done, what's the future directions that the agency could focus on to build capacity for assessing equity within fisheries.

We've only selected as a -- I gave my thanks earlier, and I should have mentioned thank to you to Darryl, and the NAS folks, for putting this presentation together, but we've got here is just a select number of the recommendations, to kind of give you a sense for what the report does, and so this is not all of the recommendations. There is a lot of them in there, but this is just some of the ones that we thought, you know, outlined the overall kind of spirit, and message, of the report.

I will note that this first one here focuses on developing and implementing a contextual, place-based, and participatory approach for integrating equity considerations into decision-making. I think this -- Honestly, in my personal interpretation from yesterday, it mimics some of the comments that Captain Zales about greater stakeholder engagement in the fisheries process.

I will note that the report includes some discussion of the Gulf and the participatory modeling that the NOAA Southeast Fisheries Science Center group has been doing in this space, as an example of some participatory science that occurs, bringing stakeholders in to represent their knowledge of the system as an approach to managing it.

Also, I will mention -- You know, on to the next one, for 3.1, where the recommendation was to expand work on equity by generating dashboards and data summaries that more fully express distribution of permits and quota holdings.

Overall, the recommendations within the report, that focus on expanding information, expanding indicators, expanding some of these data summaries -- Some of the information that does currently exist, like NOAA's social indicators for fishing communities, and some of these mapping portals, the Gulf, and the Southeast Science Center and Regional Office, have been really integral in the early development of these products that, you know, have been used in council documents, and in other management plans, so that the Southeast has some areas to be proud of, and some things to build on, as we go forward here, and I think many of these things are fairly available across the Gulf already, but, obviously, there's still a lot that needs to be added to be able to make this comprehensive and to make it more, you know, actionable.

Recommendation 3.2 focused on recommending NMFS to develop guidance documents for equity, and so the key thing here is that there are national-level guidelines for each National Standard, and so one of the things you'll read, in the report, is that the committee's interpretation is that NMFS already has a mandate to assess equity, that this is not new, that this is part of the National Standards, National Standard 8, and several other Executive Orders, but this is already a mandate on the agency here, and things that they've been working on, but that there needs to be more national -- There needs to be a more comprehensive guidance document that says here are the pathways, processes, resources for doing this.

I will note that the committee also noted though that the operational guidance of actually how to implement or manage for equity should be left to the regions, that this is not something that should be at the national level, and that that's still the regional implementation kind of ideology, and I think that parallels the presentation that comes after this, to where there was the national EEJ strategy and then the more regional implementation plans.

Recommendation 3.3 was to invest in developing social science capacity and leadership, and so, for those of you that aren't aware, there are senior-advisor-level positions within the agency, across a lot of different subject areas and expertise areas, and so there is a senior science advisor for economics, and there is even one, I believe, for some more specialized things like wind energy.

The committee wanted to recommend that there be added leadership, and social science expertise, for something like a senior scientist for the social sciences, and so more in the anthropology/social science/non-economics space here, because they already have fairly deep expertise and leadership in the economic side.

Recommendation 3.4 is that work on equity must transition to operational data collection and assessment, and so we recognize the landscape of how fishery management works, and the committee felt that this is a good example of we value what we measure, and we use what we measure, and so once a region, or once a fishery, determines the equity context, the equity subjects, and what needs to be measured, then there needs to be a commitment to measuring these things in a way that they can be operationalized in assessments and in management, because these types of social science data often are just single points in time, or they're disconnected enough from the time series that management decisions are made that they're hard to fold those things together, and so, in this case, it's really focused on identifying the most important information and then committing to measuring that in a way that it can be operationalized and actually used.

Recommendation 4.1 focused on collecting and, to the extent possible, disseminating public information at more regular intervals, to adequately assess the impacts of management decisions and change in fisheries. This one gets into, you know, a deep conversation around some of the barriers that occur.

There is not just the Paperwork Reduction Act, but there are privacy laws in place, and there's rules that limit what information could be shown, even at the scale of a geographic fishing community, depending upon the number of permits, or the number of businesses, within that community, and so this is one that represents the difficultness of being transparent in an equity conversation, or an equity assessment, because there are restrictions on the information that can be shared publicly, but still generally committing to managing in a way that there is public transparency and stakeholders are able to see what's going on.

4.2, and this is where I was alluding to earlier, of some of the social indicators, but continue developing the community-level indicators of fishing engagement, dependence, and reliance, and you will see a fair amount of discussion about these community-level indicators.

There was a lot of conversation in the open meetings, and some discussion in the report, about the difficulty of defining fishing communities geographically, and so that's not lost. We recognize that, you know, fishing communities are not all constrained to the zip code, or the community, on the map. People live in different places, and people fish across large regions. Landings don't always occur where processing occurs, and so these fisheries are spatially difficult.

However, at the same time, these community-level indicators do give a lot of information on who is fishing, how communities have changed through time, how they rely, and engage, on fisheries, and this information could be useful in kind of the current context, because it is information that's there, and so, in addition to looking forward to what information is not available, and needs to be collected, this one really focused on some information that's already there.

Then, transitioning into Recommendation 5, and, just as a reminder, Chapter 5 is really the forward-looking chapter, that the first one, 5.1, is that NMFS should focus its work on equity, to move beyond just distributional outcomes associated with permits and quota, and focus on more multidimensional aspects of that fleet, and so recognition of the knowledge of stakeholders, and it's, again, getting back to Captain Zales' point from yesterday, and that aligns with the discussion of the report. Then, also, you know, inclusion in the process, and so that participatory process is really important for moving beyond just distributional equity.

Then Recommendation 5.2 is the qualitative data and methods and mixed-mode approaches to assessing procedural recognition, and contextual equity should be elevated in fishery management decision-making, and so just making sure that this information is seen for the value that it has, that it's prioritized, and kind of shared throughout the whole fishery management decision-making system.

For anyone who didn't have access to it, and so the report was posted with our materials, but there are other kind of executive summaries, and you can find the study website at the link above, and I'm happy to answer any questions, either now or over email, but, also, feel free to reach out to Tom Miller, who was our committee chair, or Darryl Acker-Carter, who was the research associate who is now helping coordinate this project, and so feel free to reach out to any of them, and you have my email, and thank you again for the opportunity to share this work on behalf of the committee.

CHAIRMAN NANCE: Steve, thank you so very much for that presentation. I think it was very informative. Dave Griffith, please.

DR. GRIFFITH: Hi, Steve. Thanks a lot for the presentation, and, you know, I really did enjoy reading this report, and I thought you guys did a wonderful job, when I reviewed it, and I'm kind of curious though about this participatory -- You know, we talk a lot about participatory management, bringing more fishermen into the process, and I'm wondering if you can enlighten us on how you might go about that process and whether or not, in order to improve legitimacy of that process, how much it would include traditional and local ecological knowledge of fishermen. Thank you.

DR. SCYPHERS: Thank you, and I think you just asked a couple of the really important and more difficult questions that the report definitely elevated to the level of important questions, but things that we just -- The committee is not able to answer in a general sense, because it's so different across regions.

You know, on the first one, on the participatory element, and I think this is where the stylized fishery was, it was a useful exercise to be able to say, in this stylized fishery, that is a brand-new fishery, and so it has no legacy of the past, and, you know, the pathway to a participatory process is easier, because you can see who the initial entrants are, and you can identify the stakeholders, and you can kind of co-create from the very beginning.

I think that's great, but that's also still, you know, we recognize an exercise, and it's not really what matches the way that many of these fisheries are, because they do have legacies. They have catch histories leading up to whether they shifted to limited-access permits or not, and then, from there, it's really hard to identify, you know, who the current stakeholders are, but one of the things that kept getting asked in meetings, in public meetings, is we still always have the problem of, if you're not in the room, raise your hand, and who are the people that would have had access, but didn't, because of the way the system was set up, or who are the folks that were involved in the fishery, and then left for a variety of reasons, and what were the mechanisms for their exit.

That part of participation -- I think it's just clear that it's not easy to be inclusive, equitable, and participatory there, and so that part is really difficult.

Your second part though, on LEK, the traditional ecological knowledge, you know, that's where I think some of the examples from the Western Pacific, and then Alaska, were useful, because I think they've had a lot more experience trying to think about how to bring those datasets in, and there's a couple of examples in there, but it's very regionally and contextually complicated, and I know that that's why I wanted to read Tom Miller's quote in there, is because I know that's an unsatisfying answer.

DR. GRIFFITH: Thank you very much, and I just want to add one -- Can I just add a follow-up comment, Jim?

CHAIRMAN NANCE: Yes, please. Yes. Go ahead, David.

DR. GRIFFITH: Okay. Thank you. I just want to mention that economics is a social science, and I know, a lot of times, people make a distinction between economics and the other social sciences, and I think that has a tendency to kind of elevate economics above the other social sciences, and I would just like to point out that economics is a social science, and, more recently, economists have been drawing much more heavily on the other social sciences in their analyses, and so I just wanted to point that out. Also, thanks a lot for -- Again, thanks a lot for this report and your role in it, Steven.

DR. SCYPHERS: Yes, sir. Thank you, and thanks again for the review and the feedback on it, and definitely point well taken, and it's something that the committee wanted to make sure was explicit in there, was -- The interpretation was that the senior scientists for economics would be unlikely to be filled by a sociologist or anthropologist, and so that was the need for a recommendation for a broader senior scientist and social scientist, but you're right that it could be a social scientist -- An economist could fill that slot as well, and so thank you though again.

CHAIRMAN NANCE: Thank you. Luke, go ahead.

DR. FAIRBANKS: Thanks, and thanks for this presentation. I had browsed the report, but it's always good to hear these presentations, to help get the main takeaways. I was curious, and this is probably a hard question to answer, given that some of the recommendations were about asking NOAA to think about how to operationalize these things, and come up with guidance, but was just curious, you know, what you, and the committee, discussed, or concluded, in terms of sort of if there were opportunities for short-term, tangible ways that these concerns could be inserted into management, whether in a form like that this SSC, or, you know, with the council, or through sort of the applied processes of the stock assessment cycles and things like that.

You know, what are -- If there are sort of low-hanging fruit for kind of, you know, tangible, modest improvements that could help bring about more of these concerns for distributional equity, given that, like you said, that, you know, the assumption is that this is a mandate of how fisheries management should already be done, you know, and that might be a little bit different than some of the broader recommendations, moving forward, regarding participation, or guidance, and things like that, and so, if you had any thoughts on that, I would be curious. Thank you.

DR. SCYPHERS: Thank you, Luke. That is a great question, and it is one that the committee spent a lot of time talking about, and, before I answer it, I just want to be very clear on this part too, that this is -- The way I will answer this is that this is what the agency could do, and not what the agency should do, in these instances, and, in many instances, there will still be data limitations, or gaps, that prevent this from happening.

One of the -- There is a slide, later in the back, on kind of towards this direction on what can NMFS do now, because that was some of the feedback that came through in the report, is make some things actionable now of what could happen, and so, in instances where the agency does have information at participation list level, and so who the fishery participants are, who the owners of the permits are, who the recipients of the quota are, and any variety of characteristics of those owners, you know, permit holders, participants, they could assess the distribution of permits and quota with that level of information currently.

Now, the setting of what the management goal, or what the equity goal is, that's more complicated, and that's something that then, you know, has to be set within that particular fishery, but, in many instances, there is information of, you know, who the owners are, how the allocations occur, and who holds how much type questions, and that information is already there, and available, many times.

The second level of analyses that are largely possible now is at the community scale, and so those community social vulnerability indicators. That toolbox is really valuable to kind of, right now, be able to assess where, spatially, benefits are accruing, and so you could currently use those resources. The agency could currently use those resources, and they are using them to assess reliance, and participation, at community level, across the region.

Now, the other part of your question I think is the one that we all have asked about, in various forms, and that is how do you actually link that to a management context, or a decision context, and I think that's when you really have to take a close look at the details of how spatially and temporally refined these information sources are.

If the social science datasets are only updated every five to ten or fifteen years, then they're going to be less useful, in a management context, to even assess change before and after an event, and whether that event is, you know, a disturbance event or a management shift, and, if you don't have that temporal resolution in the data, those analyses aren't very fruitful, and so those are things that can be done now, in certain contexts, but, as you saw, many of the recommendations are on, you know, committing to more regular data collection and more operational-type data needs. I hope that kind of gets at what you were asking.

DR. FAIRBANKS: Yes, and that was great. Thank you.

CHAIRMAN NANCE: Thank you. Cindy, please.

DR. GRACE-MCCASKEY: Hi. Thank you very much. Steven, thank you for the presentation. You and I have chatted about this, this effort, and I think this is really, really important. I guess my question is somewhat similar to, you know, some of what you just talked about, in terms of I guess like next steps, right, and so, having formerly worked for NOAA, and, I mean, I don't think I'm going to die on the hill that we need more non-economic social scientists in leadership positions, and we need more of those data, et cetera, but, you know, I'm curious whether -- I guess how this was received by NOAA and/or, you know, if we have any indication of their willingness and ability to actually implement some of these suggestions, and recommendations, and/or, you know, maybe what our role is, the council and SSC, et cetera.

DR. SCYPHERS: Thank you very much, Cindy, and that's something that I could have mentioned in the introduction, and I didn't, and so it's a really good question, because this study was envisioned as part-one of a two-part study to begin with, and so the plan, and this is a little bit in the introduction of this report, is that this particular report was tasked with showing what the information needs are, what information is available, and how you would do the analyses. Then a follow-up report, follow-up assessment, was to actually look at a set of fisheries and try to, you know, make the assessment, conduct the assessment, and see, you know, that process through.

I don't want to speak -- I will not speak, you know, for the agency, and how they received it, and I will say that I think that the committee anticipated that the report was more complicated, and that the pathway to assessing equity was not as straightforward as might have -- As we might have hypothesized they would envision to do a phase-two, and so that's where I think, you know, the quote I read from Tom highlighted that this is not simple.

I do know there are ongoing discussions between NOAA Sustainable Fisheries and the National Academies about a phase-two, and I don't know any details. I'm not involved in that part of it, but I hope that that comes to fruition. I hope they do build another committee, and I hope they're able to try to kind of pick up from this part, grab some specific fisheries from each region, and try to do this in practice. Our timeline, and scope of work, didn't, you know, allow that, but I think you're right that that's the next step, is now, you know, try to do something.

DR. GRACE-MCCASKEY: Awesome. Thank you.

CHAIRMAN NANCE: Thank you very much. Jack, please.

DR. ISAACS: Good morning, everybody. I really enjoyed this presentation, and I'm going to enjoy getting into this report too, which seems that it might be kind of long overdue. You know, I'm an economist, and folks that talk to me know that I get a kick out of economics, but the discipline has its limitations, as much as some of my colleagues are loath to admit that, and, in particular, we're not really very good at these issues of equity, and we try to punt on that issue, by almost dodging the matter altogether, but, as my friend David said, you know, we are supposed to be social scientists, and, if you actually listen to the people that we're supposed to be studying, you can see that these issues of fairness and equity are very important to them, even if, as economists, we're not very good at measuring them, and so, when you get reports like this, you can point out that the fact that fairness and equity are very important to our stakeholders, and I'm very much encouraged.

Also, I'm really going to be curious to see, you know, what happens when they start studying the particular fisheries and the like, and I think that's going to be very helpful, and I encourage the public outreach efforts, too. I've learned that here in Louisiana, at the state level, the importance of that.

It is very often the folks that you hear -- This is not going to be revelatory to anybody, but, very often, the fact that you're hearing from certain folks at meetings, and conferences, and whatnot, and it doesn't mean that you're hearing from a representation of our stakeholders, of the people that we're supposed to be serving, and so these efforts at reaching out to encourage more people to participate I think will only help us to make better decisions. Thank you.

CHAIRMAN NANCE: Thanks for those comments, Jack. Rich, please.

DR. WOODWARD: Jack stole some of my thunder, as an economist as well, and I totally agree that we are social scientists, as Dave pointed out, and I think are a couple of key distinctions. One is, as Jack pointed out, that we don’t focus very much on equity, and the other is I think that we don’t use qualitative measurements, and that’s going to be really important, particularly in talking about equitable access, and so I think we need to be more systematic about appreciating the value of qualitative data, and also, you know, evaluating its quality as well, and that’s where it’s going to be difficult to find an economist with a good ability to make those distinctions, and so I applaud the efforts that are encouraged by this report, and thanks a lot for the presentation, Steve.

DR. SCYPHERS: Thank you very much.

CHAIRMAN NANCE: Thanks for those comments. Will Patterson, please.

DR. PATTERSON: Thanks, Mr. Chair. Hi, Steven. I really appreciate you providing this report to us, or a synopsis of it. I can only imagine what kind of undertaking this was. I mean, as you indicated early on, and in reading Tom’s definition of equity, you know, it’s not a real -- It’s not a term, or an issue, that has really defined edges, you know, and it’s kind of fuzzy, and I think you answered part of what I was going to ask in your statement about this second report, where, if there was a second study, you would have examples from actual fisheries, and you would try to do this assessment of equity, but, you know, part of --

When I’m thinking about equity, you know, there’s, obviously, different components of that, and two big ones are, you know, access to fisheries and their benefits, but also, you know, there’s this issue of equity which is access to decision-making and the process of, you know, making regulatory changes.

A lot of the statements that you made, in providing your synopsis, were focused on what the agency, National Marine Fisheries Service, NOAA Fisheries, could do to collect data that would be useful for doing these, you know, equity assessments, and, you know, National Marine Fisheries does do scientific assessments, you know, stock assessments, and they do socioeconomic assessments, but where, you know, decision-making occurs, in regulating fisheries, is at the council level.

The council is very much a political process, which is only partly informed by science, and so I’m curious, you know, how much discussion you had during this process, talking about, you know, access to these political levers and advocacy, because not all constituent groups, or stakeholder groups, in a given fishery have similar access, and sometimes decisions are made, or certain decisions are made, not in the room, right, and they're made ahead of time, and, you know, council members -- I am not talking about the Gulf Council specifically, but, among all councils, you know, various council members have their information that works, and people who are pulling their ears and talking to them about what they would like to see happen on a given issue, and so sometimes these decisions are made even before there is public comment in the room.

You know, my question, first, is, you know, did you guys -- Did you folks have much discussion about that type of equity and access?

Then, secondly, your group was pretty broad, but, you know, it can only be so broad with, you know, ten or so members, but, you know, in our region, we differ from a lot of regions in the diversity of stakeholder groups within our fisheries. I mean, it's more complex here than I think any place in the country, but, also, you have that issue where you have regional differences in the makeup of fisheries, and the various stakeholder groups, and I'm sure that came out in some of the discussions that you had.

Also, you know, there are very different world views, or predominant world views, that exist among the regions, and so I wonder how that -- You know, if you discussed that explicitly, or was this more a general, you know, higher-level theoretical discussion about equity, and not necessarily what it would take during the political process to affect equity, however it's defined, and whatever decisions are made, and how that might work in different regions differently, and so, anyway, sorry for the very long two-part question, but I'm very interested in the work you've done here.

DR. SCYPHERS: Thank you, Will. So, for the first part, largely no, and so the focus was generally -- The focus was narrowly within commercial and then within for-hire, and so comparisons across fisheries and council dynamics was not within the scope of it.

I do think, you know, the council process is described as co-management. I mean, having various stakeholder groups represented within a council, and that varying regionally, is described in there as kind of a representation of a co-management process, where you do have stakeholders engaged at that system, but it wasn't the level of focus of kind of this report.

To your second part though, on within the Gulf and the stakeholder diversity, absolutely, and I think that's one that, you know, each -- If you look in there, there's some short regional kind of examples from each area, and I think the committee would have really been able to unpack those even more, if we had more time and more, you know, ability to do it, because there is so much complexity.

I mean, the Gulf, you're absolutely right, and there's so much complexity within just the commercial, and then the for-hire side of it is very different, too. If you look at the subjects of equity, you know, the way -- One example, in the report, is just how different crew function, and how crew are compensated, in the for-hire fisheries versus the commercial fisheries, and then, if you look at just crew within commercial fisheries, there is extremely different crew compensation programs throughout the country.

In some regions, you know, crew work their way up to become captains, and eventually owners, and, in others, they don't, and, in some, there is reliance on, you know, different social groups for crew labor, and so it's -- In kind of the preamble, where I was talking about how complicated it is, I probably should have also acknowledged that we didn't fully represent that complexity in any region, and certainly the Gulf is the most complicated, as you said, and I do hope that the next report comes to fruition, and I hope that the statement of task allows them the opportunity to tackle some of these areas that, you know, are important to the Gulf and important to other regions.

DR. PATTERSON: Mr. Chair, can I just respond, real quick?

CHAIRMAN NANCE: Yes, please. Go ahead, Will.

DR. PATTERSON: Thank you, Steven, for that greater context and explanation. I really appreciate it. You know, sometimes we get reports, and we get presentations, and the SSC doesn't quite know what to do with it, but, in this case, I think we should consider, you know, offering a motion to encourage the sponsor, which I think was NOAA Fisheries, to go back to NAS and say, hey, you know, this follow-up report, and, you know, expanded in the directions, as indicated, would be very beneficial. I would support that.

CHAIRMAN NANCE: I appreciate that, Will, and we certainly can look for a motion from this committee for that purpose. I don't know if you have one ready, Will, or someone else.

DR. PATTERSON: I don't. I'm wondering if maybe one of the socioeconomic folks, that might have a little broader knowledge of all the intricacies of what was done, and what could be done, you know, might be better to offer that motion.

CHAIRMAN NANCE: Okay. We'll take Jack's question next, and David, or Cynthia, any of -- If you would like to make a motion, please consider that, and we'll be able to entertain that after Jack's question. Jack, please.

DR. ISAACS: You know, I don't want to slow things down, and my question was answered, I think, just in the previous set of comments, and just a brief reminder of my example here in Louisiana of some of the importance that can stem from these equity efforts. Years and years ago, say fifteen or sixteen years ago, the department really didn't have any measurement on say the ethnic composition of its commercial fishers, the ethnic composition of our -- Of, you know, the crewmen and this type of thing, and then, for some reason, twenty years ago, eighteen years ago, we were asked to do an assessment of the languages spoken, by people in the department, and, also, I did some more work after that, on other matters, and we found that a large percentage of our commercial shrimpers were Vietnamese.

In fact, in subsequent research, we found that, at least in one year, probably half of the landings, by value, came from Vietnamese commercial fishers, and we also, you know, had some documented evidence of the -- Of Spanish speakers among oyster crews and the link, and, as a consequence of that, the department started doing simple things, like making Vietnamese translations of some of our important regulations.

Nobody had really thought of that before we measured the problem, and our enforcement division has now made it a point of hiring Spanish speakers among its agents, for the contact with people in the public that are affected, and so, you know, just having a measurement of the problem prompted some positive responses here in the Department of Wildlife and Fisheries in Louisiana, and I'm sure that, if we get measurements like this at the national level, the federal level, we'll also have more positive developments like that.

CHAIRMAN NANCE: Thank you, Jack. Steven, I wanted to just say that I certainly appreciate this presentation. I think it gives me a lot better understanding of the complexity of equity and how important that is as we consider all of the things that the SSC is -- Items that are brought up before us, and I think this is certainly part of that. If we don't have a particular motion right now, the next presentation is by the -- It's going to be by our Regional Office, some of the Regional Office staff, Christina and Heather, and it's on equity and environmental justice, the regional plan, and so maybe we could tie it in together, but, Dave, if you have one now, we would certainly appreciate that. David Griffith, please.

DR. GRIFFITH: Well, I don't really have one off the top of my head, but I would like to have a moment, maybe while we're going through this other thing, to talk to Steven about drafting one. Is that all right with you, Steven?

CHAIRMAN NANCE: That's perfect. I have no problem with that, and, as we listen to this other one, maybe that will help congeal what we want to say for -- Because they're both very related, and so it doesn't hurt to have it here or after the next presentation, and so I would certainly appreciate any input after this next presentation also, and so thank you for that.

DR. GRIFFITH: Okay. I will send Steven an email. Thanks.

CHAIRMAN NANCE: Okay. Perfect. Thank you so much, and you can work on that with him, and even later in the day or whatever, and it's not necessary to do it right after these presentations, but just -- I do think it's important that we've heard this presentation, and we feel it's important, and I think a motion would help to congeal that.

DR. GRIFFITH: Thank you very much, Mr. Chair.

CHAIRMAN NANCE: Thank you. Our next presentation, and I'm going to have Ryan give the scope of work, and so we'll go ahead and do that first.

EQUITY AND ENVIRONMENTAL JUSTICE REGIONAL PLAN

MR. RINDONE: Sure. Christina Package-Ward, from the Southeast Regional Office, and Ms. Heather Blough, also from SERO, will present the Southeast Equity and Environmental Justice Implementation Plan. This plan integrates the national EEJ strategy, emphasizing the distribution of benefits equitably, enhancing community engagement, and providing institutional support for underserved communities.

The presentation will cover immediate and long-term action items, including research and monitoring priorities, policy adjustments, outreach strategies, and governance involvement aimed at ensuring equitable access to fisheries management benefits. The SSC should evaluate the information presented, ask questions, and make any recommendations, as appropriate.

CHAIRMAN NANCE: Thank you, Ryan. Christina and Heather, I'm not sure who is going to give the presentation, but we appreciate both of you being on the line today for this presentation.

MS. HEATHER BLOUGH: Good morning. This is Heather. Can you hear me?

CHAIRMAN NANCE: Yes, Heather, we can. It's good to hear your voice.

MS. BLOUGH: Okay. Super. Yours too, Jim. I am here, together with Christina right now, and so we are with NOAA Fisheries Southeast Regional Office, and we're going to co-present, actually, on the agency's Equity and Environmental Justice Implementation Plan for the Southeast.

Our Southeast Equity and Environmental Justice Plan actually implements the national strategy that was released about a year ago, and that national strategy outlines six objectives for advancing EEJ through our mission-related work at the agency. The regional plan was due to headquarters early last month, and so it's up there now, currently under review, and it's intended to be a living document that we will review and update every five years, or sooner if needed, and, you know, this is the first time that we've ever undertaken a comprehensive effort to advance a common set of objectives around this topic.

As Steven noted, this is a really complex issue, and it is relatively new to us, and we do expect our work in this area, and the implementation plan itself, to continuously improve, you know, as we gain more experience with the topic in general, learn more information, and continue to get feedback and input from our underserved community members, the councils, and other partners and stakeholders.

At the council's meeting in January, we reviewed with them a comprehensive list of nearly 200 action items that came out of an extensive public engagement effort that we conducted last summer and into the fall, and that was to talk with underserved communities, and also the broader public, about ways that we could advance those six national objectives through development of our region-specific implementation plan.

At their April meeting, just last month, we summarized, for the council, the feedback that we have received from Gulf Council staff on that initial list of action items that we have been considering, as well as input that we received from our South Atlantic and Caribbean Councils, and some others, and we also previewed for them more of a refined suite of actions that we ultimately incorporated into the implementation plan that we sent up to headquarters last month, and that's the information that we're going to share with you all today.

We have grouped the action items that we put into the implementation plan into two distinct categories. About two-thirds of them are identified as immediate or near-term items that we are committing to accomplish within the first life cycle of the plan, with existing resources, and then we also have identified several longer-term, unfunded actions that we believe are really important to advancing the suite of national objectives, but we don't have resources to support at this time.

There's a lot of content to cover, and we've organized this presentation by objective, and, as we run through each objective, we'll pause at the end, to invite questions or discussion around potential areas of collaboration or recommendations or advice that you have for us. You also have a handout linked to your agenda, if you would to follow along, and that actually has the full text of the action items that were incorporated into the draft plan that we'll be referencing, and so you can see that as well, as a reference guide. Any questions, before we jump into the objectives?

CHAIRMAN NANCE: Any questions from SSC members at this point? Seeing none, Heather, let's go ahead and proceed.

MS. BLOUGH: All right. Thanks, Jim. I'm going to turn it over to Christina to start on this.

CHAIRMAN NANCE: Okay. Thank you.

MS. CHRISTINA PACKAGE-WARD: Hi, everybody. Our research and monitoring actions aim to improve and expand the social science needed to fully identify and understand our underserved communities and their EEJ-related concerns, needs, and interests.

The feedback that we received from the Gulf Council staff on this objective was generally supportive, and it highlighted relevant council priorities and recommendations from the recently-released National Academies of Sciences report that was just discussed. It also expressed interest in aligning priorities, where appropriate, and then they also cautioned us to manage expectations and the disappointment that can be created by signaling that we want to increase co-development, and coproduction, of priorities when there are not resources available to fund the work.

In response, we looked for opportunities to align research and monitoring priorities with council priorities, when possible, and we used the council's current priorities, but we note that staff mentioned that they will be updated this year, as well as the National Academies of Sciences report, noting some areas of overlap on the topics of social vulnerability indicators, diversification, and allocation. Then we carefully vetted our funded and unfunded list, taking a hard look at whether the items included on each were realistic.

Our resulting immediate or near-term actions are focused, in large part, on conducting research and analysis to identify underserved communities and understand their issues and challenges, and so this includes analyzing the barriers to entry in federal fisheries, expanding demographic data collection, and undertaking interview work to better define and identify underserved communities in the Southeast, examining historical factors and processes, surveying crew members, and analyzing these data, and conducting interview work with IFQ participants, and managers, to identify IFQ-related challenges.

Our immediate or near-term actions also include partnering to explore and engage on key topics, such as using specific tools to identify and understand unserved communities, involving underserved communities in participatory research and citizen science, and examining the effects of allocation decisions and the impacts of seafood imports.

We also identified several longer-term research and monitoring actions needed to effectively improve our service delivery to underserved communities across the region. We intend to prioritize this additional work as funding is identified in future years, and these include evaluating equity issues in fisheries, including underserved community challenges and procedural equity in the fishery decision-making process. Then analyzing the impacts of services and management decisions and also examining the expected versus actual impacts of fishery management actions, examining the importance of diversifying operations in fisheries, conducting research to eliminate specific underserved populations and issues, including consumptive or subsistence use of fisheries and women in fishing, and identifying challenges and lessons learned from disaster events. I will just pause here, if there are any questions, or discussion, on this topic.

MR. RINDONE: Carrie.

EXECUTIVE DIRECTOR SIMMONS: Thank you, Christina. I just wanted to mention that the Gulf Council will be working to update our research and monitoring priorities in the next -- Probably during the July council meeting, for the next five-year award, and, when we were going through this, you know, some of the similarities that we saw, as far as the research and monitoring priorities, through the review of the original draft of this, was very -- They were very similar, and so I think we're going to try to echo -- To make sure we use the same language, and try to build these in a little bit better as well to our plan, and so hopefully you'll see some of that in the coming months at our SSC meeting, and so I just wanted to mention that. Thank you.

MS. PACKAGE-WARD: Awesome. That's great, Carrie. Thank you for sharing that.

MR. RINDONE: Any other hands? Okay, Christina.

MS. PACKAGE-WARD: Our policies and plans actions aim to address various institutional complexity and access barriers identified during our stakeholder engagement work. The feedback that we received from Gulf Council staff on this topic questioned the purpose, or objective, of several of the activities we were considering, including some terminology that was unclear.

They encouraged us to try to present the activities at more consistent scales, as some were very generalized, and others were fisheries-specific, and, also, they encouraged us to identify more meaningful metrics, in some cases, and use language that more clearly distinguishes our role and authorities, and they also noted their preference for more informal best practices, versus policy directives that were proposed to address certain barriers.

In response, we substantially refined, and revised, the list of items we were considering under this objective, and we also clarified terminology, in some cases.

Our resulting immediate or near-term actions focus on ensuring equitable access to offshore aquaculture opportunities and to climate-related benefits and services, working with our observer program to determine if any changes would be appropriate to address some of the suggestions we heard there, and to develop an informal handout on the program that can be shared with vessels as they receive their selection letters, establishing best practices for how we develop and deploy fisher surveys, collaborating with the Gulf Council, and others, to address equity issues in the shrimp and IFQ fisheries, along with any unintended procedural barriers to engagement, and working with our General Counsel and headquarters to develop policy guidance addressing the use of various forms of financial assistance to support our underserved community engagement objectives.

We identified two longer-term actions that we believe are important to ensure the equitable distribution of our mission-related opportunities and services in the Southeast. We intend to prioritize this additional work as funding is identified in future years, and so these are focused on simplifying our fishery permit application and renewal processes and developing a policy framework to support more routine and consistent efforts to gather, consider, include, and apply local and traditional ecological knowledge in our data collection, science, and management processes. I will just pause here, if there are any questions, or discussion, on this item.

CHAIRMAN NANCE: Any questions? Seeing none, Christina, go ahead.

MS. PACKAGE-WARD: Perfect. Our benefits actions focus on leveling the playing field with respect to the opportunities and services we provide, so that all stakeholders have equal access. The feedback that we received from Gulf Council staff on this objective emphasized the importance of social and economic data collection and analysis needed to characterize the full flow of benefits and beneficiaries.

They pointed to the National Academies of Sciences recommendations on that topic, and they noted that our social vulnerability indicators work is a research priority for the councils. Staff also cautioned us to manage expectations regarding our ability to increase stakeholder access to grants benefits, as competitive funding is limited, to carefully consider our ability to address stakeholder requests for national-level policy changes, and support with federal fishery disaster assistance, given our limited roles and responsibilities in those areas.

These comments were very helpful to us in developing a shorter, more refined, and meaningful list of actions to advance this objective, and so our resulting immediate or near-term actions include tracking the percentage of opportunities that accrued under certain communities, when we're able to do so, so that we can get an understanding of what that looks like.

The types of opportunities we're thinking about, in this context, would include things like contracts and grants, experimental fishing and research permits, educational training and internship opportunities, and we've included several options, or several items, focused on reducing barriers to accessing grants, careers and mission-related jobs, and the capital needed to successfully compete for fishery and aquaculture opportunities and maintain profitability.

We want to promote the consideration of underserved community needs in federal fishery disaster assistance allocations, in collaboration with headquarters, states and territories, and other partners, and other items would have us collaborate at all levels of government to explore and pursue opportunities for preserving, or creating, new infrastructure and working waterfronts.

This is a critical need in all three regions, and there are a number of opportunities that we could explore, and take advantage of, if we allocate the time to do so, and we've also included a couple of items that try to address requests to use our authorities to help communities mitigate the threats they're facing from large-scale infrastructure and energy projects and related natural resource injuries.

We've also identified just a couple of longer-term actions we believe are needed to effectively support this objective, but would require additional resources, and those include advancing, and improving, science and management in the U.S. Caribbean, collaborating with underserved communities, the aquaculture industry, and the fishing industry to develop, or support, high school technical courses, and other vocational training, and technical assistance programs in fishing and marine aquaculture, with a focus on underserved community members, and I will just pause here, again, if there are any questions, or discussion, on the benefits item.

CHAIRMAN NANCE: Thank you, Christina. Dave Griffith, please.

DR. GRIFFITH: Hi. Thank you, Christina. I appreciate what you've done, and I was just looking at this managing expectations part of the slide, the previous slide, and I think that's a very -- I'm kind of wondering how you do that, but I think it's a very important thing to mention, because, a lot of times, when we're out in the field, doing focus groups or interviews with fishermen, or other stakeholders, and it seems like, a lot of times, they have pretty high expectations of what our research may result in, and I do think that it is important to kind of tone-down those expectations, because sometimes, when you go back and interview them a second time, they say, well, we haven't heard anything from you, you know, for the past few months, and we expected, you know, NOAA to come in here and make regulations, or something like that.

I hear it all the time, in all kinds of underserved communities that I do research with, whether they're migrant farm workers or, you know, crew on fishing vessels, and so I was kind of wondering if you would address that, and how would you manage those expectations?

MS. PACKAGE-WARD: I think, you know, a lot of what we heard too was just that people were happy to be listened to, just in general, and so, I mean, I don't -- I think they are expecting something to come from this, but they were just happy to have their concerns heard and feel like they were considered in this process at all, but I don't know, Heather, if you want to speak more to this.

MS. BLOUGH: I think the other thing we try to do is just be really open and transparent about what we can and can't do, the funding limitations that we have, right, and like this first initial exercise was really a listening exercise, right, to get their issues on the table, being super clear about the need to vet it, how long it takes to make change through the council process, you know, on those fishery-related items, and that this was really the first time we've even initiated discussion on the topic at all, and so we're hopeful that --

We did hear that they were afraid this would be the only discussion, and they would never hear from us again, and they weren't sure that they would ever see a plan, and so we are hopeful that, when the plan comes up, that they will feel like they were well heard and be supportive of the items that we prioritized to carry forward, but it kind of feels like that's going to be a continuous like effort to build and continue trust with them throughout this process.

CHAIRMAN NANCE: Thank you. Will.

DR. GRIFFITH: Thank you. I appreciate that.

CHAIRMAN NANCE: Dave, thank you for that question. Will, please.

DR. PATTERSON: I was going to save this until the end, but it kind of follows on what David just asked, and so, in the right-hand column, you have immediate, or near-term, actions, and then, obviously, the longer-term types of things, and a lot of these are to, you know, promote, preserve, promote, and so there's no concrete like we will do this, and this is our first priority, and so I'm curious that, in this process, and it may just be too early stage to have thought much about this, but, you know, some of these action items can be really big, and expensive, and so I'm wondering if you've thought about like the scope of cost to implement some of these things that you're just starting to identify, or if that's something that is more of a longer-term process that you will undertake.

MS. BLOUGH: So we did try to -- I mean, we did consider that for the items that we did include in the near-term, right, and you're right that a lot of the wording is consider, explore, and, you know, this is -- Because we're just starting this process, and we also tried to focus on items, and conversations, that are already ongoing, or are planned, right, over the next few years, related to like -- So two of the biggest topics that came up in the Gulf were shrimp, right, and basically the entire shrimp industry identifies as underserved, and, because they're looking at equity issues related to the imports, right, the market conditions, and like not having a level playing field with the management system, and so we're already working, through our National Seafood Strategy, to try to develop a pilot project around that that would -- You know, there's the Gulf Futures program that we're working on with the commission.

The idea there is to start working outside of just NOAA Fisheries, right, to expand the scope of the conversation to include the other agencies that can actually help affect some of this work, and I feel like the communities that we talked to understand what that is, right, and they're not expecting us to resolve the issues overnight, but they're just really grateful that we are willing to have the conversation and start pulling in the people, right, who can help to make it happen, or arrive at some sort of a -- Even if it doesn't necessarily resolve all their issues.

That's for shrimp, and then, like on the IFQ issues, and that was the other big issue, and challenge, that was raised with the people who are participating in that program, that have to lease shares and don't own shares, right, and so we already hosted some IFQ -- We organized some IFQ focus groups around increasing market transparency last year, and the council is doing some work in this area, and has some open amendments, and so just trying to support -- To look at ways we can support that process too, to like improving increasing equity in that fishery.

The infrastructure work was -- It's probably like one of the biggest things that people highlighted, the biggest needs across three regions, and there are -- You know, like DOT has -- I think it's current open, but a solicitation, and they actually have billions of funds allocated, right, to support infrastructure development across the nation, and I think it was an Oregon representative that actually had like fisheries added to the list of covered eligible projects, and so that action would -- It's intended to give us a little bit more capacity to track, and maybe participate, in some of those projects and make sure that we're taking advantage, where there are opportunities like that, to be able to identify them and communicate with stakeholders about how to apply for funds and that kind of thing.

MS. PACKAGE-WARD: If you look at Item 9c, it has our action items in there, and so we do have metrics for each item, which, I mean, are still maybe not quite as refined as we would like them to be, but that has some additional detail on what we plan to do for each item, and how we plan to measure it.

CHAIRMAN NANCE: Thank you, Christina. Carrie, please.

EXECUTIVE DIRECTOR SIMMONS: Thank you. I think this has been a great conversation, and I think one of the things that we were commenting on here specifically was a little bit more weedy, and that was -- Essentially, it was discussing, you know, an education and informational opportunity for the grant process, and we had a little bit of concern about, you know, the way that was described.

It essentially was saying that, if you took this training, you would be receiving potentially the funds, and so I think that's one of the things we were trying to manage with our review, specifically on some of those items, and I will give you an example of something that happened recently at a shrimp industry meeting that was held in Baton Rouge with Sea Grant. We were informed that some of the industry groups had submitted, I believe, six proposals with Sea Grant, and I think it was Georgia Sea Grant, for S-K funding, and my understanding was that no funding was received for marketing at all by that individual, and so that's what we mean by managing expectations there. Thanks.

CHAIRMAN NANCE: Any other questions? You know, I was thinking, looking at the benefits and so forth, and developing infrastructure, and is there a cost associated with that, Heather or Christina?

MS. BLOUGH: I mean, at this point, at this initial stage, we're thinking the cost is just staff time to participate in identifying some of these opportunities, participate in the National Seafood Strategy work that's ongoing, and conversations with other federal agencies who are responsible for different pieces of it, you know, Trade, USDA, and so, I mean, all of these, for the most part, are starting small.

CHAIRMAN NANCE: Okay, and I think, as these initiatives build up, and move forward, then the costs associated with that would be something that would be discussed at various meetings and so forth.

MS. BLOUGH: Yes, and like, as this is a living document, right, I think we're also thinking that, as we identify more discrete projects, with related costs that start spinning off out of all of these, those could be incorporated, right, into either into the longer-term unfunded, or we could decide to fund them, but we anticipate that this is going to be just like one long continued conversation with the councils, the communities, and others, about how best to prioritize all this work to meet the most pressing needs.

CHAIRMAN NANCE: Sure. Thank you, Heather. Ryan has a question, also.

MR. RINDONE: It's more a comment, or suggestion, and so, just thinking about some of Will's comments, and Jim's comments, and trying to, you know, look ahead to plan for success, looking at the preserving infrastructure and working waterfronts, and so I'm originally from North Carolina, and North Carolina saw a dramatic contraction in the number of seafood houses spread out throughout the Outer Banks over the last, you know, twenty or twenty-five years.

There are very few now, compared to what there were, you know, some time ago, and it ended up being like a too-little-too-late sort of thing, with the state trying to work to find ways to help some of those working waterfront areas sustain, despite multiple, you know, different market forces, and economic factors, which ultimately led to a lot of the closures. There might be some knowledge there about things to look for, things to avoid, things to do differently, that you guys might consider for that portion of your immediate and near-term actions.

MS. BLOUGH: Thanks, Ryan. We'll definitely make a note.

CHAIRMAN NANCE: Thank you for all those comments. Christina, let's go ahead and move on. Thank you.

MS. PACKAGE-WARD: Our outreach and engagement activities are largely focused on further diversifying our communication platforms and tools to address some of the key barriers that were identified through our public engagement work last year, and the council is particularly skilled on this topic, and they gave us lots of suggested -- Useful suggestions and feedback in this area.

They highlighted the popularity of the constituent calls that we used to organize to talk with stakeholders on like specific topics, like Gulf red snapper, and they suggested that we incorporate more of those, along with increased use of podcasts and radio, to help address some of the identified literacy and technological barriers.

They expressed intent, and interest, in supporting our desire to better reach and engage female stakeholders in the work that we're doing, and they had some actually really cool ideas about ways that we might be able to make that happen. They highlighted challenges with some of our actions that were focused on increasing outreach and engagement to target audiences, noting the really limited demographic data that we have on stakeholders, as well as our PII-related issues and restrictions.

They emphasized the importance of incorporating retention criteria into some of our performance metrics, and they supported the need that had been identified by communities for improving our plain language communications, and they also raised some important questions about our ability to manage critical messaging if we were to rely on non-agency-affiliated community liaisons to help meet our communication and translation needs.

This feedback was really helpful to us in prioritizing the smaller suite of actions that we carried forward, and we also used it to refine and supplement some of our performance metrics, and also just modify the wording of some of our activities, to address identified -- Or to acknowledge identified barriers.

The resulting immediate or near-term actions that we included here have us organizing a workshop with our regional Sea Grant partners, and we're hoping to initiate work on that like within the next several weeks, and carry that out this summer or fall, and that will largely be focused on looking at ways we can better partner to achieve some of these outreach and engagement objectives.

We also plan to develop new policies, or protocols, for more consistently meeting identified translation needs with the funds that we do have in hand, and headquarters recently established a contract with the State Department to help support this need, and so this guidance would look at, you know, how to prioritize use of that contract, as well as maybe use of the non-official services, like Google Translate and things like that, to help fill in the gaps.

We want to develop more tailored outreach strategies to communicate with communities on perspective and current regulatory changes, versus grants and other opportunities that might be available to them, the status, and schedule, of federal disaster declarations and assistance, and also on fisher surveys, you know, why we're collecting the information we do, and how that information will be protected and used in fisheries science and management.

We're establishing new strategies to help us do a better job at meeting those plain language directives and mandates, and then, also, we want to work with our regional collaboration teams, and other NOAA offices, to look at the potential to establish virtual meeting hubs in some communities that would focus on really increasing access to virtual meeting opportunities for some of these community members who are facing technological or other barriers to that opportunity.

The longer-term actions we're considering here would have us pursue additional funding to increase our ability to meet identified translation needs and also integrate that service into our annual activity planning and budget processes, and so it really just becomes part of the basic services that we provide, and it's part of the culture of the work that we do, and we want to identify, or create, multilingual stakeholder liaisons, both at the Regional Office and the Science Center, and the goal here, really, would be to work towards providing like a one-stop shop service to stakeholders who are contacting us for information on a broad suite of topics and issues.

We would like to expand on the work, and outcomes, of that Sea Grant workshop that we'll be hosting this year, towards really developing institutionalizing, right, new communication pathways throughout the Southeast region, to better reach underserved communities on all of these topics, and then, also, we would use additional funds to employ strategies to facilitate more frequent, and meaningful, outreach, and interaction, with our female stakeholders, including hopefully maybe supporting some of the ideas that council staff had advanced on that topic.

CHAIRMAN NANCE: Thank you. Ryan has a question. Ryan, please.

MR. RINDONE: Thank you. Thinking about especially the translation funding, and establishment of multilingual stakeholder liaisons, with the advent of different AI technologies that have come out recently, and I think there's even the ability to -- Like a video of me right now, as I'm speaking, to change -- To use AI to change the way that my face and my mouth moves to correspond with a different language, and for it to look like I'm a native speaker.

Have you guys had any discussions about using similar technologies, with the staff that are currently on-hand, and the resources that are currently available? It seems like it might be a much more cost-effective approach for trying to reach some of these communities, or is there another facet of connecting with them that you're also trying to accomplish?

MS. PACKAGE-WARD: We have had preliminary discussions about the use of AI. We just saw, I don't know, maybe a week ago, that the Weather Service is using it for -- It's just incredible, how they're using it to address their interpretation translation needs, and so I think the goal here really is to --

So we haven't had a lot of time to figure this out, right, but, once this plan goes through, assuming that this stays, part of the developing this guidance, and protocol, will be to look at all the various translation needs we have, which we might very official translations for, right, like maybe our rulemakings that are going to the Federal Register, versus where more unofficial translations might work, and also how we might be able to integrate the use of AI.

This is more of a staff -- This is also sort of a staffing time need, right, and we just need to set aside some time to explore all of the different options and then maybe marry them to the different -- To the different needs that we have for different products.

CHAIRMAN NANCE: Thank you. Let's go ahead and move on to the next slide, please.

MS. PACKAGE-WARD: Okay. Inclusive governance, and so these actions are really those that touch the work of the council most directly, because they really aim to increase underserved community engagement in decision processes, and council staff also gave us a lot of useful suggestions around the things that we were considering here.

They did express interest in working with us to increase underserved community participation in public meetings and input processes, and they also noted the opportunity to take advantage of existing, or maybe even modified, council products, like the video on the fishery management process, their Navigating the Council process brochure, and the Fishermen Feedback tool, to try to help address these and some of other engagement objectives.

They supported one of the actions that we were considering related to increasing early engagement in our Endangered Species Act decision-making processes. They highlighted some information needs, and collection challenges, related to diversifying representation on councils and council advisory bodies.

In some cases, they recommended alternative approaches to meeting identified needs, for example taking advantage of existing council committees and APs, rather than standing up new bodies to support some of this EEJ work, and they emphasized the importance of really clearly distinguishing our authorities, roles, and responsibilities in some areas, and those mostly related to council appointments and the Marine Resources Education Program, and then, finally, they also identified funding, and some other practicality and feasibility concerns, related to some of the items that have been suggested that were focused on council meeting, or addressed council meeting, logistics.

All of that feedback was also super useful to us in refining and prioritizing the items that we carried forward. The immediate, or near-term, funded actions that we incorporated in the final draft have us working with the councils on strategies to increase underserved engagement in public meetings and input processes, and also on council and other advisory bodies, and this would include, you know, looking at ways to help make sure that all stakeholders feel really welcome, and encouraged, to participate and provide input on the decisions that affect them.

Also, it would have us amplify headquarters messaging about the status, schedule, and process of council appointments each year. We have an action there that would encourage the councils to consider using existing committees and advisory panels, or standing up new bodies, to advise the council on some of these equity and environmental justice issues related to the fisheries they're managing, and also to help just support implementation of our Southeast Regional Plan.

We would like to work with the councils to develop, or distribute, materials that address some of the educational barriers to engagement in decision processes, and also work with our Marine Resources Education Program steering committee to make sure that underserved communities have equitable access to those opportunities.

We want to work with the SSC, and the council APs, to develop joint research priorities and also make sure that we're taking full advantage of competitive grants, exempted fishing permits, and other mechanisms like that to support fisher participation in the research that we're able to fund, and then, finally, that last action, we did carry forward an action to engage earlier the public in our Endangered Species Act listing decisions, and also in the development of recovery plans, critical habitat designations, through informational webinars, public meetings, and other mechanisms that we identify.

The longer-term actions that we're considering here, we would like to explore the potential to leverage community liaisons, where it’s appropriate, to help gather and report input from rural and other underserved communities who have lesser access to decision processes. We would like to pursue additional funding that would help us develop our increased funding to existing competitive grants and pilot projects to support greater participation in regional research and monitoring activities, and then we would also like to use any additional funds to help support the Gulf and South Atlantic Councils in meeting any identified translation needs, through, you know, providing real-time interpretative services, where they determine that to be useful, dubbing council meeting recordings, or other approaches. Any questions about this objective?

CHAIRMAN NANCE: I don’t see any. Steven, please. Steven Scyphers.

DR. SCYPHERS: Thank you very much. I was just curious about the leveraging community liaisons, if there’s an example of a program like that in other regions, and it makes me think of some of the peer listening programs that happened in Alaska after the Exxon Valdez oil spill, and I know there previously were some efforts to train, and implement, those types of folks in the northern Gulf, after the BP oil spill, but I hadn’t been aware of any programs in the long-term, and I wondered if you all had some, you know, case studies, or something, that you could describe on that part.

MS. PACKAGE-WARD: We have not, and we were hoping that this might be an offshoot of the Sea Grant workshop that we’re going to organize this summer, or fall, and I definitely just took notes on the two that you referenced too, because I think this could also involve, you know, exploring some of that, how it worked, and lessons learned.

CHAIRMAN NANCE: Thank you. Let’s go ahead and move to the next slide.

MS. PACKAGE-WARD: All right. We’re in the home stretch. This is our last objective, and this one is really focused on providing the internal support structure to support all of this work in the implementation plan, and so it’s an important one.

We didn’t receive as much feedback from the councils on this one, because, really, it’s more inward, internal-facing, like what are we, NOAA Fisheries, going to do, right, to provide a good support structure to help make this happen, and they did express support for certain actions, and they reiterated the importance of plain language training here.

They highlighted the National Academies of Science recommendation to develop investment strategies for social science capacity and leadership within the agency, and they also cautioned us to manage expectations about our ability to implement several of the suggestions that we had been considering here, given the funding limitations and environment that we're in, and we did take that to heart in trying to figure out which action items to move forward, and also how to bin those between funded and unfunded.

Our resulting list of immediate or near-term commitments would have us integrate all of the immediate, or near-term, action items that we've included here into our organization priorities at both SERO and the Science Center, through annual strategic planning processes, and also develop a strategy to pursue funding for those longer-term action items that we've included in the plan.

We plan to establish teams to support implementation of the regional plan, and we're envisioning those will look similar to those that we used to develop the plan, which included council representatives to the Council Coordinating Committee, the working group on EEJ, and so we're hoping that we'll be able to keep that relationship moving forward, because that was really helpful to us in developing the plan.

We want to work with headquarters to train our staff, and the councils, on both the national and regional EEJ objectives and priorities, develop partnerships, and also support scholarship, internship, and mentorship programs to increase underserved community access to careers within our organizations, and then also to continue engaging and building new partnerships that will allow us to leverage resources to address some of the more complex and cross-jurisdictional challenges that were identified through this work that we don't have the authorities, roles, responsibilities, or funding to address on our own.

Then the longer-term actions here, that we really believe are critical to successfully implementing the national strategy in the region, would be to hire additional non-economic social scientists and EEJ coordinators, both at the Regional Office and Southeast Fisheries Science Center, and also additional biologists that would be dedicated to work in the Caribbean here at the Regional Office.

We would like to do routine plain language training for all of our staff, and periodic refreshers, and also provide specialized training to grants reviewers, port agents, and others who are interfacing directly with the public, and we would also like to identify staff who can provide like hands-on technical assistance with applications for grants and other funding opportunities, where people have been challenged to navigate some of those more complex bureaucratic processes. Any questions here?

CHAIRMAN NANCE: I don't see any right now. Go ahead.

MS. PACKAGE-WARD: As far as the next steps, as we noted early in this presentation, the draft plan is currently undergoing review at headquarters, and I think it's actually done now, and we should receive comments back very soon, and then it's tentatively scheduled for a June rollout, and we will take into account any additional input that you provide today, and thank you all for the great input you've provided so far, and we'll take this into account when we address the headquarters review comments. Then, once it's finalized, it will be reviewed and updated, on a five-year schedule, and just thank you. We look forward to your continued involvement and feedback in this work. Thank you.

CHAIRMAN NANCE: Thank you, both. You know, having that national overview from Dr. Scyphers, and then having this regional from the Regional Office -- I find it very effective in being able to see the need for these types of research.

You know, when we do assessments, there is the assessment, and then there's the end products, and I think these equity ones are a little more elusive, but I think we need to move forward and make sure that the stakeholders are heard and that we have those inputs into our assessments and other products that we produce as a council, and so thank you both, for both presentations, for being able to bring that up. Jack Isaacs, please.

DR. ISAACS: Another really good presentation, and it was very well paired to the one that we saw earlier today, and I wish that I had held my comments about the language, my little anecdote, until now, but anyway, and I guess you learn in time.

I would be very interested in seeing what your findings about women in the industry are. I was surprised, when I first started some of my research here in Louisiana on the seafood dealer sector, how many women were active in that particular stage in the fishery, at the docks, the dealers, and I would be curious to see if that were also true in other states, and, also, I would like to know more about why that may have developed, and this research may be able to shed some light on that, and also what type of challenges women active in the industry might be facing.

I think that's important to consider, the fact that -- Especially if a lot of the dealers are women, because that's an important link in the industry, and, if women in the industry are having a hard time, maybe that means that the dealers are suffering, and, if the dealers suffer for some reason, because of the challenges that women have, I think that affects the rest of the fishery, a lot of those fishers downstream of them, and, if we could remove any barriers, if they exist, I think it will help the industry as a whole.

The main reason that I raised my hand here is I'm curious to know more about what you're going to do with the Endangered Species outreach, and that really interests me.

MS. BLOUGH: This year, we did some public engagement work in the Caribbean, with our queen conch listing, because it was so relevant to them, and, for the first time, we really used the real-time interpretation services, for webinars and whatnot, and so I think they're envisioning just employing more of that type of work. The council staff expressed interest in partnering with us on some of this stuff, because I think councils also have an interest in earlier engagement, and so we haven't had yet, you know, really exhaustive discussions about what this is going to look like, and it's more just the intent to do it at this point.

I think really the next step, after the June -- After this plan is finalized, right, and released in June, we'll be able to do some implementation planning on our own end, and in cooperation with the council, to start sort of fleshing out some of these immediate and near-term commitments, both in terms of timelines over the next five years, right, and who can help with what pieces of it and what it looks like, and so we definitely would be interested in feedback from you all, if you have ideas around what you would like to see that early engagement look like.

CHAIRMAN NANCE: Thank you. Dave, please.

DR. GRIFFITH: Thank you, Mr. Chair. I want to thank you for this report, and I agree with Jack that it really follows-up Steven's report pretty well, and I wonder if -- Are you part of this effort going on, and I think it's going on right now around the country, to do focus groups on, and even in the Caribbean, but focus groups on EEJ issues, and I was wondering if the transcripts from those focus groups will be available for researchers in the future, and I think that could -- You know, people could develop a lot of the kind of research projects that you're talking about with the assistance from those focus group transcripts.

Brent Stoffel, I believe, is the one that -- I just know about his work, because he recruited me to help out with a couple of them in

North Carolina, and so do you know if that work -- I mean, are you part of that effort?

MS. PACKAGE-WARD: Yes, we all are part of the Southeast group working on these issues, and we helped conduct I think twenty focus groups in the Gulf of Mexico, the South Atlantic, and the U.S. Caribbean, and then scoping in a couple of the locations.

DR. GRIFFITH: I was just going to say will we get access to that? Will that be made available? I know there might be some anonymity issues that have to be addressed first, but --

MS. PACKAGE-WARD: Unfortunately, the way that we received PRA approval was through a customer service PRA, and so I don’t think that we’re able to make the transcripts available, and, also, we did promise confidentiality for folks that were involved, but, I mean, we do have some key takeaways that we’ve talked about before, but I don’t know, Heather, if you want to expand on that.

MS. BLOUGH: We are looking at what we might be able to share from them, and what format we might be able to share it in. We did present, to all of the councils, the key takeaways that came out of all of that work collectively right, and so it wasn’t by area, and we did tell the participants themselves that they -- That it would be anonymous, and it was a requirement of our Paperwork Reduction Act clearance that we received.

For whatever reason, it came with a confidentiality thing, but we can definitely -- I mean, we’ve been talking internally, because it would be nice to be able to do a little more with the results of that than we did, but that was really a big piece of the public engagement effort that we did last summer and fall that we’re referencing in this presentation, and it really fed into all of the action items, right, that we talked with you about today.

We got an initial list of like over 300 suggestions that came out of that work, and then we pared it down to about 200, and then we ended up with maybe seventy-five that we carried forward, and so we did get really good input, and feedback, from those, and so, yes, I guess we can look into -- We can also maybe do a takeaways presentation for you all, at a future meeting, if you would be interested in the higher-level takeaways and haven't heard that at a council meeting.

DR. GRIFFITH: Okay. Thank you.

CHAIRMAN NANCE: I think that would be a good idea.

DR. GRIFFITH: Yes, definitely.

CHAIRMAN NANCE: Thank you, David. John Mareska, please.

MR. MARESKA: Thank you, Mr. Chairman. Thanks for the presentation. It was very informative, and there are a lot of efforts, and action items, going on, but, looking at the draft plan, I see there is some state involvement, but what I didn't hear a lot, in the presentation today, is how the states can be involved, as well as how the universities can be involved, that may already have inroads into some of these underserved communities, and so could you speak to that?

MS. BLOUGH: I think the intent is to involve the states, and the academics, as much as we can, right, through the implementation, and some of these are very sort of agency-specific, but a lot of the ones we have worded to do things collaboratively, and we did identify -- I mean, we really started from scratch on this.

We didn't have a list of underserved communities, and so we did work with a lot of Sea Grant folks, academics, and others, in identifying people to talk to, and we have opened communications now, but we're still trying to kind of develop that distribution list. During the council presentation, some of the states have expressed interest in working with us on particular issues, and so we're totally open to, and we welcome, including as many voices in this as who can help get it done, you know, and, also, to have suggestions around -- Like if you guys have specific recommendations about people.

Obviously, some of the things, like disaster assistance, there would be strong, you know, collaboration with the states on that, and I think the working waterfronts one, and so, yes, the intent is to be collaborative. We haven't really identified what that's going to look like, and that's probably going to be part of the implementation planning process too, I imagine, when we get down to the nuts-and-bolts of, you know, how are we going to do the work that we've committed to do over the next five years.

CHAIRMAN NANCE: Thank you. Harry, please.

MR. BLANCHET: Thank you. This goes -- A lot of the discussion today has been related to SERO, NOAA, the council, Sea Grant, and one of the outreach and engagement pieces that does need to be maybe folded in a little bit more carefully is the external contractors, and we had a great example recently, in the Gulf, where the shrimp ELB program was able, through an external contractor, was able to put a lot of ELBs on some Asian-speaking boats, and they did a much better job of characterizing where that total fleet was going, because it had more buy-in from that community than it would have otherwise, and that was purely through some initiatives by that contractor. It worked great, and I think that having that as a more formal part of your request for proposals might be useful.

MS. BLOUGH: Good point. Thanks so much, and we also found the same. If we were able to identify, you know, people with relationships with the Vietnamese communities in certain locations, it was really helpful to us in getting people to the table, and supporting translation needs and things like that, and so we would like to continue identifying folks like that, who have can help us and who have the credibility, right, and trust with those communities.

CHAIRMAN NANCE: Thank you. Heather, this may be -- I'm not sure you can answer this one, but, just from my own -- You know, over the years, the biological components of management have always been well funded, and the social input, and those types of things, gets funding, and then it loses it, and then it gains it again, and that type of thing, and so I think that long-term funding is important, and I think that would help the stakeholders feel that their input was going to continue on. Is there, from the agency's standpoint, any funds that are going to be available long-term for these types of projects?

MS. BLOUGH: So, I mean, for hiring, right, that's a different question than for the projects in general, and, you know, this has been in like the President's budget for several years, and it was not funded. We have seen headquarters leadership, like over the last couple of years, making a really serious effort to fund EEJ where they can.

They are prioritizing EEJ, when we have carryover funds and things like that that we can apply, because we don't have a dedicated EEJ line yet, but they are hiring a national EEJ coordinator at headquarters, and some of our other offices -- Like I just saw notices, the other day, that the Office of Habitat Conservation and Restoration Center is hiring I think three EEJ coordinators, and they might be term FTEs. We, like at the Regional Office, are looking at the potential to bring on, you know, someone like that, if we're able to make it work after looking at the use of how we're using the IFA funds and all that, and so the interest is there.

You know, I think that we feel like it was a success that we were able to identify it as a priority in our plan and carry it forward, and I know leadership, here and at the center, are highly supportive of all of this work, and at the national level, and so I don't know. You know, I don't know how much money we'll be able to find to support this, but I think that leadership definitely supports it, in concept, and is going to do the best they can to help advance this.

CHAIRMAN NANCE: Thank you so very much. We don't have any other questions right now, and we'll go ahead and take a break, at this point, and we'll come back at 10:45 Eastern Time. We'll have any motions that would like to be proposed, then please send those to Meetings, and Jessica will be able to put those up, and so we'll reconvene at 10:45. Thank you.

(Whereupon, a brief recess was taken.)

CHAIRMAN NANCE: Okay. **We'll go ahead and start again, and I think there was a motion sent by Dr. Griffith, and it reads: The SSC recommends that NOAA Fisheries request the National Academies of Sciences to follow-up on "Assessing Equity in the Distribution of Fisheries Management Benefits" with a second consensus study report that, as noted in the current report, would build on this contribution by evaluating equity in select, illustrative fisheries, using the information available.** That was made by Dr. David Griffith. Do we have a second for this motion?

DR. GRACE-MCCASKEY: I will second.

CHAIRMAN NANCE: Cindy, thank you so very much. Do we have any discussion on this motion? David, did you want to discuss why the motion was made and what you --

DR. GRIFFITH: Sure. Thank you, Mr. Chair. I made the motion in part in response to Will Patterson's recommendation that we make such a motion, but, also, you know, I think that it is important to get more detailed information on specific fisheries, regarding these issues, and I think that, if the SSC could make this recommendation, it might push the process forward.

In the last presentation, it was clear that there is a need for, and a desire for, additional research on equity issues, and so that's why I put together the motion with Steve, by the way. Thank you.

CHAIRMAN NANCE: Thank you, and I feel also on that, and the fact that both of these presentations I think pointed out the need for these types of research, particularly in our area. Rich, please.

DR. WOODWARD: I think this is a great idea. Dave, did you give any thought to whether there should be like different kinds of fisheries to evaluate, be evaluated, and should we include that into the motion?

DR. GRIFFITH: Well, I was thinking, you know, of the same two sectors that were included in the first equity study, which would be commercial and the charter both, but I'm open to considering a wider variety. I mean, I agree with Jim that the fisheries of the Gulf are extremely complex, and we could use a lot of this kind of information here.

CHAIRMAN NANCE: I think, and this is my opinion, and I think that, if we leave it broad, I think it opens up more doors than if we try to narrow it, or give examples of fisheries we would like to see information on, and some people may not feel like those are worth studying, but they want to study something else, but it's not in this motion, and so I think leaving it broad allows it to be looked at by a larger audience.

DR. WOODWARD: I guess my only concern is that we may end up looking at the same usual suspects, and it would be beneficial to spread it out, but I'm comfortable with it as-is.

CHAIRMAN NANCE: Thank you, Rich. Paul, please.

DR. MICKLE: I think it needs to read "the Gulf SSC", as there are multiple SSCs, and I don't think we can speak for all the SSCs, and that's all.

CHAIRMAN NANCE: Okay. You were breaking up at first, and I think I caught what you were saying, that it needs to be the Gulf SSC, and is that correct?

DR. MICKLE: Yes, sir.

CHAIRMAN NANCE: Okay. Thank you, and I agree. Dave, and Cynthia, is that okay?

DR. GRIFFITH: Yes, definitely. Thank you.

CHAIRMAN NANCE: Okay.

DR. GRACE-MCCASKEY: Yes.

CHAIRMAN NANCE: Paul, thank you for that recommendation. Jim Tolan, please.

DR. TOLAN: Thank you, Mr. Chairman, and thanks, Dave, for the current motion, and I'm just kind of struggling with, in my head, what this second consensus study report would really be doing, because I took, from the first presentation, that it was sort of a proof-of-concept, where they said can we do these sorts of things, with a very simplistic fishery, based on just two of the sectors, and I'm just curious what the second -- Would it build in that, or would it bring in, as was mentioned before, some of the more complexities of the Gulf? I'm just trying to figure out, before I vote on this motion, what the second consensus study report is going to be tackling. Thank you.

DR. GRIFFITH: Can I address that?

CHAIRMAN NANCE: Absolutely. Thank you, David.

DR. GRIFFITH: Jim, thanks for that. My idea about this is that, first of all, there have been a lot of studies done in the Gulf of Mexico that could inform a second consensus study, and so there's a lot of ethnographic information already out there. When we were -- For example, when we just did the shrimp assessment, Chris Liese and I, and a couple of other economists, put together a report, based on essentially secondary sources, about the kind of problems that would come up in the shrimp fishery, in terms of things that would constrain effort, but, in that process, we also had to deal with things like the labor supply, and the Vietnamese presence in the fishery, and we kind of got into some of the equity issues, and I think that, although we didn't really focus on that, we found that there were some issues involved with equity, especially when it came to like distributing money from the Deepwater Horizon spill and things like that.

What I envision is that it could result in original research, but there's also, right now, studies out there that could inform this, and, again, the Gulf fisheries are extremely complex. You know, we have inshore and offshore, great big vessels and very small vessels, and then a variety -- Of course, a variety of fisheries, and gear types, and so that -- That's kind of what I think, and I hope I've been clear, and I don't know if it was very articulate here.

DR. TOLAN: To that point, Mr. Chairman?

CHAIRMAN NANCE: Yes, please, Jim.

DR. TOLAN: Thank you, David, and that does help. I was part of the shrimp assessment, and I remember the work that you guys did on the economic side of things, and it was very different, in terms of what we've sort of handled assessments before, and so your answer for this question provides a lot of clarity, and so thank you.

CHAIRMAN NANCE: Thank you. Dan, I'm going to skip over to Steve, because I think he has something for this particular topic, and so Steven please.

DR. SCYPHERS: Thank you, and David covered most of what I would say. I would just add that, you know, the kind of idea for this follow-up study was already in conversation, and it was included in the early part of the report, and so I don't think the motion is suggesting that the SSC is recommending any specific direction, or any specific, you know, case study for that report. That happens through the National Academies interacting with the sponsor, and developing the statement of task, and so that would all happen outside of us, and I don't interpret this motion as, you know, getting into the specifics of that process.

I think I personally like this motion, because it basically encourages them to carry forward with what was initially envisioned from the beginning as a two-point study, with the first part laying out what information is needed, how could it be used, what needs to be collected, and then the second part is, you know, tackling these illustrative case studies, and those of us on the committee, and others who have been part of these various types of studies, there is always multiple regions.

There is usually multiple regions represented, and then there's dialogue, to where, in the early meetings, folks speak to the committee, and it works towards whatever the specific focus is for those illustrative case studies, and so I think, you know, the rest of it, David answered, and it sounds like Jim was satisfied, and so I just wanted to respond to that part as well. Thank you.

CHAIRMAN NANCE: Thank you. Dan, please.

DR. PETROLIA: Thank you, Mr. Chair. I think my question stems from just being relatively new to the SSC, but, on all the other motions, I think we always made a recommendation to the council, whereas this one seems to be a recommendation to NOAA Fisheries, and is that -- Do we do that?

CHAIRMAN NANCE: We can. We can make it directly to the -- Most of the things we do, and you're right that most of the things we do are recommending things to the council, but, since this was a National Academies of Sciences report, I think we, as an SSC in the Gulf, can recommend to NOAA Fisheries, who funds these things, to be able to move forward with this study directly. Ryan.

DR. PETROLIA: Okay, and so this still does fall within our --

CHAIRMAN NANCE: Absolutely. Yes.

DR. PETROLIA: Thank you.

MR. RINDONE: I mean, essentially, the way that this would be presented to the council, like by Jim, would be, you know, the SSC is recommending that the council request that NOAA Fisheries do this, and so you guys -- I mean, we don't write letters directly on behalf of the SSC. The council will write a letter to NOAA Fisheries requesting this of the National Academies of Sciences, and so I don't think you guys have to change your motion, and, I mean, I think it's understood, but just as far as the process goes.

CHAIRMAN NANCE: Thank you, Ryan, for that. Any other discussion on this motion? Let me go ahead and read the motion as it is, and then we'll go ahead and take a vote.

The Gulf SSC recommends that NOAA Fisheries request the National Academies of Sciences to follow-up on "Assessing Equity in the Distribution of Fisheries Management Benefits" with a second consensus study report that, as noted in the current report, would build on this contribution by evaluating equity in select, illustrative fisheries, using the information available. Is there any opposition to this motion, by a show of hands? Jack, is that opposition to the motion?

DR. ISAACS: No, it is not. That was an accidental click of the button. My apologies.

CHAIRMAN NANCE: Okay. That's fine. Okay. Are there any -- **Is there any opposition to the motion? Seeing none, the motion carries without opposition.**

I sure appreciate this motion, and I think it carries, I think, our feelings, as an SSC, about the importance of these types of studies, particularly in the Gulf and Mexico and in our area. Thank you. We'll go ahead and start our next item, which is Item Number X, and, Dr. Siegfried, we have you presenting this.

We may -- You know, we have three hours to talk about this one, and so we may, in the middle, break for lunch, those types of things, and so just be aware that we won't cover everything before lunch, and we'll save time after lunch for our discussions. Ryan, would you please go through the scope of work, and then I will turn the time over to Katie?

ALTERNATIVE ASSESSMENT METHODS FOR GULF STOCKS

MR. RINDONE: Sure. It's just Katie that's going to be doing this one, and she's going to review the Science Center's response to a letter the council wrote in August of last year requesting for -- Requesting an evaluation of alternative assessment methods for Gulf stocks.

Depending on the data available and the complication of the requisite analyses, the stock assessment can take months to years to complete, and this variability in time requirements is an opportunity to improve efficiency in the process, by pairing the appropriate approach with each species, rather than defaulting to say an age-structured approach, and exploring progressively, or comparatively, simpler approaches.

The Science Center is going to discuss its review of stocks that would be suitable for alternatives to age-structured models, and you guys should evaluate the information presented, ask questions, and make any recommendations.

CHAIRMAN NANCE: Thank you. Katie, I should have cleared this before I announced it, but I hope you're on.

DR. SIEGFRIED: I'm here.

CHAIRMAN NANCE: Okay. Good. That's good. Okay. Please go ahead. Thank you.

DR. SIEGFRIED: I was able to listen into all the EEJ work, and so I've been here.

CHAIRMAN NANCE: Okay. Great.

DR. SIEGFRIED: Thanks for that intro, Chair, and Ryan, and this is not a nice, succinct, and tight version of an answer to that one memo, and there's actually quite a number of requests from the council, in the past couple of years, that have led to this, and also some internal angst at the center about how our assessment process is going, not just which species we can use simpler methods on, but also how can we simplify overall, and so I am going to cover a little bit more than what that letter asked for, sort of as an intro to the SSC about what we've been doing, trying to work with the council staff.

The center has other councils, and SSCs, to communicate to, and so some of this we've already done in our region, and some of it we haven't, and we have multiple people sort of to please, and objectives to consider, and so, if you see things and you think, well, we've already done that, or something like that, then that's probably why.

Just an outline to keep me organized, and, first, I wanted to cover some background of why are we even evaluating the assessment process, or species, you know, that we can do simpler assessments, or different assessments, on, and what steps have been taken so far, and what previous work has been done in this effort.

What can be simplified, the models, which species can we apply simpler models to, what can we streamline, as far as methods and our assessment process as a whole, and we have discussed some of this with the SEDAR Steering Committee as well, and so it is underway to sort of make some improvements, and efficiencies, in meeting objectives of management, as well as streamlining internally, and thinking, well, we're not going to get any more money to have any more people, and so we really need to figure out to do this a little bit better. Then I will cover some next steps, because this will be a multistep process, that you will see the progress along the way.

I will cover this in great detail, and it's a busy slide, but this is work that Shannon did to put together sort of what's the problem, and why have assessments been taking so long, and trying to understand sort of what happens.

Along the top, you will see the SEDAR number, from 10 out to 85, how many months, sort of on the Y-axis, and then the blue is the data step, the green is the assessment step, and there's white space, as well as revisiting our data steps there, and so that first red line, the horizontal red line, is one-year, and then there's a two-year and a three-year mark.

You will see it was pretty consistently around a year that it took to do most of our assessments, regardless of type, until we hit 56, 57, and 58, and what happened there was we had some new MRIP data come online, the conversion from CHTS, the APAIS step, and then, finally, the FES step, and that really spanned over a couple of our assessments, and it caused a big blip of time in the middle there.

There's also been federal government closures that we don't have any control over, and we can't technically work during that, which happened a couple of times that I know I was doing assessments, and we missed webinars, or we missed workshops, and so there's a little bit of that as well.

Then you start at 68, which is scamp, for both the Gulf and South Atlantic, and that’s when we had our first research track, and that significantly increased the time that it took to conduct an assessment. Now, the pandemic was thrown in there at the beginning, and none of us saw that coming, but, if we want to see whether the pandemic was really the reason, if you look at 74, that’s red snapper, and that took almost as long as the South Atlantic scamp.

Then we have a few others highlighted here, the research track for highly migratory species, and that’s for the shark species, and I think those were hammerheads, and we had 80, which is a Caribbean assessment process that took a long time, trying to figure out what to do with all of the information, and what type of assessment it was, as well as the research track, 82, for triggerfish, which, at the time of making this slide, had already gone two years, and has just underwent CIE review, and we haven't gotten to the operational step for that.

The point of this is to show you that we’re trying to figure out sort of what happened, what’s taking so long, and one of the things that we noticed was the research track really significantly increased the timeline for most of our assessments that underwent a research track.

I presented this when I covered the SEDAR 74 CIE review, but we really came to the conclusion that our research track and operational assessment process did not achieve its potential, as it was executed, and you can argue whether that’s the way it was envisioned, or whatever, but it really, the way it was executed, just reduced throughput, and timeliness, and it has increased the burden on our data providers. As you saw in the slide before, our complete research track process, with an operational at the end, takes three to four-plus years.

We’ve had review panelists, or panelists on assessments, express concerns about the limitations imposed on data explorations, and, you know, I’ve heard, over and over again, that we were promised research, and this should be a research track, and we should be able to do all these extra things, but, in practice, that just didn’t work out, with the schedules that we had and all.

It did not significantly increase the integration of new science, compared to benchmark assessments, and so we seem to have similar abilities to incorporate that new science, and then a benchmark, the previous benchmark assessment, as it was defined, would provide management advice at the end, and so, you know, we didn’t see the benefit there for the research track integrating new science.

We’ve had some issues with CIE reviewers expressing strong concerns about the lack of final datasets and model diagnostics, which were explicitly excluded from our sort of operating procedures for the research track, and we also thought that we would reserve capacity and flexibility, but that was not realized, due to the heavy burden on data providers, and it’s really two pulls that the data providers have to perform, rather than the one, like for a benchmark-like process.

Then it was very difficult to schedule an operational assessment to follow the research track when the research track was moveable. It was extendable, and moveable, and there wasn’t a final end date, and so it was really hard to schedule that follow-up assessment.

The emphasis on transparency, and thoroughness, is really the primary bottleneck, because it’s extremely time-consuming for data providers. We’ve said it repeatedly, and we don’t have a bottleneck with the assessment analysts, and it’s really the expectations on data providers went up a lot with our research track and operational process.

CHAIRMAN NANCE: Katie, can I ask just a -- In my mind, when we say that the data needs a second pull, but isn’t the data already set up in a format, when we’re doing a research track, that that same data would be used in the operational assessment, or am I missing something?

DR. SIEGFRIED: The fine-tuning of -- There’s a difference in the types of data, and so say it’s a commercial catch statistic data provider, right, and they’re providing a time series of landings. What should happen is, during the research track data workshop, they figure out their scripts, they figure out what they pull, and they pull to what the terminal year is that they have available to them.

Then the operational assessment we thought would just be a turn-of-the-crank, right, and that tends to be the case for something like landings data. All of the little fine-tuning and all of that is done during the data workshop for the research track. However, if something is discovered, or found out, during the review for the research track, we have to sort of go back and fix a lot of the data issues that maybe the reviewers uncovered, or that we uncovered, during the assessment process.

We saw this for SEDAR 74 for red snapper, where we needed to do an evaluation of our age data, and so they can’t just turn the crank and produce exactly what they did before, with just a few extra years of data added to the end, and so they have to do it two times. Ideally, they would just the turn the crank, but that’s not what we’ve seen in practice.

CHAIRMAN NANCE: Okay. Perfect, because I’ve always had that question, and so I thank you very much for that comment.

DR. SIEGFRIED: Mr. Chair, can I ask a question to that point?

CHAIRMAN NANCE: Yes. Josh, please?

DR. KILBORN: I’m curious, and isn’t that a benefit, you know, the identification of data problems, and the resolution of that, and wouldn’t that be considered a benefit of the process?

DR. SIEGFRIED: It would be considered a benefit of the process if we wouldn’t normally have done that in one step during a benchmark, and so, normally, in a benchmark, we wouldn’t have the fact that we’re going to pull it again later, and so that’s what we saw in practice, was a lot of stuff getting pushed off to the operational step.

DR. KILBORN: Okay. Thank you.

DR. SIEGFRIED: For scamp and for our red snapper, and there was definitely can-kicking, in a lot of instances, down the road.

CHAIRMAN NANCE: Thank you, Katie. That explains it, for me, very well. Thank you.

DR. SIEGFRIED: Like I said, that’s not how it was envisioned, but that’s how it happened in practice, and so that’s an unfortunate -- So we saw a clear need to improve the process, especially when there’s no management advice at the end of it, and it seemed like that time needed to be worth something, right, and so we were trying to figure out how can we improve this process, and, at the beginning of this year, we started to meet with the South Atlantic and Gulf Council staff, to discuss their objectives and potential improvements to SEDAR, to better meet the needs, and, in that, it’s not just talking about SEDAR itself, but we also started to talk about things like taking assessments -- Like interims, those sorts of those that would provide management advice extra-SEDAR. I am making all these hand motions, because I’m hand-talker, and nobody can see it, but I just air-quoted “extra-SEDAR”.

The topics included identification of their primary objectives, and I don’t recall a time when this has happened, where we would sit down and say, okay, what are the council's objectives, and are we meeting them, or are we not meeting them, or is it even possible to meet them, and we need to evaluate tradeoffs, in order to figure out what's possible.

We wanted to very frankly discuss what has and hasn't worked, and there were some hard conversations, sort of acknowledging things that we haven't done right, or things that we would like to improve, and, you know, nobody wants to talk about all their mistakes, but we needed to talk about what has and hasn't worked, and then start proposing, in collaboration with council staff, changes to the stock assessment process.

We did this with one really important caveat, that we can't just increase our resources, or staffing, in order to meet needs. We needed to properly evaluate tradeoffs, and that's a big reason I think why the simplification of methods came up pretty early, and it was a least ago that the council even talked with us about that.

For the Gulf Council, they were a slightly different order, and slightly different individual objectives, than the South Atlantic, and so here's what the Gulf Council gave us, and this is very distilled.

First was the accuracy and reproducibility. There have been instances, in the past, where there have been errors, or issues, recreating time series that were -- You know, they're weighing on the minds of council members, and it's been a problem with implementing management that we needed to recognize, and so accuracy and reproducibility was very important.

The timeliness, and, in that, we mean the recency of the terminal year. There was a pretty universal concern that, by the end of the assessment, and by the time we start talking about using it for management, there's been a few -- A couple to several years, and that's different, potentially, than what the fishermen are seeing on the water.

The throughput was something where it doesn't necessarily mean full-scale assessments, but the throughput of management advice, just so that we can -- So that they can stay more timely, and that came up. The transparency as needed -- The language that we got from council staff was they wanted transparency when it was important. Sometimes it's not as important as other times.

The automation, or access to data, including fishery-independent indices, was important, and I think that we saw this at the last SSC meeting, where John, and others, were able to show data that they accessed themselves, and so, as far as I understand, that's already started, and there's also a push, at the center, to get the fishery-independent indices more available on a public-facing website.

Then the long-lasting catch advice, which means, if we can't get assessments every three years, then we need to actually provide interims, or other types of advice, routine updates perhaps, that would allow for longer time between assessments, and then thoroughness was last on the list there, as far as we don't need the most complex model necessarily to manage for everything, and so let's now throw the kitchen sink at every species, and let's figure out which ones we don't need to do that for, and so accuracy was more important than timeliness, though those were the top, and throughput was more important than complexity, so that was good to know.

MR. RINDONE: Katie, can I just make a comment on the transparency thing?

DR. SIEGFRIED: Please. Go ahead.

MR. RINDONE: I guess, just explicitly, when we were talking about, you know, times when transparency wouldn't be needed quite so much, we're thinking about situations where, you know, there really aren't any new data to discuss, and it's mostly just updating the data streams that were used the last time, and so there's really not anything that we expect to need to be discussed, besides the updated product, once it gets to the SSC for review, and so, you know, obviously, if there's a lot of new information being considered, then that kind of heightens the need for additional transparency, but, if nothing is really changing, run what you brung.

DR. SIEGFRIED: Thanks, Ryan. That's a good comment, and, since you mentioned that, I do think it's important to discuss, at some point, the difference between transparency and participation, because I think that most of what we produce is transparent, in that we produce highly-complicated and thorough documentation of every little thing that was done.

I do think that that's getting better, that some of our older documents were not clear, and maybe some of them were not as accurate, or not accurate, and that's part of what led to the initial concern, but transparency does not always mean participation, and so that's one of the things that we have to negotiate, as far as throughput, is how much participation there is.

We will always produce documentation, and we will always present these things to the SSC, and there will never be anything that we just do and nobody gets to see it.

Then, when we talked about what worked well and what didn't, and I'm just going to go over the concerns here, and there was insufficient frequency and timeliness of management advice, and I definitely see that point, in that there's long between the end of, you know, our terminal year of assessments and when management actually goes into place.

You know, there's been fingers pointed of potentially like, well, guys take long, and, well, you guys take long, and, well, there needs to just be a collaborative effort to figure out how to minimize it as much as possible, minimize the time between the end of the assessment and when management can take place.

The lack of access to key data streams can lead to extra council requests, and so one of the things we noticed, and I don't necessarily feel this way in the Gulf, but definitely there is -- With different councils, there is a ton of council requests that come, because there's not as much communication, and there's not as much access to key data streams, or presentation to the SSC of data streams, when they're requested, and that is really important. If there's not a response to those types of things, or at least a discussion of why the council request occurred, then that's going to be a pretty major roadblock to understanding.

The current process is insufficiently transparent, in that -- This specifically was geared to allowing external reviewers to reproduce results. The problem there is a confidentiality thing, or issue, and we really try to get all of our CIE reviewers, and any SSC members, that want to be able to run our models access to those data in the model configurations, through NDAs, and sometimes our hands are tied, if it's too short of a time period, but usually we can get them access, and so I think we work pretty hard to get that to work. We did for the SEDAR 74 CIE reviewers. All the reviewers that wanted access had access.

Sometimes the TORs, in the past, have not been met, or at least the intentions of the TORs, and a specific issue that was given to us as an example is when a simpler model was asked to be run along with the more complicated, or the age-structured, model, and I think those types of issues are unfortunate, where, if the council wanted something that wasn't clear to us, or we didn't meet something that was in the TORs, then it sets up just a poor working relationship, when it could be avoided by just talking a little bit more with council staff, or making sure we're meeting the intentions of the TORs, and I think we're trying to get to that by working on the TORs collaboratively at this point.

The documentation has been fragmented. For instance, our final projections are not usually in the SEDAR report, because -- This happened for gag, and, I mean, try to follow that documentation, from when Lisa last presented it to the SSC, and then we did a SRFS run, and then there were a bunch of projections and all of that, and, once it is past the point that SEDAR considers it a SEDAR documentation, it's hard to follow what was actually used for management on the SEDAR website.

You have to sort of go to the SSC's website, and sort of do forensic paperwork, basically, to figure out what was used, and so we can do better at making sure that our documentation is not fragmented, in collaboration with both SEDAR and our council staff.

Just at this initial stage, we have a few recommended changes, and these were presented to the Steering Committee, and the council staff are aware of this, and it's important that the SSC is aware of these types of things coming down the pike, and then weigh-in on them, as appropriate, and so, first, we wanted to eliminate the research track and operational process.

We agreed to that, at the SEDAR Steering Committee meeting, and I don't know anybody that has heartburn with that, but please let us know if this is something that you disagree with, so that we can discuss it, and then we wanted to fix this nomenclature issue, where there is an expectation of what is provided. If it's called a research track, or it's called an operational, or if there's a TWG, or if there's a benchmark, or a standard.

I mean, everybody has got whiplash from all the different types of terminology that we've used historically for the assessments, and so we've proposed, and we're still in the process of discussing eliminating the nomenclature and the slot concept that, you know, I have six people in my group, and, therefore, six assessments are possible, and it just isn't, not only because sometimes we have more than person on an assessment, but because the data providers just can't provide as many assessment -- Data provision as we have assessment analysts per year. It can be staggered, and we can come up with better ways to schedule, but the slot concept is just not working out either.

So, if we want to eliminate nomenclature, what do we propose instead? An age-structured assessment, conducted without a data workshop, a topical working group, or a CIE review, takes six to nine months, and that's sort of the basis, and this was our spit-balling, sort of how we would call assessments if we didn't say, oh, this is a standard, or this is a research track, and so then, from that six to nine-month point, we would choose project add-ons and develop the appropriate calendar.

The project add-ons would be a discussion, a negotiation, with the council staff. For instance, a stock ID workshop would add around six months. A data workshop adds around three months. Each assessment webinar adds around one month, and some of this is because of the need to notice, and some of it is because of -- You know, notice each webinar, and some of it is because there's physically a meeting, where people have to go to it, or there is multiple webinars plus an in-person meeting.

Incorporation of new information, or each panel meeting, or topical working group, adds one to three months, and a CIE review adds one to three months, and the rework for the SSC can add at least three to four months, potentially due to the frequency of SSC meetings. Now, the Gulf has a pretty high frequency of SSC meetings, and so I don't think that that's quite true for us, but it definitely is true in the Southeast. Before we move on, are there questions about this? This is a lot of information about how long assessment add-ons take.

CHAIRMAN NANCE: Do we have any questions from the SSC? I can see your hands moving though, Katie. Anyway, Will, please.

DR. PATTERSON: Thanks, Jim. Katie, why does a stock ID workshop take so much longer time than any of these other things?

DR. SIEGFRIED: A stock ID workshop has its own data scoping, and it has its own pre-webinar, and it has its own in-person meeting, and it has usually one to two follow-up webinars, and so I think the reason the stock ID was listed as six months is because the SEDAR 74 stock ID took six months, and so we've had them take three months before, but this was, you know, the division trying to make sure that we represented what was approximately the case, and so 74 took a long time, but a less-complicated stock ID might take less time.

CHAIRMAN NANCE: Okay. Thank you. Mike, please.

DR. ALLEN: Thanks, Katie. This is such an important topic for us to discuss, and I'm not familiar with the slot concept. Just for background tell me, and what is that?

DR. SIEGFRIED: So, on the SEDAR website, there is a -- We also call it a Tetris grid, and it shows all of the different -- I don't have it in my presentation, but it shows all of the different councils, commissions, management bodies that the Southeast provides management advice to, and so across the top is all of the different management bodies, and then -- The Gulf gets five slots, in the past, and the South Atlantic has gotten four or five slots, in the past, and HMS gets one slot, and the Caribbean gets one slot, and it used to be based on how many assessment staff were in each group.

Then, on the Y-axis, basically, of this Tetris, is how long each of the assessments take, and so if you have say one person who has gag, and you think it's going to take eighteen months, then you put out eighteen months in that one slot, but that means that person doesn't work on anything else, and that there's definitely data available for them, and that we can provide data for something like eighteen slots, which just isn't possible for our data group. I wish I could show it to you. I'm trying to verbally explain it, but I know it's hard to --

DR. ALLEN: That's helpful. Thank you.

DR. SIEGFRIED: Okay.

CHAIRMAN NANCE: Thank you, Mike. Jim Tolan, please.

DR. TOLAN: This is kind of a follow-up to what Will was asking about the time for each of these categories, and, while I get each of the assessment webinars is going to add a month, because of I'm assuming it's the Federal Register requirements, and I thought, when we moved to the topical working groups, that we could sort of skirt around that, and we could have more frequent meetings that didn't have to be under the Federal Register, and am I not understanding that correctly? Thanks.

DR. SIEGFRIED: No, and there is IPT-style meetings that we would have with the topical working groups in between the ones that are registered for the public decisions, and that was useful, so that every single time we met didn't have to be noticed, but any decision-making meeting had to be noticed, and so everything we ever talked about had to still be discussed on a registered meeting.

DR. TOLAN: Okay. Thank you.

DR. SIEGFRIED: Yes.

CHAIRMAN NANCE: Okay. Perfect. Josh.

DR. KILBORN: Thank you, and thank you for this presentation. This is really great stuff, and a lot of my personal pet peeves have been addressed, and so I don't really personally have a problem with the elimination of the research track process, as long as there's still a mechanism to incorporate new, you know, information and new knowledge.

This is where, you know, my, I guess, naivety about this process kind of starts to pop-up, because I don't know for sure, and like do all of those project add-ons, plus the age-structured assessment that you have listed there, all together kind of constitute what would be a research track process, or are there additional things that happen throughout that process that we would need to also consider and add to this list of project add-ons, if we took this approach?

DR. SIEGFRIED: The only things that aren't accounted for here are if something comes up in the middle, which I guess if council staff -- What if we need to come say to you all, to the SSC, and say, look, we need another meeting to discuss this thing, and so there might be a little bit of an extra add-on, say an extra webinar, and so the goal would be to cover all of it at the beginning, and it would be what most people are familiar with as a benchmark approach, and benchmarks can incorporate any new information, and so that structure, in our minds, covers everything that's needed, and there's management advice at the end. That's a big positive for a lot of folks, is we've gone through this whole process, and then we can get management advice, instead of doing another assessment.

If something comes up, it is important that, at the assessment phase, we be flexible enough to incorporate something big enough, if it comes up, but we're going to try to negotiate this as well as possible, so that we can get our schedule at the center, you know, down for our data providers.

DR. KILBORN: Thank you. Can I follow-up?

CHAIRMAN NANCE: Yes, please, Josh.

DR. KILBORN: Do you mind just expanding on the difference between the benchmark and what became the research track, for those of us that have been consistently confused by the nomenclature?

DR. SIEGFRIED: Yes, and so the previous benchmark basically had all of these things, except for a topical working group wasn't one of the things, and it was a panel that basically was there from day-one, that would cover all of the decisions made along the way, and so the benchmark would contain all of these, as well as provide management advice at the end, full diagnostics, have the terminal year for the assessment consistent throughout the process.

What the research track was meant to do is allow for the data providers to not have to go to the terminal year and to maybe, you know, provide provisional data, if there's something coming down the pike, and like, for scamp, there were some ages provided that were done with a different saw, and they knew that they were going to have to do a different analysis later, but we wanted to keep going with the research track, and so it's sort of like a let's incorporate all the new research, and let's be flexible about the timeline, and let's be completely open with what we're doing for the model configuration, and then we'll tighten it up at the operational phase, and produce management advice at that point.

The timeline went from, you know, eighteen months, or two years, to around four years, because there was a whole other assessment in there, and so the research track was supposed to provide more time to research, and it was supposed to provide more flexibility, and it was supposed to allow for just model configuration to be considered at the first stage, and we just don't think that we realized all of those benefits, and the benchmark will provide management advice more frequently than a research track would.

DR. KILBORN: Can I ask one more follow-up?

CHAIRMAN NANCE: Okay. Go ahead, Josh.

DR. KILBORN: So part of what I'm hearing is that, you know, the original process was meant to take longer, right, because it was supposed to incorporate all of these benefits, but, unfortunately, a lot of these benefits weren't realized, and so now we're thinking about going back to a shorter process, where applicable, and so my follow-up is, is there a way to be more efficient with the time, and still realize the original goals of the research track, rather than, you know, just trying to shorten the process? Thank you.

DR. SIEGFRIED: The efficiencies, and the benefits, I mean, there's going to be a tradeoff between those. Obviously, if you want to investigate everything and the kitchen sink, it's going to take more time, and so that's not efficient. If you want management advice, then you probably want to cut out the follow-up, you know, turn-the-crank step that we envisioned for the operational assessment. It really was envisioned to be just a turn-the-crank. We didn't think we would have a lot more to discuss at the operational, but, in practice, we would have had a lot to go over.

The timing, the scheduling, is actually really important, and we didn't realize how important that was for our data providers, I don't think, in that we need a more structured schedule than what the research track and operational provides, so that everybody knows when things are expected in our data provision groups, and so the efficiencies and the exploration are just at odds.

I think what we have to do is say, okay, what needs to be explored, and be explicit in that in our terms of reference, and then the assessment will be much more effective, and we'll gain efficiencies, where we can, and we'll get management advice at the end.

MR. RINDONE: Just to jump in here, Josh, I mean, there doesn't exist a scenario where the council is going to request an assessment that they don't expect to get management advice from, and so, essentially, what that leaves is, for every research track, there was going to be two data provisioning requirements, one for the research track and then one immediately following for the operational assessment, and so, you know, the data provisioning is a bottleneck the Science Center has been working diligently on, but this was essentially doubling the workload on that, and the process, and so the process is just not --

It's just not going to work the way that it was designed, and what the Science Center is proposing here basically -- You know, it cannibalizes across the good parts of lessons learned from the research track process, and what we knew worked from the last round, with using the benchmark, standard, and update framework, and, you know, it creates this menu, if you will, of add-ons that the council, and other cooperators, can negotiate with the center when looking at what their assessment needs are.

DR. SIEGFRIED: Just one more thing to that.

CHAIRMAN NANCE: Go ahead, Katie.

DR. SIEGFRIED: Thanks. We compared our research track process, and we sort of modeled it on something that the Northeast started, and it can't be quite the way they have it, and they have a research track team, and a management track, and the research tracks there take five years, because there is literally research that's proposed and done and incorporated in just the research track process.

They have so many more people than we do to do these sort of parallel tracks, and it just isn't working out for us, with the personnel, the resources, and then the understanding of what the research track could and couldn't do with the timeline we were proposing.

With a five-year timeline, there's so much more research possible, and I think most people that saw what we could accomplish during a research track -- You know, I don't see how the assessment analysts could possibly do research. We could really only do lots of different iterations of the model, and so it's not really the way that the Northeast does it, and it's probably just better to go with what meets the objectives of our region, instead of something that we can't achieve with our limited staffing. That's my personal opinion though, and it's not --

CHAIRMAN NANCE: I appreciate that opinion, Katie. Thank you. Harry, please.

MR. BLANCHET: I have kind of a two-part. The first is that, under the bullet about the TWGs, saying each TWG adds one to three months, and so, when we're talking about the red snapper assessment, with four technical working groups, that's adding something between four months and a year to the overall timeline, and is there no way that some of those things get worked in parallel? I mean, it doesn't seem like there should be --

MR. RINDONE: In that particular instance, they get folded into the data workshop.

MR. BLANCHET: Okay.

MR. RINDONE: So, I mean, we'll have -- Like for red snapper, you know, we'll have a couple of data scoping calls, you know, making sure that everybody gets their ducks lined up appropriately ahead of time, ahead of the in-person data workshop, and then all of those four topical working groups that we talked about yesterday -- They will all meet together during the data workshop, and, you know, there may be a situation where, you know, there needs to be an additional like post-data workshop webinar, or something like that, if there's, you know, a loose end that needs to be tied off, but the expectation, obviously, is that work should be accomplished through the data workshop.

MR. BLANCHET: Okay, and so I was reading this as saying that you have a calendar that starts off at six months, and then you start tacking onto that calendar, and, the more TWGs you had, the more time you had, and is that -- Is that not the way to read that?

CHAIRMAN NANCE: I think some of it can -- Go ahead, Katie.

DR. SIEGFRIED: The topical working groups are not the working groups that we have at the data workshop, and so the data workshop will have those four working groups, and, again, the nomenclature is confusing, I know, and that's part of why we're trying to move away from that, but, before, what we had is this would be outside of the data workshop. If we needed to have panel meetings, or topical working groups, that met in between assessment webinars say, in order to cover topics that were very highly detailed, that needed more work before we all met on like an assessment webinar to discuss it, and that's what we're talking about with those new information, are some sort of topical working group, and not what is happening at the data workshop.

CHAIRMAN NANCE: But, Katie, some of those could be concurrent, correct? You could have two topical working groups going on simultaneously?

DR. SIEGFRIED: Yes, and we have that going for red grouper right now, actually, where we don't like do them sequentially, and we do them concurrently, yes.

CHAIRMAN NANCE: So some, Harry, are sequential, and some are -- So just I think the important thing is those add time.

MR. BLANCHET: Yes, and it was just -- What struck me was the "each" part of that, and so, going back to -- I'm still unclear, also, in terms of the differences between slots and a calendar.

DR. SIEGFRIED: The slots were defined based on number of assessment analysts, and a calendar takes into account everybody who contributes to the assessment, and so data providers and assessment analysts, and the data providers service more than one region, and our assessment analysts tend to be grouped by region, and so, if we only consider the slots, which are assessment analysts, we forget that our data providers are providing across all of those individuals, and so a calendar is required in order to take into account everyone's availability.

MR. BLANCHET: Okay. Thank you.

CHAIRMAN NANCE: Thank you, Harry. Dave, please.

DR. CHAGARIS: Thank you, Mr. Chair. Just taking a step back, and maybe we circle back to this later, but, you know, a lot of what we're talking about here is still following the same single-species approach of you do the analysis, prepare the data, finish the assessment, and repeat the whole thing, but it seems like there's potentially a lot of gains, and efficiency, that could be made by combining species at certain stages of this, and like, for example, you know, a lot of the surveys are provided the same data for different species, but yet, you know, they're coming one year for one species in a data workshop, and the next year for a different species in another data workshop, and it seems like, you know, having some sort of combined species approach, to where data are provided for multiple species at one time, you know, might set up -- It might gain some efficiencies, especially on the data workshop side, but also, you know, allow for the data providers to focus more on their products, and not necessarily keeping track with the assessment, and so they would have, you know, an expectation of routinely providing the data, and, that way, it would be available in between stock assessments as well.

I'm wondering if, you know, just kind of big picture, and have you all thought about, you know, combining -- You know, combining species, under this framework, at some point along the stage, at some point in the process, to, you know, be more efficient, especially on the data provision side?

DR. SIEGFRIED: Thanks for that comment. I think that we've started to discuss that quite a bit with some of our data products, for instance indices, and there is efforts to put out indices for multiple species on a public-facing site, and so that's, you know, the group that does Gulf and Caribbean indices, getting that together and creating the automation to update that in a way that's not incredibly onerous of a task for them, right, like individual SEDAR data workshop might be.

There's also been discussion about, you know, why are we always reinventing the wheel at the data workshops, and, you know, everybody who has gone, we talk about a lot of the same things, and it would be really helpful if we distilled a lot of that into something like procedural workshops, where the answer to how to produce those data is already there, and the data providers can go ahead and utilize that best practice and not go through the task of defending the process each time, and so that's a multispecies approach for those sorts of topics.

We're also having an internal age comp working group that will cover multiple species, in order to get at this issue of either subsampling or age composition development, weighted by length comps, and then length comps by landings, across all species, and so that's sort of -- You know, those are efforts that are ongoing now, and so what we can see to make those efficiencies would be to create those best practices that are then publicly vetted, and we can just turn to those, instead of having to reinvent the wheel each time.

That's what is happening now, and, if anybody has other ideas, I can bring it back to our meetings to discuss more, and all of that takes a lot of work, and we haven't yet seen the benefits of being able to just refer to best practices and move along. Sometimes, not just in the Gulf, but across the Southeast, there have been debates about what to do at the SSC when we feel like this is a best practice that should easily move through, and I've heard that at our meetings, where, you know, there is concern that best practices aren't always accepted. We're struggling with getting those efficiencies, but we're definitely trying.

DR. CHAGARIS: Predefined procedures would definitely help facilitate that, but, also, you know, maybe rethinking the specific actions that take place within SEDAR, as far as meetings and webinars and having the information presented for multiple species at once, and I think it would be informative. Thank you for that.

DR. SIEGFRIED: Sure.

CHAIRMAN NANCE: Thank you. Sean, please.

DR. POWERS: Thanks, and a lot of people have said comments, and so I'll try to keep this brief, and, I mean, obviously, I support this. The research track had great promise, as Ryan alluded to, but, in reality, this long of a process, that doesn't end in management advice, is -- It is a challenge to justify how long it took on the schedule, but, Katie, I really have two questions for you.

There is still a need for the analysts to have time to research different methods, different assessment methods, different model configurations. When we eliminate the research track, how is your staff going to get that time, is the first question, because I know, both for them to be -- For the job to be both intellectually rewarding and to be improved, they will need that time to look into that.

Second, you know, the CIE reviewers on the red snapper assessment really harped on this process, and the improvements to it, and this is a good step, but one of the key things was asking how essential it is to get all this feedback once you get into the assessment phase and modeling phase.

You know, a lot of us, on the SSC, don't contribute much to the actual modeling building, and those decisions, and very few of us have that level of expertise. The CIE reviewers almost suggested that, after a data workshop, after we approve the data, and the structure of the data, that it’s almost that we should let the analysts go on their own, for a time period, and be more efficient to work in your group, to answer questions, and then come out of it with an assessment.

This kind of iterative assessment approach, with lots of webinars, is that really effective, in your opinion? So how does you staff get enough time for research and development, under this new system, and, secondly, do you think we can streamline the assessment even more, by eliminating some of outside input?

DR. SIEGFRIED: Thanks, Sean. Those are great questions, and so, as far as protecting staff research time, because part of what makes our staff so good at what they do is to give them time to pursue professional development opportunities, whether that be research, whether that be, you know, additional learning, and we’re actually having advanced stock assessment courses offered, and the Northeast has TMB courses offered.

It's important that, you know, our staff are given that time off from the operational workload, in order to maintain their professional development time. I have some staff that end up getting more time each year than others, and my job is to make sure that I balance that from year-to-year, as much as possible, and we do have a set amount of time that is supposed to be given to them, and I do my best to give them that time.

One of the things that is hard with that is when we get staff -- Like, for instance, Matt and LaTreese have a dedicated operational workload for a really long time, and so, right now, I need to let them, you know, for the most part, do other things for professional development, and so that’s on me, and that’s on the center to let me do that for the staff. It’s very important. Otherwise, they won’t learn new methods, and they won’t maintain interest in their job, and morale will drop, and so I have every incentive to do that.

Not to mention their technical expertise will improve the more time they get to do that, and so that’s my answer to that first part, and then my opinion about, you know, your comment about the number of webinars is it’s a tradeoff between transparency and throughput.

It’s also important to have the best practices established, so that every little decision that the assessment analyst makes doesn’t need to go through a panel, right, and, if I want to use the Dirichlet multinomial, if we’ve been doing that long enough, that shouldn’t have to be a panel decision whether we do that, or the way that we weight a comp, and that needs to be a standard practice, or, you know, if people don’t understand how we use mirroring, we need to explain that better, so that it’s not a shocker, and it’s not a panel decision every time they make those decisions.

We try to put in the number of assessment webinars needed to balance out the time they need to develop a good model and the amount of transparency that is requested.

DR. POWERS: I just think that’s really important, where you can save a lot of time, because I agree with you on things like weighting, mirroring, and how you do those things, I mean, really is -- You know, it’s the analyst’s call, in how things improve the model, and how they fit and all that, and I agree with you that there does need to be some transparency, and that we are mirroring, and here’s why we have to mirror, and there can be input in that decision, but the actual nuts-and-bolts of a lot of this stuff -- I don’t think it needs to be discussed.

I mean, like you said, I mean, hopefully, as you go through the -- As the center gets more and more best practices, you can rely on that, but I agree with you that, you know, the larger transparency issues, or like with mirroring, and here’s why we have to mirror, but the actual nuts-and-bolts of how you do those things, and the same thing with weighting. I mean, we seem to waste a lot of time getting -- Or presenting it to the assessment panel, that really doesn’t give you any meaningful help.

DR. SIEGFRIED: Yes, and part of what we’re doing right now is I feel like we’re sort of moving through this time in the relationship between the center, the SSC, and the council where we’re trying to build trust in our technical abilities, and we’re trying to build trust that we’re responsive, and that we’re trying to meet objectives, and I think, once those things have been obvious for a while, there will be less need for transparency during things like assessment webinars, and, once we develop procedural workshops, where everybody has seen all those, or, you know, some transparent document about best practices, there won’t be such a need to do that.

It's not just the Gulf, like I said, and this is the South Atlantic and other groups too, and so every council’s culture is different, and so those are -- I think that that will help with the need for transparency through the long-term, but, yes, those are great points, Sean.

CHAIRMAN NANCE: Thank you, Katie. We're going to break for lunch, and so, Doug and Luiz, I still love you, but we're going to put you off until after lunch with your questions, and, Katie, thanks for thus far, and we'll come back at 12:50, Eastern Time, and continue this discussion, and we'll be on Slide Number 8 still, and then we can move forward, and so thank you.

(Whereupon, the meeting recessed for lunch on May 8, 2024.)

\- - -

MAY 8, 2024

WEDNESDAY AFTERNOON SESSION

\- - -

The Meeting of the Gulf of Mexico Fishery Management Council Standing and Special Reef Fish, Special Socioeconomic, and Special Ecosystem Scientific and Statistical Committees reconvened at the Gulf Council Office in Tampa, Florida on Tuesday, May 8, 2024, and was called to order by Chairman Jim Nance.

CHAIRMAN NANCE: Okay. We're ready to go ahead and start again. Doug, we'll go ahead and take your questions, please.

MR. GREGORY: Okay. Thank you, Chair, and thank you, Katie. We've still got a long way to go in this presentation, and so I'm going to keep my comments short. I just wanted to comment on a few things. I was a review chair, or a chair to the review workshops, one for the Caribbean spiny lobster and the other for the scamp, and my experience was the CIE seemed to have pretty good access to the data, in that they were running their own versions of Stock Synthesis during the workshops, and communicating with the analysts, and, like Sean said earlier, I can't do that, and it was kind of interesting to watch, and a little frustrating.

The other thing is I think there's a tremendous amount of trust, and respect, from the SSC for all the analysts, and so, if there's any -- You can rest assured that's not the case, and then one final thing was about best practices, and I don't recall the SSC reviewing the workshop results, or reports, of the best practices, and expecting us to go on the SEDAR website and keep track of all of that is a bit too much, and that may be the reason that some of us go to a webinar and question something that you all think are best practices that should already be accepted.

A recent example for me was which stage of oocytes to use for determining maturity of a fish, and that's something that is changing recently, and I recall being told, by Luiz, that there is a best practice workshop, or something, going on with that, and I haven't seen any results of that, but, if that information could be given to us in advance, then we wouldn't be questioning some of these things, particularly when there's a change in the traditional process, and that's all I've got to say.

The presentation is great, and I've been -- I welcome this review by the center, and the openness, and the willingness to try to make it flexible. The problem, in the past, has been the lack of flexibility, and so I appreciate your presentation, and I appreciate all that the center staff has done to develop this new approach. This will be our fourth new approach since I've been with the SEDAR group. Thank you very much.

CHAIRMAN NANCE: Thank you, Doug. Katie, any response?

DR. SIEGFRIED: I appreciate your comments, Doug, and I suppose the only thing I think is important to comment on is, when I was talking about trust, it's a lot more about just the center in general, and the council making sure that stakeholders sort of know what our objectives are, and make sure that things are aligned as much as possible, and avoiding mistakes, and things that really cause problems with management, as much as possible, but I very much appreciate you stating what you did, Doug. Thanks.

CHAIRMAN NANCE: Thank you, Katie. Luiz, please.

DR. BARBIERI: Thank you, Mr. Chairman, and thank you, Katie. You know, so far, what we've seen of the presentation, I really like it. You know, I know we discussed some of this during the SEDAR Steering Committee meeting, but I really like the way that you're framing this conversation in more detail, and addressing a lot of questions, and I don't really have a question here, and I just want to put something out there, perhaps for us to discuss later, Mr. Chairman, when we have, you know, open discussion about this topic, but it's to present a bit of a different perspective than Sean brought up.

Sean, I disagree, a bit, with your perspective there on basically getting a process that goes faster, right, and has more efficiency, at the cost of keeping the SSC involved along the way, and I think that this can create some problems that, you know, we can avoid, by actually having the SSC -- Not less, but more involved in these assessments.

Not everyone on the committee has the background, and the experience, working with some high-end stock assessment models, and now they have so many bells and whistles, right, so many toggles, that, you know, your head starts spinning, but I do think that this working in tandem, between the committee itself, right, and the expertise that we can bring to the table, with the very strong analytical team that we have at the Science Center, brings really the best outcome possible, and it’s a win-win, and I say this for several reasons.

One, you know, although we have brilliant -- I mean, really, we’re very lucky to have the team that we have at the Science Center now, you know, for our stock assessment team, and it’s just a phenomenal team, and I really like everyone, and, as Doug said, Katie, yes we have the utmost respect for all of you, because you do phenomenal work.

Having said that, not everyone on that team, really, I think has the experience conducting biological research on some of these fisheries stocks, right, and so the scope of experience, from a biological perspective, and even sometimes a fisheries perspective itself, is not as expansive as it is on the modeling side of things, and so sometimes I think having the SSC more involved along the way brings those two sets, right, of skills, and knowledge, together in a way that, complementary, they become much, much more effective.

This is one reason, and another reason -- Meaning, you know, sometimes people who have this very high training in modeling do a great job in making sure that we have great model fits, and that the residuals are all in order, and all of the diagnostics are -- But they may miss, inadvertently miss, the biological significance of some of the decisions that are made, right, and this is where I think that we can step in and provide more assistance along the way, and this is one reason.

Another reason is the fact that the plan that Katie is explaining here is really for us to adopt more of a tiered approach, right, and so the stocks that are supposed to be considered priority stocks -- For those, we’re going to generate more bandwidth to do potentially an even deeper dive, right, into those assessments and be able to assist our assessment analysts throughout the process of producing the stock assessments, while, at the same time, we’re saving bandwidth, right, by not putting so much time and effort trying to fit some data-poor stocks into highly-sophisticated data-hungry models for which we don’t really have the appropriate data to inform parameters, right, and so that generates, sometimes, delays, and a very slow process, and I can tell you that the scamp assessment, Doug, that you mentioned, was one clear example.

You know, decisions had to be extended, and working groups, topical working groups, had to work forever on issues, because a lot of the data had to be, you know, manipulated, adjusted, more information brought in, and so, at times, we are trying to fit, you know, a square peg into a round hole, right, in the sense of saying, okay, we're going to get something like yellowmouth grouper, or yellowedge grouper, and try to conduct an assessment for which we really don't have the biological information, the data, right, on a lot of those parameters. Even the fisheries is not that well known.

Those efficiencies now, in that tiered approach, will be gained by us conducting simpler, as Katie presented, right, simpler analyses for those things, that can provide timely advice, right, that we scale in terms of the uncertainties associated, but, you know, really, trying to fit everything into that one model of highly-sophisticated statistical catch-at-age models doesn't seem to be bringing the efficiency that we need, and so, to me, those are the two reasons, Sean, that I feel that we should be involved, and, actually, an effort, and, you know, we may discuss this a bit later, but to actually get the SSC more involved in the process.

Carrie, Dr. Simmons, yesterday made a mention of a potential process going forward, where we would actually -- The panels, right, the different SSC members that compose panels, working with the assessment analysts throughout the process, would come to the SSC and provide periodic updates, so we can keep a finger on the pulse, right, of what's going on, because there are, oftentimes, when a very long assessment process takes place, that we are not properly engaged along the way, and so, at the end, we have all sorts of problems that we're trying to fix a posteriori, and, of course, that doesn't work as well, because, you know, center has to then do additional analysis, and it just prolongs the whole process even further, and so, Sean, that's my perspective on this there. Thank you.

CHAIRMAN NANCE: Sean, go ahead.

DR. POWERS: As always, Luiz, I always appreciate your comments, and even your disagreement. You know, I'm not saying the SSC shouldn't be involved. Something has to change, and it is just taking too long to do a lot of these important species, or priority species, if you want, and all the species are important, but the priority species, and this was a suggestion.

I mean, I think a lot of those things that you've talked about, as far as the fisheries reality, and how the fisheries work, and interpretations of selectivity patterns, and all of these things should happen at the data stage. It just seems, to me, that the assessment stage is the one that can be streamlined the most, by putting more trust in the analysts, and, you know, obviously, it defeats the purpose if they make decisions that the SSC doesn't agree with, and so I'm cognizant of that, that, all of a sudden, we've just wasted a ton of time, if there is something that the SSC doesn't feel was the correct decision.

I get back to the conversation that I had with Katie, which was involve the SSC in those decisions, and, I mean, I keep going back to the example of mirroring, and should we mirror, and why do we have to mirror, and why do we have to do certain things, but really trusting the analysts more, and to not have to go back, every webinar, and run through fifty fairly straightforward things they're going to do.

Like I said, the compromise is probably, you know, getting more and more of these things sealed up as best practices, so the SSC already has weighed-in on them, and we don't have to revisit them more and more, and so I'm not discouraging SSC interactions, but something has to happen to streamline this process.

CHAIRMAN NANCE: Thank you, Sean, and I think a good example of maybe an intermediate, between what Sean is saying and Luiz, is -- Because I understand what Sean is -- You know, we don't have to be at every single step, but I think a good example is yellowedge grouper. As Skyler was going through that assessment, and she found some issues and things that she wanted to discuss with the SSC, and she brought that to the SSC, and we then had a panel that looked at those, and made recommendations, and I think that helped that assessment process.

We weren't involved in every single step, but we were involved in the steps that I think mattered in that assessment, and so that's that one example I think that helped the process to move along a little quicker. I appreciate both Sean's and Luiz's comments. Seeing no other hands, Katie, let's go ahead and -- I think we're done with this slide.

DR. SIEGFRIED: Okay.

CHAIRMAN NANCE: I think, right? So I think we're on this Number 3.

DR. SIEGFRIED: Thanks. I did make some notes for the larger discussion that we might have at the end of this, or this is just one of multiple times that we'll update you, the SSC, on progress on this, and so there will be lots of opportunity to discuss.

What we have here for you is the next recommended change was -- This is a sort of step in the process, is to identify key stocks, and to prioritize them, and we asked the councils to do this, and there is also a Science Center -- There is a nationwide prioritization document that Rick Methot is -- I think he’s the lead author on it, and, in 2018, the SSC, in the Gulf, received a presentation on it.

It wasn’t our set of key stocks, or our prioritization of them, and it was based on what the councils’ priorities were. We really appreciated the council participating in this. It’s not binding, and we just -- We’re trying to start this conversation of, okay, what’s important to you all, and so, if we declare our priorities a couple of years in advance, that helps us, with particularly our agers, but there is no need to lock in detailed calendars two years in advance, and that’s what we’ve been trying to do.

There was an effort, in the Science Center, to start locking in these detailed calendars, because we have data providers that provide data for four areas of the Southeast, and they were just getting overcommitted, because we weren’t viewing them all in one calendar, but we realize we don’t need to do that so far in advance, and so, really, just identify which species are coming down the pike and which are most important.

The Gulf Council did respond to us, and I think you all have access to the memo where they state that, as part of this evolving and improving -- As part of evolving and improving the stock assessment process, the Science Center requested that the council identify these stocks, and then below is the list of five key stocks, and we have for you red snapper, and that wasn’t a shocker, red grouper, gag grouper, gray snapper, and greater amberjack.

There was, from what I remember, a pretty lively discussion about this, and there might be further discussion, and I know that we talked to council staff when we were with other council staff members, and it was -- There was sort of a debate of whether to identify these, whether to prioritize these, and we really appreciated the council, you know, putting themselves out there to say, okay, these are -- At first blush, this is what it is important to us, and that really gives us a good way to move forward.

DR. PATTERSON: Katie, can I ask a quick question?

DR. SIEGFRIED: Sure.

CHAIRMAN NANCE: Yes, Will. Go ahead.

DR. PATTERSON: Thanks, Jim. When I saw this slide, I was a bit confused, or I guess the previous slide. Red grouper, red snapper, gag, and those are all pretty marquee, and, if not Gulf-wide fisheries, at least of substantial recreational and commercial importance.

Then you have gray snapper, which is, you know, more of a regional fishery, and it's assessed by the FWRI stock assessment group, through the SEDAR process, and then greater amberjack, which is, you know, data-moderate, and we've had problems trying to do integrated assessments for amberjack, going back for multiple cycles. I'm wondering how those last two made this list over things like king mackerel, or vermilion snapper, or even like gray triggerfish, and like what was the rationale for including those two?

CHAIRMAN NANCE: Ryan, to that point?

MR. RINDONE: Thanks, and so gray snapper is actually done by the Science Center, and it's not a regional stock. It has Gulf-wide landings, and the catch limit is in the millions of pounds, and so it's a common primary and secondary targeted species throughout the Gulf, and it's most prolific in Florida, but Florida accounts for about -- Depending on the year, about 60 to 70 percent of the landings in any given year, but there are landings of it Gulf-wide.

Greater amberjack, of course, has the Great Amberjack Count going on right now, and it's been a hot-button topic for the council, for a number of years, including recent discussions about ideas for managing amberjack from a regional perspective, and the council actually passed a motion requesting that staff start a document on that, which we just -- Everything is backed-up, right, and so sorry, Mr. Dugas, and I know that was your motion.

Then, as far as the other three species, we actually did have those on our list, but, just looking at things, and having eight key stocks that you're trying to assess every three years -- I mean, that's essentially our current SEDAR process, and so, with king mackerel right now, we have king mackerel as a pressing management concern, but we don't really understand what could have happened with the stock that has driven the landings down like it has over the last several years, and so it certainly hasn't been an overabundance of fishing pressure, and landings, compared to the ACLs that we set.

You know, if it turns out that those were somehow inaccurate, if there's another environmental variable at play, and like we just don't know that information yet.

Vermilion was definitely brought up, and it's in the same class as gray snapper, and so, you know, you could look at those as, you know, commensurate with each other, or perhaps interchangeable, in terms of them being target species and ACLs in the millions of pounds, and what was the third one? Triggerfish.

Well, triggerfish, come on, you know, and we have a benchmark assessment that we have scheduled for triggerfish, to see what's going on there, and then, if you remember, the last stock assessment for triggerfish had to be stopped earlier, due to some irreconcilable data issues, but we did have an interim analysis done for triggerfish that let us update the catch limits, a few years back, and so I would say it's not that the other three species you mentioned, Will, aren't also key, but it's just, you know, how many key ones do you have, and so that's certainly something that the council would benefit from some SSC deliberation about, if you guys would like to entertain that.

CHAIRMAN NANCE: Katie, and then --

DR. PATTERSON: Can I --

CHAIRMAN NANCE: Will, go ahead. Thank you.

DR. PATTERSON: Thank you. My apologies to Francesca, and obviously I had misremembered about the gray snapper, and I think I was probably thinking of yellowtail. Thanks for the explanation, Ryan, and I don't find your arguments completely convincing, especially relative to the three stocks that I mentioned, and I think there might be a couple of others, but it is informative to hear the council perspective on that. Thanks.

CHAIRMAN NANCE: Katie, any other input from the center?

DR. SIEGFRIED: I was just going to say the thing that Ryan said about gray snapper, and so I'm glad he covered that, and this is just a first stab at us discussing this, and I know John Walter was at the council meeting when this was being discussed, and he and I chatted quite a bit about how many species can we have as key, how often, you know, this will be, and so this will be sort of a sliding scale of what's possible, and so offering this to us, in addition to what we know they're asking for now, is very helpful to understand sort of what is important to them overall, and just hearing the debate amongst council members about what's most important to them was useful to us, but that's all I was going to add.

CHAIRMAN NANCE: Thank you, Katie. Ryan, please.

MR. RINDONE: I mean, just to add for Will, you know, we also talked about Spanish mackerel, which has an ACL that is near ten-million pounds, and the importance of yellowtail and hogfish, especially in the eastern Gulf of Mexico, and there were round-robin deliberations on all of this, and trying to really define like what does it mean for something to be a key stock, you know, and is it something that we would expect there to be continued pressure on? Is it something that we anticipate there to be continual management needs for? Do we expect changes in fishery dynamics to result in effort shifting to or away from these species?

A number of things came into play, and the up side of this is that it's not like we're going to etch these into stone tablets, or anything like that, and these are going to be the key stocks forever, and we can always revisit this list, as pressing management concerns arise, and changes in the species -- You know, our perceptions about the species abundance and biology, et cetera, come about that maybe we need to swap some things out.

CHAIRMAN NANCE: Thank you, Ryan. Jim Tolan, please.

DR. TOLAN: Thank you, Mr. Chairman, and Dr. Patterson nailed one of the species that I was going to ask about, and Ryan provided some guidance on it, because it's one of our perpetual problem children, that being gray triggerfish, even though it's not that big of a deal on the western side of the Gulf, and it is a big deal on the eastern side of the Gulf, and it just hasn't responded well to our assessments up to this point, and so Ryan provided some guidance on that, but thank you.

CHAIRMAN NANCE: You know, I'm going to kind of cut this one off, because I don't want to have a debate on what are key stocks and what aren't at this meeting, and just realize that there are going to be some key stocks, and we can have that discussion, as an SSC, and it certainly is the council's prerogative to identify the stocks that they want to have through the system, and so I think the council, and the center, with our involvement in that, can identify key stocks and which ones are important. Carrie, please.

EXECUTIVE DIRECTOR SIMMONS: Thank you, Mr. Chair. Just really quickly, I mean, this was also based on this reimagined process starting in 2026, which our understanding is that many of the other things, that are currently on the schedule before then, including gray triggerfish, would already be addressed, and so maybe that needs more discussion at some point, Katie, about how that will actually go forward, but that was our understanding at the SEDAR Steering Committee. Thanks.

CHAIRMAN NANCE: Thanks, Carrie. Josh.

DR. KILBORN: Thank you. I was also interested in, you know, what defines a key stock, and Ryan addressed some of my questions, but I did want to, I guess, just follow-up and ask if there was -- You know, how do we define a key stock? Is it based on, you know, the ecological importance, or, excuse me, the economic importance of that species, or are we more leaning towards, okay, this species is in decline, and we've been trying to figure it out, and we can't, and so we need to, you know, frequently get advice on this species, you know, those kind of tradeoff considerations, and I'm interested in how those played out.

Also, the second kind of part of my question is, given that, you know that there's going to need to be a regularly rotating list of species over time, as, you know, successes and failures are realized, but I'm worried that we're going to ultimately end up right back where we started, where, you know, every couple of years, we're updating that list of important key species, and we're just overwhelming everybody all over again, because we don't have, you know, a fixed timeline of kind of how long this species is going to be key, for example, if somebody could clarify that.

MR. RINDONE: I've got you, Josh, and so, I mean, key stocks is going to mean something, I think, a little bit differently, depending on which SEDAR cooperator has to answer the question, you know, like the Gulf versus South Atlantic Council, as an example.

I think, for the Gulf Council, we kind of looked at it in a dynamic lens of -- Like I had mentioned when I was responding to Will's point, you know, it's not just, you know, is it a primary or secondary target species, though that is certainly important, but, also, you know, do we expect there to be a lot of management changes, do we expect shifts to or from that species as a result in changes in fishery dynamics? Is there pressing research that's happening on this species, that's going to change our understanding of it, and we want to monitor what's going on? Is there strong susceptibility to environmental covariates, like we see with red grouper and gag related to red tides?

There were a whole bunch of things, and we certainly didn't build a conceptual model to make the decisions, and we just kind of chatted about it, and this is ultimately where we coalesced, but -- Again, like I said, it’s not that these five species are the only five key stocks the Gulf Council can ever have. I mean, if things happen to smooth out for any of them, and we want to swap something out, or we need to move something up, then we can do that.

CHAIRMAN NANCE: Thank you. Doug.

MR. GREGORY: Thank you. I will be brief. My question is more procedural. It’s surprising, to me, that this list would have been made by the council and staff without any input from the SSC, and all the comments that have been made, and Ryan’s comments are very well taken, but I think our input is warranted, and not on a -- basis over the years, but more -- I can envision us listing a priority list of species, and not just the top-five, but all of them, and giving that to the council and let them operate with that, and make their own decisions, but they do need our input. Thank you.

CHAIRMAN NANCE: Carrie.

EXECUTIVE DIRECTOR SIMMONS: Thank you, Mr. Chair. I think there’s some confusion here. There’s a letter that was posted to the briefing book materials, and this list came from the Gulf Council meeting in April, after the Gulf SEDAR Committee of the council reviewed the March steering committee results, and, in an effort to try to get the ball rolling, and get this process moving forward, we were asked to provide key stocks, and the council spent a long time talking about what they thought key stocks meant, and this was the list that the council landed on during the April council meeting. I think there has to be a starting point, and that was what the council was trying to do to accommodate the center’s request.

CHAIRMAN NANCE: Thank you for that clarification. Harry, please.

MR. BLANCHET: I will try to be quick. One of the things that often seems to derail plans is that you end up with a stock that has significant unresolved issues that folks think needs to have a higher priority than the current SEDAR list, when you get something like, well, we’re going to begin a three-year process on that in 2026, and that seems to be an untenable position for the people who are interested in that specific stock.

Is there -- You know, I don’t want to add more stocks to these key stocks, but maybe a key issues, or a significant stock issue, something that -- So what we seem to be doing is we want to identify those species where we're going to get regular high-intensity assessments, and there's another set of species in there that should get occasional high-intensity evaluations, things that have -- I mean, like what we did with gag grouper.

It took us a while to get there, but, eventually, we started to get a better understanding of some of the dynamics in that particular fishery, and in that stock, and we may have the same thing going on with king mackerel, and we may have the same thing going on with some of our other species, but I don't know that you need to put them into a key stock type of thing as much as give it more intensity one time, and I didn't see that in the process as it currently is. Thank you.

CHAIRMAN NANCE: Thank you, Harry. Katie, let's go ahead and --

DR. KILBORN: Sorry, but can I follow-up on that point that Harry brought up?

CHAIRMAN NANCE: Okay. Go ahead, Josh.

DR. KILBORN: Thank you, and so it's regarding the idea of, you know, multiple species being affected by an issue, and the Ecosystem Technical Committee has been working towards a fishery ecosystem plan, right, for the Gulf of Mexico, and one of the things that we've been talking about, within that context, are fishery ecosystem issues, and, you know, how they relate to multiple species, and so I'm curious how those two frameworks -- You know, that framework could be dovetailed in with this kind of stock assessment framework, to try to, you know, get some of that additional research done, get some of those multispecies considerations done, get some of that legwork, you know, to take on some of the lift, I suppose, for some of these assessments, and can that be done? Has anybody thought about how those two things might go together?

DR. SIEGFRIED: I can address that, Chair.

CHAIRMAN NANCE: Go ahead, please, Katie.

DR. SIEGFRIED: I don't know about how well, but I can address that, and so there's definitely -- The ecosystem considerations was sort of the first step in our single-species stock assessments. We are undergoing a national change with the climate-ready fishery initiatives, where more and more ecosystem work is being done, but we don't yet -- We have not yet operationalized what you're talking about, Josh, and so I think that sort of thing needs to be considered at the same time as providing the single-species stock assessment advice, and, if we can't even get the single-species process down pat, I worry about trying to bring in this other way of doing a multispecies approach, and that has not yet been tested either.

I'm not closed off to the idea. We're approaching it, and we're figuring out how to operationalize it, but I don't think that we're there yet with that. Right now, the thing I can think of is doing a multispecies approach to data provision, like what I've mentioned in response to Dave Chagaris's comment, and ways to, you know, create sort of thematic methods, you know, based on things like episodic mortality, based on things like natural mortality, things that we can answer across species.

Those, however, inform any ecosystem models, and any ecosystem considerations, and, when I've been to ecosystem modeling meetings, you know, it's just absolutely false that single-species assessment are not necessary for that type of work, and so I'm trying to nail down the first part before I can address the second part.

CHAIRMAN NANCE: Thank you, Katie. Carrie, please.

EXECUTIVE DIRECTOR SIMMONS: Thank you, Mr. Chair. Just really quickly, so the SSC knows, I mean, the council did put in a request, from the pot of climate resilience funding that was available to the councils, to get back into this ecosystem technical committee, the FEP process, the FEI process, that Dr. Kilborn brought up, and have, you know, a designated staff member to work on that, and so that is in the works. That proposal is being reviewed, and we're trying to get the appropriate resources here to move it forward on our end. I think, right now, with king mackerel -- I mean, I think we just need to see what data is available to even determine if an ecosystem model could be used, based on data availability. Thanks.

CHAIRMAN NANCE: Thank you. Josh, thanks for that question.

DR. SIEGFRIED: I did want to address something that Carrie mentioned before, and I tried to say it when I started this slide, because I figured we would get some of this response that the SSC should be considered, or asked, about their opinion about key stocks, but I just want to reiterate what Carrie said, that there did need to be a first, you know, hey, let's get the ball rolling, and that's how we're taking this.

There's this 2015 stock prioritization document, which I'm sure Ryan wasn't looking at it, but he basically said all of these things, like how important it is to the fishery, what the status of the stock is, what's the ecosystem importance, what assessment information do we have, and that is the sort of decision tree that's in that document, but what's supposed to happen is that the science centers are supposed to work with their councils to negotiate, once each group has stated their objectives, and their points of view, and so we really did need this, and, of course, the SSC is a committee of the council, and I'm sure we can work out -- If you want me to go through that document at the next meeting, or something like that, to get more formal discussion about this, but it was definitely never intended to be a one-and-done and don't ask the SSC. We definitely talked about getting SSC discussion about this, and so I just wanted to make sure that was clear, that this is very cursory information.

CHAIRMAN NANCE: Okay. Ryan.

MR. RINDONE: Katie, our experience with the stock assessment prioritization tool pre-dates the Gulf Council's relationship with you as our center POC, but our experience with that tool was underwhelming, in that it kept telling us that we were underassessing blue runner and banded rudderfish. Sorry. Not blue runner, but banded rudderfish, which is part of our jacks complex, which kept coming up in the top-five list of species that we should be assessing frequently.

We had gone back and forth, with some center input, trying to figure out, you know, why the tool was telling us that information, and there were some other problems that we had ultimately run into with it, and we had ultimately decided not to move forward with using the tool to establish stock assessment priorities, but speaking -- Based on my experience anyway, where these recommended changes are going, and understanding the intent of them, and the approaches that you guys are offering now, and the flexibility that will be afforded to the council, and the SSC, in terms of trying to inform this process through negotiation -- Like I see a lot of promise here, and so I'm encouraged.

CHAIRMAN NANCE: I do too, and I think, so we can move on, but the key sentence is that five stocks that the Gulf Council has identified. They did that at their April meeting, and they will have input from us, in the future, and so we'll be able to change these things as we see fit, but let's go ahead and move on to Number 4, Katie. There we go. Perfect.

DR. SIEGFRIED: Sure. The next recommended change may actually address what Harry was bringing up, is that remaining stocks could be assessed using less-time-consuming approaches. Now, the key stocks does not need to be taken as those are the only five that we would ever do an age-structured assessment on. It's just a matter of taking a look at, you know, simplifying a process as well, and so the stock assessments could potentially have limited webinars, which is something that Sean had mentioned, or limited workshops, and we can perform more updated -- More update assessments, or updated projections, and we can also utilize less-complex assessment approaches, which could be something like a data-limited model or something like an interim assessment or management procedure.

Like I said at the beginning, we're starting to do a lot of this in the Gulf already, and it's just going to take some work to sort of get a species-by-species assessment, for lack of a better term, of what is the best approach for that species.

What could this actually look like? This is something that we stated at the steering committee meeting, is we just can't, at the center, provide full flexibility, and full participation, and also create a long-term calendar that maximizes throughput, and so, as has been repeatedly stated, we just need to find efficiencies, and we do envision establishing a process where the center communicates frequently with council staff to develop project schedules and insert them into the planning calendar at the first opportunity, without this strict need to be two years out, and a whole set of communications that everybody is on, you know, these deadlines that seem to be arbitrarily set, as opposed to what's more reasonable for what everybody needs to know, as far as data providers and which assessment folks are getting ready to do the assessments, or interims, for that matter.

One of the things that we wanted to highlight, and I think a few people have mentioned some improvements they've noted, but there have been improvements in our data provision. For instance, there's been some standardization and automation, which has streamlined the provision of things like commercial landings, recreational removals, both landings and discards, our length data, and our observer data.

Thank goodness this happened for something like recreational removals now, when we're dealing with all the different issues having to do with which recreational removals time series to use, but we have standardized working papers that explain the data in great detail. The commercial landings reports are streamlined, and so their scripts at this point.

There's been improved coordination and data scoping for our center-led operational assessments, meaning not OAs, but just everyday operational workload, and we've hired a SEDAR-like coordinator at the center, who has helped quite a bit, and so a lot of the data providers and assessment analysts aren't having to coordinate other folks. There's been increased communication with our data providers, including state data providers, or commissions, the analysts, stock assessment leads, and it's been very helpful to have that cross-divisional and extra-center communication.

There's been really good working papers documenting our data analyses, and those are routinely provided now, for the last four-ish years, at least, if not more, depending on which part of the Southeast we're talking about, but there is additional work needed to improve a few key data provision processes, and one of this is our age data, or age composition, construction, and then we're working through Gulf shrimp in SEDAR 87 now.

Now I'm sorry to hear what Ryan said, that the tool was disappointing, and I'm sure that I can imagine why. I do think it can be used better, but one of the things that at least -- I've seen it used better, but it needs to be something that is collaborative between the managers and the Science Center, and I wasn't there, and so I don't know what happened, but one of the things that was required, in that document, was that the Science Center conduct a gap analysis.

Without the gap analysis, and this is data gap analysis, it's hard to know how the species rank out and which type of assessment modeling you can even do, which is one of the requirements of that prioritization document, and so Shannon led the effort, with a lot of folks pitching in, to create this gap analysis.

Now, I could not find a nice way to show this to you, and it's a very large Excel spreadsheet, and I tried to pull apart the ones that we've had age-structured modeling in the past, or that we're continuing, on the left, and then on the right are some of the more -- Some of the lesser-known, or lesser-focused-on, or ones with fewer data, and so right at the top of the list, for our gap analysis, those are the three key species, red grouper, gag, and red snapper, that were identified by the council, and then it follows with things like triggerfish, gray snapper, vermilion snapper, king mackerel, and you can read the rest.

We've conducted, or are conducting, assessments for all of these, maybe except for tilefish, in ways that I think everybody would agree are the age-structured complex modeling. There are certain species that I think we need to pay more attention to, things like Spanish mackerel, cobia, king mackerel, and greater amberjack, and maybe we can do a coastal pelagic workshop in some way to describe the data better and explain maybe different, or better, approaches to assessing, or monitoring, those species. That was an idea that has been floated.

All of these are based on analysis of their catches, their abundance, their life history data, whether we have size or age data, and their ecosystem linkages, and those are all summed together to produce their relative ranking there on the right of the left-hand box.

On the right, we have, starting with snowy grouper down to Nassau grouper, the rankings, and so the same classifications for other species, and now ones that might jump out at you there are things like lane snapper, that we did an I-target method on, but there's other species in there that we think we could potentially address with a simple model that is similar to what has recently been done in the Caribbean, something just like with an index and catches, and so we do plan to put together individual data availability for each of the species that I'm showing you here, but I just wasn't able to do that in time for this meeting. We plan to present that in July. Are there any question about what I'm showing here?

CHAIRMAN NANCE: John Mareska.

MR. MARESKA: Katie, I guess this is an all-inclusive list for the Gulf, but I don't see yellowedge grouper. Remind me, and is that a Florida-led assessment, and is that why it's not on here?

DR. SIEGFRIED: No, and we just did yellowedge. I must have cut it off. Sorry about that. I can really quick find out what the number is for that, and I know that it was on the list. Let me see. Are there any other questions, while I really quick find that?

CHAIRMAN NANCE: Harry, please.

MR. BLANCHET: I am trying to understand the ranking, where you've got greater amberjack as a five and brown and white shrimp as a four, and cobia is three, and could you just explain it, please?

DR. SIEGFRIED: When this was done, we had -- So five is what types of catch information, and the ranking is relative. You know, the higher the number, the better, and so it was assumed here that greater amberjack had good catch information, but did not have great information tracking abundance, or life history information, or understanding what the ecosystem link was. We do have good size and age information for our catches, and so what that means, to me, and this was done before G-FISHER was completely onboard for amberjack, and so I anticipate the abundance would go up a bit, but, for the shrimp, we have SEAMAP, which is supposed to cover it quite well, and I think that's why those are ranked higher for abundance, but I can certainly -- Go ahead.

CHAIRMAN NANCE: I was just going to say, Harry, that the levels -- If you look at the next slide, it gives you what the dynamics are for what a five is, what a four is, and so forth. It's very much like our ABC Control Rule, in a way. It's subjective, but, anyway, that's why the fours and fives.

DR. SIEGFRIED: Yes, and yellowedge -- I must have omitted it, and I apologize it. Yellowedge was a fourteen, a sum of fourteen, and so near scamp.

CHAIRMAN NANCE: So yellowmouth and took out yellowedge.

DR. SIEGFRIED: Probably. I probably did something like that. Like I said, I was having a tough time figuring out how to picture this. I have a huge screen to my left that's full of all this information.

CHAIRMAN NANCE: I do think this is -- I mean, it's very much like our ABC Control Rule, but it gives us an ability to have input from these different levels into a stock and what classification it would be to bring it up to the list. Will, please.

DR. PATTERSON: Thank you, Jim. I read through the scoring criteria, and so I understand what's listed there, but, like Harry, I'm still confused how the scoring was evaluated. You know, for greater amberjack, you've got this big recreational component that has high CVs on those catch estimates, and so I don't understand why that particular species was given the highest score for catch and why something like, you know, snowy grouper, for example, that mostly is a commercial species, where there's an IFQ, why there would be less certainly, much lower certainty, on the catch there, than even something like red snapper or gag. I understand what the criteria are for, you know, one through five, based on the rubric, but I don't understand how -- The evaluation still confuses me.

DR. SIEGFRIED: Okay. Well, something that I can try to do, when we provide the individual information, is to be clear about how that was decided and regroup with Shannon to find out if we would maybe change some of our numbers at this point. I think she completed this a few years ago, and it was with the help of quite a few people, and so we maybe we need to go back and, as Ryan puts it, get all of our ducks lined up and be able to explain each individual species values.

I think it is useful for the relative left and right associations, right, as far as species that are regularly undergoing assessment, as opposed to those that are not, and so at least we get sort of a categorization, on the right, of species that we could potentially address with a simpler approach, but, yes, fair point.

DR. PATTERSON: Jim, can I respond to that, real quick?

CHAIRMAN NANCE: Yes. Go ahead, Will.

DR. PATTERSON: I think, if you look at the summed scores, and how these are ranked, you know, it does kind of line up for data-rich, data-moderate, data-poor. I mean, those all make sense, and it was just that catch number, in particular, that was confusing to me, but there's no real need to go back and re-address this, and I was just curious how that was done.

CHAIRMAN NANCE: Thank you, Will. Jason, please.

MR. ADRIANCE: Thank you, Mr. Chair. Will essentially asked my question, and I would be curious in seeing the rationale behind that catch ranking at some point. It had me a little confused as well. Thanks.

CHAIRMAN NANCE: Yes, and I think, if a different group did this, they would come up with a little different numbers, and so I think the key here is this tool is there, and it would be useful to go through, and we could -- You know, as long as we're comfortable with the numbers, and this is just -- This really is an example. Katie.

DR. SIEGFRIED: Thanks, Mr. Chair. We can go through these if we need to, and I wanted to provide them, and I figured there would be questions about, you know, how you would pick a four versus a five, but, if people are satisfied with the general groupings of the more data-poor at this point, I think that's more the point for this presentation, and we can move on.

CHAIRMAN NANCE: Yes, and I think this is pretty straightforward, as far as the criteria and how you get the different numbers.

DR. SIEGFRIED: Okay, and so what I did then is sort of, okay, we know the key species in red there, that are the first shot at key species, and those are in our data-rich to data-moderate on the left, and it's that gap analysis that I showed, and, also, on the top-right, in black, is our assessed species that were also on that gap analysis, the gray triggerfish, vermilion, yellowtail, mutton snapper, and then scamp and yellowmouth.

What we wanted to do was identify other species, which are in the blue, that were on the right column, or the right box, of the gap analysis, and then identify which of these are captured by something like G-FISHER, because that could help us know whether we could do a simple approach, like a surplus production model, or something like that, and all of those -- I just realized this isn't very color-blind appropriate, but all the blue on the bottom-right are something that is covered by G-FISHER, that we could consider doing a simpler modeling approach, and they're not on the schedule now, but that was one of the things that the letter asked for, is which species could we use a simpler approach on.

We tried to group it by key species, assessed species, but not identified as key, and then also species that we have indices for, and then the next step would be to identify other indices, and then which species are covered by those indices, that we could then fill in some of the gaps in what G-FISHER might not capture.

CHAIRMAN NANCE: Ryan.

MR. RINDONE: Katie, I would just point out that we have an assessment for hogfish, and we do not manage black sea bass, and tilefish is not on there.

DR. SIEGFRIED: Okay. I can go ahead and adjust that in my notes.

MR. RINDONE: FWC does hogfish.

DR. FROESCHKE: (Dr. Froeschke's comment is not audible on the recording.)

MR. RINDONE: Well, SEDAR 49 was the data-limited approaches, which explored the eight different species, to see which ones we could do something for, and then, ultimately, what came out of that was the management procedure for lane snapper, using the I-target method from the Data Limited Toolkit.

DR. SIEGFRIED: We think we can do more than just lane snapper that was explored during 49. The MSE work that was done during that assessment said that lane was the most appropriate for it, but, now that we have more years of data, there's others that were in 49 that we think we could apply simpler models to, but I will make the adjustment for black sea bass and hogfish. I should have recognized that.

MR. RINDONE: The South Atlantic side is creeping in there.

DR. SIEGFRIED: I pulled this in too because this is what G-FISHER covers, and so they do cover those, and so I assume that the commission asked for G-FISHER information and for hogfish -- That Florida asks for hogfish data, but, anyway, I can make that correction. Are John and Ryan finished with their comments?

CHAIRMAN NANCE: Yes, they are. The twins are done, and we will move on.

DR. SIEGFRIED: I could hear they were debating, and so okay. What requires additional discussion? Obviously, the next steps, but something that we haven't really addressed too much yet is the desired level of transparency and how to achieve it while ensuring desired throughput, which sounds so clear and easy, but it is something that we need to hopefully come to agreement about when we start each assessment. That way, we can time it appropriately, and, again, tease apart transparency, as opposed to participation, because we do have public comment, and we do have documentation, and SSC review, or at least presentations for everything, and so we want to make sure that the tradeoff is described, and understood, while we’re negotiating.

This was something we presented to the steering committee meeting, but, as defined in our scientific integrity policy, transparency is really important to NOAA, in that ensures that all relevant data and information used to inform a decision made, or an action taken, is visible, accessible, and consumable by affected or interested parties, to the extent allowable by law.

We do run up against issues with confidential data, which we are trying to be as creative as possible in providing code that has confidential to folks, by giving them NDAs and the like, and then transparency, traceability, and integrity at all levels are required for NOAA to achieve its strategic mission of, you know, the thing that you all have heard, healthy ecosystems, communities, and economies that are resilient in the face of change.

If it’s not transparent, it’s not as good of a product, if it’s not reviewed by the SSC, or made available to the public, and everyone knows what we did, and so it’s very important to us, and we have realized, internally as well, even just doing assessments, if we don’t know what the last person did, it’s just incredibly difficult to proceed, and so that’s something that, I know with my team, we’ve really worked at getting things like GitHub pages up for each, and the thing that I state to a lot of folks, and I have to remember this for myself, is just think about it as though you're not doing it the next time. That way, anybody could come in and see what you did and pick up the ball and run with it, and so these are really important core values of our organization, and, personally, I'm doing this quite a bit with my team.

Then, again, discuss the transparency is different from participation I think is important, with public involvement in our process, because I don't -- I don't want to styme people's participation, but, at some points, it is difficult to proceed with a scientific project when other things come into play, right, which usually SEDAR is very good at helping us out with, and setting aside time for public comment, and the council appoints, you know, qualified folks to help us with our work, and so I think that this is just something we probably want to discuss more.

The next steps that we identified were to receive feedback on our initial recommendations from the council, and so they gave us their key stocks, and we've had meetings with them to discuss all of this, and we've heard their concerns, and their priorities and objectives, and we talked to the SEDAR Steering Committee, and these are grayed-out because we've already started these, or done these, and then the SSC, and so that's why I'm presenting this to you now.

We want to identify our assessment priorities internally, and in conjunction with our cooperators. That way, our age and growth providers can begin the work for those 2026 assessments. They do require quite a bit of notice ahead of time, because of how long it takes to get all of those data together, collated, subsampled, if necessary, read, and then interpreted.

We want to continue conversations with council staff, to establish and describe this process, and it is not going to be successful if it's not in cooperation, if we just dictate the process, and that's happened in the past, and it did not go well, which is, I think, part of why SEDAR was established in the first place. The center will also continue to work to identify the appropriate assessment complexity for species with more data gaps, and then we want to develop project schedules for stocks to be assessed beginning in 2026 with this new vision.

Like Carrie stated, we had things like triggerfish on the books beforehand, and we're not planning to change anything like that. We want to implement this new assessment process and procedures in 2026.

Then I wanted to talk a little bit about stock assessment model complexity, and this actually I saw was presented in 2018 as well, and I guess it doesn't hurt to keep talking about it, as the composition of the SSC changes, and, you know, I'm the supervisor of the group that you all -- Whose work you review at this point, but the stock assessment model complexity is something other than just whether you use SS or BAM, or something like that, or you use the Data Limited Toolbox.

I wanted to show this source, which lists all of the different types of assessments, and, if you want to do some light reading, you can go in there and see what types of data are required more explicitly. In general, across NOAA, we use a variety of models to conduct our stock assessments, in a variety of model platforms. When we conduct our assessments, we try to identify and develop appropriate models, based upon the available data. However, there is quite a bit of momentum to maintain the complexity that was done last time. Sometimes it's even in the TORs to use what was done last time, and so we do need to be more aware of that momentum, or inertia, if you look at it from a glass-half-full point of view.

Those models fit into one of six general categories, based upon our data requirements and products, and this is a webpage for assessments across the country, and they're really down to index-based models, data-limited models, aggregate biomass dynamic models, virtual population dynamics, statistical catch-at-length, and statistical catch-at-age. There are all live links, and they should be in your presentation. If not, let me know, and I will send you one.

I am trying to go a little bit faster, so I can complete this and we can have conversation, so we don't run over time, but the index-based approaches are covered on this slide, in that the typical data requirements are just one or more indices of stock size, relative abundance, and the resources required are it's a minimal lift to do an index-based approach. There would be a benefit from MSE evaluation, to ensure management objectives are met with sufficient probability.

We are trying to do some of that work now, even though we've been using something like an interim assessment without that work, for every single species, but it will benefit from the MSE, the desk MSE, evaluation. This is most often used in between comprehensive stock assessments, and it just uses index trends to update management advice. We can update status, as we've discussed at a previous -- Sorry. The OFL. Not status, as we've discussed before, but, typically, we just update ABC.

Some index-based methods evaluate the current index value against a critical threshold, and so, if the stock index falls below the threshold, it triggers management action, such as reduction in catch, and some of them it's utilized when it's an increase in the allowable catch.

We cannot provide estimates of MSST or determine whether a stock is overfished, and so definitely no status updates, and we cannot evaluate the risk associated with many harvest options. Examples are AIM, I-target, I-slope, anything from the Data Limited Toolbox, and then our interim assessment approach.

Our data-limited models typically require total catch of a stock over time, or a survey-based index of total stock abundance, and it's still minimally time intensive, and it does benefit from an MSE evaluation, and this is like SEDAR 49. It requires that in order to ensure that management objectives are met with sufficient probability as well.

DLMs typically provide management advice in relative terms, whether harvest levels should increase or decrease compared to previous years, and it cannot provide estimates of MSST or determine whether a stock is overfished. It cannot evaluate the risk associated with many harvest options, size limits and allocations, for example, and examples, particularly on the west coast, are DBSRA and DCAC, and they're pretty common, and MLE.

Our aggregate biomass dynamic models, we often call them surplus production models, or just biomass dynamic models, and they require total catch over time and an abundance index for the stock, and they perform because when the input data have high levels of contrast, and so, when we have data that goes back far enough that we saw a stock that was not fished down, and then we see a period where it's fished down, and then we see some sort of recovery, and that is -- Those are best suited for -- Sorry. A surplus production model is best suited for those types of species or stock histories.

It does not take a ton of time to execute, and these represent sort of our simplest full stock assessment method that is able to provide all of the management advice that is typically requested. It can provide estimates of stock status, and that is relative to management references, and it can provide current stock size, harvest rates, and the like. It cannot, however, evaluate the risk associated with some harvest options, like size limits or allocations, and there is no selectivities involved, and there's not even a natural mortality included, or any kind of time-varying anything having to do with life history or regulations. Examples are ASPIC, which is just Mike Prager's way of making everybody laugh, even after retirement, BSP, and JABBA.

It's just true that more complex models are the norm. Sometimes they're seen as better because of results, and sometimes they're seen as better because there is more information. However, it is likely that some assessments are currently conducted with more complexity in them, and Doug read ahead, and so this is where we're getting to what Doug was talking about yesterday, but with more complexity than is supported by the available data or that the resources needed to support their complexity is unwarranted, given their priority or importance.

I think the latter is a little harder, because, once a species has been requested, and once the data collection process is all underway, those sorts of data collection programs are very difficult to change, or influence, based on how much the fishery is worth, especially when we have a multispecies fishery in our region. In other cases, increased complexity may be warranted, but the tradeoffs may be required to go in that direction.

Complex models will not be replaced simply to have a simpler model, and it should be based on a data-based decision, right, and it should be important to look at which data are available and what model type is best suited to fit those data, and so the species that are not identified as key stocks -- We do want to find ways to right-size those stock assessments, based on data availability.

CHAIRMAN NANCE: That's the last slide, Katie.

DR. SIEGFRIED: Okay. Great. So I didn't say thank you, and that was really rude, and I'm sorry, and usually people put thank you slides at the end, but thank you for listening.

CHAIRMAN NANCE: Just from my perspective, I greatly appreciate this presentation. I think it gives us, from an SSC perspective, things we need to think about, and we've talked about -- You know, you gave the four recommended changes, elimination of the research track, elimination of the nomenclature and the slot concept, identify key stocks and how to prioritize them, and then remaining stock that could be assessed with less time, and so I think all of those are very good, and, from an SSC perspective, we want to be able to discuss those and give input back to the center. John, please.

DR. FROESCHKE: Katie, I have a comment, or I guess a question and then a comment, but, on that last bullet, it says complex models will not be replaced just to simplify, but I don't think that fully captures the discussion. I agree with that, but there's more to it, in that the simpler models -- We also talked about they could have a much faster refresh rate, and, if there was just resource

-- The simpler models could occupy far fewer resources then, if they don't have to require the ageing and all that other stuff, and so I think it's more than just what all the data are, and, I mean, that's what this whole process that -- The council needs to determine what are the resources and how much it wants to apply to each one. I don't know if there's some way to better flesh out what actually the factors are to be weighed-out when determining which stock gets which assessment.

Then the comment, I guess, or the follow-up, is I was hoping, at the end of this, we would get a list of species that would fit each one, and is that coming, or is that something that needs to be done later?

DR. SIEGFRIED: I think that it's certainly something that we could come up with after this discussion. The farthest that I got was what you saw in the gap analysis, where I sort of put together the more data-rich and the ones that were more data-poor, but the real action is going to happen sort of between, right, and we're going to have to see if there are ways to simplify any of the species that we want regular management advice about, and that will be a data-based decision, but part of the data is all of the stuff that we've been asking you about, you know, all of the -- Knowing what your objectives are, knowing your priorities, and it's really important, and that's part of our data.

I should have said that a little bit differently here, but part of it just, you know, catch and abundance and those types of things, but also evaluating the tradeoffs between the throughput and the transparency that we identified in the objectives, and so it definitely needs to be reworded to, you know, capture what you just stated.

MR. RINDONE: Thank you, Katie. Josh.

DR. KILBORN: Thank you. I think you pretty much just addressed what I was going to talk about, and I think that it is important that we, you know, make sure that we're not just doing a complicated assessment because we can, right, and, if we have a species that's doing really well, and it just needs some regular check-ins, and we happen to have a lot of data, and, you know, we can still use a simplified model, as long as it's, you know, informative and gets the job done.

Although I will kind of add on the point that I don't think that that part of the conversation is divorced from the, you know, which species are key species conversation, and how do we actually identify a key species, and, you know, how frequently do we update that list of key species, and I think all of those things are tied together, right, and so that -- I just wanted to make sure that we keep an eye on that, moving forward. Thank you. Great presentation, by the way. I really liked this stuff.

DR. SIEGFRIED: Thanks.

MR. RINDONE: Thanks, Josh. Luiz.

DR. BARBIERI: Thank you, Ryan. Katie, thank you, and, yes, this presentation is just great, really, and I think that, you know, giving you the time to have the discussion of these issues more in-depth has been very helpful, and I really appreciate a lot of the SSC members engaging in this conversation along the way, providing feedback, trying to understand it better, and, you know, so not much more that I need to add here, other than, you know, perhaps to kind of raise the issue again, right, of SSC involvement in this process.

That's one issue that I think we need to be attentive to. I mean, all of us have day jobs that basically prevent us from being SSC members full-time, unless they are retired, but most of us who aren't don't have that flexibility in schedules, right, to be attending that many SEDAR workshops and participating as closely, but, whenever possible, I think this is something that we need to up our game, on our end, and Dr. Simmons touched on this yesterday, and I'm sure we're going to have this conversation in more detail going forward, and I think this is important.

Another thing that I think we need to think about, and, again, not to start a long-winded discussion today, but think about, for future discussion, right, by the committee, is our tendency sometimes is to -- We're not ones to compromise on more complex analysis. I think that, at times, for us, as SSC members, we get caught in that trap of saying, okay, if we're going to declare something, right, as consistent with the best scientific information available, and therefore make it suitable for providing management advice, our obligation to the council is to go as deep --

To do as deep of a dive as we can into this assessment, or this analysis, that's been done, so that we try and remove all the sense of uncertainty, right, and so this is understandable, and it might even happen at the unconscious level, but I don't think we can implement a plan like this, and create the throughput, right, that we need to create for this key stocks, and, by the way, I like, in the few slides previous, when you talk about the key stocks, and that's not a static list, and you made that very clear, right, that those are going to be -- This list is going to be refreshed, perhaps every couple of years, two or three years, so the council, with input from the SSC, hopefully, will have the opportunity to participate in this process and advice, right, on which stocks should be identified as key stocks.

You know, for us to do that, and have that bandwidth -- You know, have the Science Center have that bandwidth, we're going to have to accept some more simplistic analysis right now, because I feel that, over the years, right, working on these issues, and seeing assessments from the Southeast U.S., where a lot of them are spending a lot of time trying to fix holes that are very difficult to fix.

By the time that the assessment has been completed, after all this major lift that we have to go through, we get to the SSC, and the SSC is unhappy with some of the decisions made, and they feel like, well, you know, I'm not sure that I can call this BSIA, right, because of this or that little detail.

Using the term they use, which I like, is right-sizing the stock assessment and creating that better alignment of using the assessment method that best aligns with data availability, and I think it's the best way forward. I know the SSC understands this conceptually, but I just want to put this out there explicitly, because I do feel that all of us have a tendency to want, you know, to go to the highest level of analytical detail and complexity, and it's with all the best of intentions, but, with that, we are creating problems that are difficult to get resolved when we are not allowing this then to be performed, and so thank you for the presentation, and I don't have a question, but I just wanted to have this little time on the soapbox to make that comment, and so thank you.

DR. SIEGFRIED: To that point, Chair?

CHAIRMAN NANCE: Yes, please.

DR. SIEGFRIED: Thank you, and so I did have notes about the more involvement from the SSC that I wanted to bring up, after Carrie and Luiz had mentioned it, because I did talk about this at the steering committee meeting. I think that will help quite a bit with keeping the assessments reasonable and preparing the SSC for what they're going to see.

I think sometimes, and not necessarily in the Gulf, again, and we have a Southeast focus, and so all of the SSCs in the Southeast, and, if things are kind of sprung on the SSC, or if they're --

It's not a socialization, and it's prep. We're preparing them for what they're going to see, and getting any red flags taken care of earlier in the process, and that inevitably leads to a better product, and a smoother review later on, and so I very much agree with having more SSC involvement.

Now, I understand that could potentially be seen as a drain on SSC members, maybe, and I don't want them to not want to participate because it's an extra thing for them to do, and so what I was thinking, for the more SSC involvement, is, in addition to them coming to the meetings that they already volunteer to come to, providing a brief presentation, an update to the SSC at the next meeting after whatever workshop they went to, that just -- It's not a re-litigation of the decisions, but rather it would be just a check-in about the progress of that assessment, making sure that the TORs are being met along the way, getting feedback from the SSC as a whole, so that they can bring that back to the process that they're already part of, and so I'm hoping it's not too much more work, but it just will make things a lot easier in the long run. Thanks.

CHAIRMAN NANCE: Thank you, Katie, and I think we talked a little bit about this yesterday, that, when SSC members are involved in a data workshop, or an assessment workshop, that they come back, that next SSC meeting, and report, a simplistic report, and not a detailed report, but a report on the actions that were taken at that data workshop, or the assessment workshop, so that the SSC as a whole is informed about what's going on, so we're not caught off-guard at the end.

DR. SIEGFRIED: Yes.

CHAIRMAN NANCE: Perfect. Jim Tolan, please.

DR. TOLAN: Thank you, Mr. Chairman, and thank you, Katie, for a really nice presentation. It lays out a nice map of how we get the car out of the ditch that we, as a body, collectively find ourselves in when it comes to the assessments, and I will be the first person to say, if we can do it in a simpler fashion, all the better, but the flip side of that coin, for me at least, is I left SEDAR 49 with the feeling that, under the umbrella of the existing ABC control rule, the management advice that was coming out of the data-limited model side was -- I was trying to come up with a really good way to say this, but it was, at best, squishy.

It goes back to a conversation we had yesterday about the public trust side of things, and I just --= These complex models are great, and they may or may not provide any more information for management advice than some of the more simpler models, but I just want to make sure that whatever we settle on -- There's going to be a lot of species that fall under the simpler methods, that at least I can see, but I just -- Again, it goes back to the public trust side of things.

From the workload side of things, if you guys can do it quickly, and better, and come up with good management advice that we can take to the council, I am certainly all for that, and, again, it's not a direct question to you, but just more of a statement, but, when I left SEDAR 49, it was, again, squishy, in terms of the management advice, just on the ABC side, but thank you. From my soapbox, too. Thank you.

CHAIRMAN NANCE: Thank you, Jim. Dave Chagaris, please.

DR. CHAGARIS: Thank you, and thanks, Katie, for a really good presentation. You really covered a lot of ground there, I mean, everything from, you know, data to personnel to model complexity, and I think that probably most of us on the SSC agree, and we're all in agreement with, you know, the issues, and the challenges, and we probably mostly agree with the potential solutions that you proposed.

Just on the issue of the model complexity, I'm not 100 percent convinced that, you know, going to simpler models is going to save us a whole lot of time. I feel like most of the time sink is on the data side, the data procurement. I mean, at the end of the day, it's really just input and output, and so, I mean, what you need is consistency in the models, and then you can develop your data structures to feed into that and be able to turn the crank a little bit easier.

I don't think we have that right now, and I feel like, each assessment, we figure out which indices we're going to include, and we go through the whole process over and over, and so, you know, it's not so much simplifying the models, but trying to simplify the process of the stock assessment.

Then, you know, the question I have is, you know, this is all great, and it all sounds good, and, you know, we've heard some of this before, you know, going back, you know, five, or maybe even ten years now, and so I'm wondering, and do you guys have like a tractable timeline for when some of these changes might be implemented, and like we have made good progress, and can we point to any, you know, success, and progress, already? You know, how will we know when we've arrived, you know, at this new, more efficient layout?

Then, lastly, how can we help, as an SSC? I mean, I think we've had some committees, in the past, and things like that, but, you know, helping to develop a timeline, and expectations, for when we can see this, and be looking forward to it, I think would be really helpful, and I think, whatever we can do to help, we should. Thank you.

DR. SIEGFRIED: Thanks for those questions, Dave, and so I do try to harp on simplifying models, or process, as much as the simpler models, right, and we've talked to council staff, and they're swamped too, and so giving them just more and more information, with a whole bunch of simpler models, I haven't heard, you know, them cheer, like that's the best idea ever, because it's so much more work for them to make a bunch more modifications, or regulations, due to, you know, if we pump out ten surplus production models for species on the right side of that one slide, right, and so I don't think the simpler models are necessarily the thing that I'm trying to push the most.

That does seem to get highlighted a lot, but simplifying the process is really important too, and, you know, we heard about only requiring the right number of webinars, and, you know, right-sizing the process is just as important as right-sizing the model used for the available data, and there's just certain things that are expected right now that I think could be streamlined a little bit more, whether we need a review for something, whether we need a full data workshop.

I mean, I really like the fact that, for 74, we're not having a couple of the standard groups, and we're going to try to streamline that, rather than have the full monte there, and so I think that, you know, baby step by baby step, we can simplify the process, with these pieces and parts, and then we'll get to a point where we're able to proceed through an assessment where we don't have to have eight webinars, and maybe we can have four, and that will cut the process by four months there, right, and so I'm hoping that that will get through.

I think the way the SSC can help is by recognizing when we produce best practices, and accepting the best practices, and I said this quite strongly at the steering committee meeting, but not wanting to re-litigate things that are best practices, and I know we're all curious scientists, and we all want to debate, or argue, the point again and again, but, if we want to be more tactical, if we want to be more timely, and we want to provide the stuff that the council needs, and that all of the stakeholders are asking for, we need to accept what those best practices are, and not re-litigate decisions so often.

I've seen that happen quite a bit recently in our SSC, and I know that other SSCs sometimes want way more than is asked for in the TORs, and others feel very limited by the TORs, and so I'm trying to set up an expectation, with this SSC, of what -- You know, what the process could look like, what you all are willing to accept as a best practice, and making sure that you understand that, you know, we're going through this process, and what our ultimate goal is, because we're not making changes for changes sake, and we're really just trying to create efficiencies. I think I covered everything that you mentioned.

CHAIRMAN NANCE: Katie, I think your phrase that is the best for me is "the right process". I think that's the goal, is, for each species, we use the right process for its assessment, and I think that's the key. Was there any -- I don't see any other hands, and, Katie, was there anything that you felt like you wanted to hear, that wasn't brought up or anything?

DR. SIEGFRIED: I think that -- No, I'm not waiting for any other feedback at this point, and just a couple of other things that I wanted to mention.

CHAIRMAN NANCE: Please do.

DR. SIEGFRIED: I suppose one thing to ask about is the prioritization, or the key stock descriptions, or whatever, if that's something that the SSC wants to discuss more, and I can work with council staff about -- You know, about what types of additional information to provide, and you just have to let me know what you want to talk about.

CHAIRMAN NANCE: I think, from my perspective, what I was thinking of is maybe spend a little time, Ryan, and this is just me talking, and so Ryan may --

MR. RINDONE: Veto.

CHAIRMAN NANCE: May veto, but anyway, to us, to come up with we feel are key stocks, and why we feel they are, and then present that to the council, just so that they have -- We've seen what the council has, and I think it would be good if we, as an SSC, provided the council with what we considered a key stock and why we consider it a key stock. Carrie.

EXECUTIVE DIRECTOR SIMMONS: Thank you, Mr. Chair. I mean, I think that's a useful exercise after we have a better understanding of this whole shebang, so to speak, this whole reimagining, because it's still not clear to me, and I think we'll learn more in May, at the next steering committee, but we've now identified our key stocks, and that's what we were requested. We were almost holding up the center, was my understanding, until we got these key stocks to them, and so that was of utmost importance, and it's clear that the SSC felt they were not included in that, and so that doesn't mean, in the future, you know, we can't do a better job of that, but that was my understanding, is this is something that we need post-haste, and so we did that.

Now I'm not sure, Katie, we've still got a full understanding of the other letter that was provided, which is this more data-poor process, and how that's going to be integrated into this whole re-envisioning with the key stocks, and I think we need to kind of have a better understanding of that and then go back into these nitty-gritty details, because, right now, that's not really clear to me, and I think we need to have a better understanding of that. I mean, I would really like us to start there, and then go into these other details.

I just also wanted to mention that, in July, we did have a plan, from that letter, on our key stocks, for you all to spend quite a bit of time going through the discussion of that process, and, as part of that, to review some of the key stocks as well, and so it is on the agenda, but I think we just don't have a clear connection right now of how these things are going to all work with this reimagined process.

CHAIRMAN NANCE: Carrie, I think that -- I appreciate that clarity, and so I think what we want to do is be able to provide scientific guidance during the process, and, as that becomes clear, on how we can do that, I think we certainly are willing to do that.

DR. SIEGFRIED: To those points, Mr. Chair?

CHAIRMAN NANCE: Yes, Katie. Please. Yes.

DR. SIEGFRIED: I very much understand that, and it's strange for me to operate on sort of a -- It feels a little bit flying by the seat of my pants, from time to time, where we don't have a final vision yet, and so I understand what you were mentioning there, Carrie.

One thing that I forgot to ask, that David asked for, is a timeline, and I think that's part of the push that the council staff felt in getting the key stocks, right, and we're already in May of 2024. If we want to start making these changes in 2026, and, I mean, this is already pretty close for us, right, and we needed to get those species identified for our ageing folks, and so the pressure was from that.

I think that the other thing that we have yet to discuss with the SSC is anything that we wanted to do outside of SEDAR, which we have not -- We have not identified and agreed upon those with council staff yet, and I think that will happen after the July meeting, where we go over not only key stocks, but these other species and what we would propose to do with those. Is that -- I can't see whether Carrie is nodding or not, but I hope that that's in line with what they're thinking.

CHAIRMAN NANCE: She's tapping her pencil.

EXECUTIVE DIRECTOR SIMMONS: Well, Katie, why wouldn't you present that in July, to the SSC, I guess is my question, and maybe I missed that. Thanks.

DR. SIEGFRIED: What we would present is the species-by-species recommendations of what we could do with the data available, and then we could discuss, with the SSC, which of those they would be comfortable reviewing, which would inform our decisions about what to do extra-SEDAR, as opposed to within SEDAR, and so we do plan to present the data availability and recommended model types in July, and then have that conversation with the SSC, and is that in line with what you're thinking?

EXECUTIVE DIRECTOR SIMMONS: Yes. I think that would be great, and then how it all fits into streamlining and efficiencies and real-time data, and all those considerations, from the management side of the house.

DR. SIEGFRIED: Yes, and we feel the urgency too, and, I mean, that's part of why I'm -- You know, a lot of my time is spent doing this stuff right now too, because we are hoping to start all of these changes in 2026. We realize it can't be just a flip-the-switch, and there will be species that started in 2025 that will continue into 2026, as the standard way that they're operating, but that's the goal, is to try to make these changes in 2026. It's not that far away. It feels like it, but it's really not.

CHAIRMAN NANCE: Thank you, Katie. Will, please.

DR. PATTERSON: Thanks, Jim. I just have a couple of things to add here. Circling back to the prioritization of the five key species, I think -- Maybe it was Josh, earlier, that was talking about what he thought was the most important statement in that paragraph that indicated what the species were, and, to me, the most important statement is to be assessed at least every three years.

Again, I don't understand how -- You know, I can understand how amberjack is important, because of the current project to estimate abundance, and there should be lot of attention paid to integrating those results into the assessment, and utilizing those results, you know, as much as they can be, but I don't understand why that would elevate amberjack to every three years as a key species, and I'm sorry to bring that up again, because it's not just important for in the near-term, and that's stating that these are going to be assessed more frequently than any other stocks outside of that group.

The second thing is I really like this idea of having -- Of letting the data kind of guide how complex the models to be utilized might be, and, you know, we've had experience with amberjack, for example, where surplus production models didn't give a satisfactory result, nor did bumping that up to a more complex integrated assessment model, and I don't know how you figure that out without actually trying to do some of the more complex models and then figuring that the data just don't support them.

Maybe, by now, we have a clearer idea of, you know, the stocks in the Gulf, which are more or less amenable to that more rigorous approach, but, as far as -- You know, the last thing that Katie mentioned here, about having some stocks, maybe, or assessments, that don't go through the SEDAR process, and, you know, there are a few people on the SSC, Luiz and Roy and Harry and Doug, and maybe some others that I'm forgetting, that, you know, remember all the way back to the stock assessment panel days, when we had a reef fish stock assessment panel, and we had a mackerel stock assessment panel, and I guess there were a couple others.

You know, king mackerel got assessed every couple of years, and Spanish mackerel every couple of years, and red snapper it seemed like, you know, Phil Goodyear was running a model every year on that species, and so, you know, maybe that can be an approach that is revisited, instead of a hybrid approach, where you have some stocks that just go through, you know, a similar type of process that's not a full, wide-open transparency, and the slow pace of SEDAR, but, once you have some automated, you know, data pipelines, and you can compute those assessments and put them together much more expediently.

Then, if you do -- If the SSC reviews an assessment and goes, you know what, there's something that's not quite right here, and we're not quite sure about this, then maybe that then gets bumped up to the next level, and it goes back into a SEDAR process, because, you know, something is unsatisfactory, because, at the current stage, so much is unsatisfactory, because, you know, we have some pretty high-profile stocks that haven't been assessed in the lifespan of the age classes that are being fished today, right, and there hasn't been assessments since well before those animals were even alive.

I think that might be an approach that helps to get more throughput into the system, is if you have, you know, different levels of this, and I like this idea that -- You know, Katie's question about does everything need to go through SEDAR, and my answer to that would be, no, it doesn't.

CHAIRMAN NANCE: Thank you, Will. Ryan, to that one point, please?

MR. RINDONE: Thanks, Mr. Chair. Regarding greater amberjack, greater amberjack -- You know, like you mentioned, Will, we kind of progressed from the age production model all the way through a few iterations of Stock Synthesis, and all of those basically found the stock to be overfished or undergoing overfishing in progressively worse conditions, and so, you know, greater amberjack is one of our two overfished stocks at this point, along with gag, which certainly makes it a high priority for the council, since it's under a rebuilding plan and the council has legal obligations for recommendations to NMFS to rebuild it.

Regarding the idea of some extra-SEDAR assessment work, I mean, I think that's something that we're encouraged by from this proposal, as being a possibility for a number of different species, and, also, not just the species that were in the right-hand column, but that there might be the opportunity to use index-based approaches for at least updating catch advice for species that were in the left-hand column of the gap analysis, you know, some of our more data-rich species, to increase the resolution with which we're able to modify catch advice and keep tabs on the relationship between landings and say a representative index of abundance.

DR. SIEGFRIED: To that point, Mr. Chair?

CHAIRMAN NANCE: Yes, please, Katie.

DR. SIEGFRIED: To just go a little further to address what Will was saying, it is -- It was the intention to understand which key stocks and what interval for catch advice, and not necessarily to do the full assessment every three years, and, obviously, the tradeoff is there. The more key species there are, the less frequent there will be catch advice, and not just an assessment, and so we do want to make sure that they're species that we can provide a reasonable interim, or index-based, approach in between full-blown assessments.

The extra-SEDAR work that we've discussed, especially when we talked about it with the South Atlantic Council, it's very important that the SSC clearly state that they are okay reviewing those without a SEDAR process, right, and it's not the full age-structured approach, but there's all kind of questions that still need to be brought up during an SSC review, and, you know, is it important that we model time-varying selectivity? Do we think there is time-varying natural mortality? Things that we can't accommodate in something like a biomass dynamic model, and so that was something that we, you know, explicitly need the SSC to state that they're comfortable reviewing.

Then there's also -- You know, there's a -- We don't want to say that things should just pulled out of SEDAR if SEDAR takes too much time, and it should just be a differentiation between throughput and transparency, and sort of that's what we were doing with pulling things outside of SEDAR, and a number of folks who were familiar with those panels that you mentioned, Will, brought those up again, and said, well, maybe this is a good approach for some of the ones that remain outside of SEDAR that we don't need a full-blown SEDAR assessment for, and so it's interesting that you brought that up as well. Thanks.

CHAIRMAN NANCE: Thank you. Thanks for those comments, Will.

DR. PATTERSON: Jim, can I follow-up to that, real quick?

CHAIRMAN NANCE: Yes, but you've got to remember that you forgot the shrimp SSC, or the shrimp assessment group.

DR. PATTERSON: Yes, I know, and I said there were others that I was forgetting, but I just couldn't remember, but, obviously, shrimp is really important, and as important to you as anyone.

CHAIRMAN NANCE: Go ahead, Will.

DR. PATTERSON: Katie -- Well, now, going back and forth with Jim, I actually forgot what I was going to say, and so, if it comes back to me, I will --

CHAIRMAN NANCE: I'm sorry. If you remember -- If you think about it, Will, please raise your hand again, but, Katie, I wanted to say, again, thanks. We appreciate this discussion.

DR. SIEGFRIED: Sure.

CHAIRMAN NANCE: We'll go ahead and move on to our last item, Item Number XI --

DR. PATTERSON: Jim, I just remembered, real quick.

CHAIRMAN NANCE: Okay. Go ahead, Will.

DR. PATTERSON: Sorry. Katie, you know, I guess the -- It's not just a question, to me, about throughput versus transparency, and it's also, you know, transparency and going through a full SEDAR assessment, versus getting an assessment done and having estimates, you know, the biological reference points and current stock status relative to those, and so, if the question is, well, we need to do everything through SEDAR, and we can streamline the process, but we're still not going to be able to assess some stocks but maybe once a decade, then I think the better choice is to have some assessments that are done not as fully transparent as SEDAR is, but, you know, getting the assessments actually performed.

MR. RINDONE: Will, I'm assuming you mean fully participatory, since Katie was trying to stress the differentiation between transparency and participation.

CHAIRMAN NANCE: Okay. We'll take one more question. Harry.

MR. BLANCHET: At one point, I thought I heard something that sounded like Katie was asking for a motion, or a comment, or a response, from the SSC about the SSC's willingness to take a different type of role in this review process, and I think we haven't done that yet. I don't have one drafted out, but --

CHAIRMAN NANCE: I didn't hear that from Katie. If you feel inclined to offer something, but I don't feel like -- I think we've discussed this, and I think the discussions is what we'll present to the council on this topic, and I'm not sure that a motion is needed for that.

MR. BLANCHET: As long as the -- We saw no reticence in accepting that kind of a responsibility.

CHAIRMAN NANCE: Harry, I'm not following that. I'm sorry.

MR. BLANCHET: Essentially, in the presentations, and in the questions, and all of that discussion, I did not hear any reticence, from any of the SSC members, in taking on a more responsible role for review in this process. That was essentially what I was hearing from her, was that we might be looking at additional roles, and were we okay with that, and I did not hear any members say that we were not.

CHAIRMAN NANCE: Yes, I didn't either. Ryan.

MR. RINDONE: I think, ultimately, Harry, what it was coming down to is that, if we start doing more extra-SEDAR analyses, that there might be more things that ultimately come before the SSC to review, and not that the SSC's responsibility for reviews would change, but just that the SSC might have more material to review than is currently being produced at the current pace, but, right now, we're looking at, you know, a few assessments a year, and the occasional interim analysis, but, depending on how this evolves, it could be, you know, a couple of assessments a year, and, you know, maybe three to five other sorts of analyses, just depending on how everything ultimately shakes out, and so the SSC's role of being the end-of-line review body, before catch recommendations go to the council, would remain unchanged.

MR. BLANCHET: To the point that someone made regarding the old assessment panels, that was not necessarily comprised entirely of SSC members, but that was comprised of both SSC members and other people with assessment skills, and that was different, and, if we're going to have that as a part of the SSC member possible portfolio, then that's something that we're not currently doing, but, again, I don't see an issue with it.

CHAIRMAN NANCE: Okay. Thank you. I appreciate those comments, Harry. Let's go to Item Number XI, and, Carrie, are you going to present that? Carrie is going to discuss the overview of the SSC reorganization and application process, and so it will be Carrie's slide presentation.

OVERVIEW OF SSC REORGANIZATION AND APPLICATION PROCESS FOR JUNE 2024-2027

EXECUTIVE DIRECTOR SIMMONS: All right. Thank you, Mr. Chair, and so I can't believe it's that time again already, and it's time for the appointment process, and three years are up already, and so I just wanted to brief the SSC, the standing and special SSCs, on some changes that the council has made to the organization, and we also have a draft of the application as well that we're going to walk through for the next three-year term.

Just to provide everybody some background, again, in 2021 to 2024, in June, or May for you guys for this meeting, the council pretty consistently convened the Standing SSC, which was fifteen members, plus these three special SSCs, and that was the Ecosystem, the Reef Fish, and the Socioeconomic Special SSCs, and that was a total of twenty-four members.

I started thinking about, you know, if we're going to move towards a more interdisciplinary approach, which it seems like we are, the way we're convening them, should we consider modifying our SOPPs and really fully integrate that into our process more clearly, and so we also, during those times, convened the Special Coral, Shrimp, and Red Drum, as needed, and the council didn't populate the Special Mackerel or Spiny Lobster SSC in 2021.

I did spend some time talking to a couple of SSC members, before I took this to the council in January, and I think I got some good feedback. The council landed on reorganizing, just slightly, but not really, if you think about what we've done historically, just changing the way that the Standing SSC is set up and more fully integrating the reef fish, ecosystem, and the social and economic disciplines into the Standing SSC.

The expertise we have in our SOPPs is stock assessment or quantitative biologists/ecologists, and we're trying to look for at least eight members of that, up to four economists, up to four anthropologists or social scientists, and five other scientists, and those could be oceanographers, you know, habitat, geosciences type of specialties, perhaps, but five other scientists, and so that leaves us some wiggle room there, and that total Standing SSC would be twenty-one members.

Then we would still keep our special SSCs, and hopefully populate all of those, with not exceeding three members for the Coral, the Shrimp, the Red Drum, Mackerel, and Spiny Lobster. Those would be convened as needed with the Standing SSC.

The council adopted those changes, but that also triggered some changes to our Ecosystem Technical Committee as well, because we were collapsing the Ecosystem SSC into the Standing SSC, and so that means we had to change our terminology here, and so, for the membership of the three staff, I will just say that we're going to include five members from the economic, social, or biological expertise from the SSC into the technical committee, and so you still have the same number of SSC members participating in this technical committee, but it just doesn't presuppose those three Ecosystem members just automatically get appointed to that committee. After the council does the reappointment, we'll be reaching out to folks, to see who is interested in serving on this Ecosystem Technical Committee as well.

I know many of you know this, but I feel like we've gotten a lot of feedback, particularly during the March steering committee, and we're going to aim to do a better job, after the council repopulates the SSC in June. At our first meeting in July, we've changed it to in-person, and we're going to have some orientation presentations given to this body, as well as some more information on how the center and SEDAR sees the role, as well as the council, of the SSC, and so this is just a high-level kind of overview, just to remind you all that, you know, you are advisors to the council, and there's quite a bit of information on what your role is, very specifically, in our SOPPs, and there's a link there that you can read more on, if you're interested.

It also includes the BSIA framework for the Southeast region, and we're also planning to go through some of that in more detail in July as well with the SSC.

You will recall that the SSC has three-year term limits, and so we've had a couple of folks that maybe haven't been as involved in the process, that want to know more information, and so if -- You know, what kind of commitment is this, and so we typically have Standing SSC meetings per year, and sometimes we make one of those virtual, and like, in this instance, it was this meeting in May, due to logistics and hotel costs of a huge convention that's actually happening in Tampa this year.

We typically have our meetings that last two to three days over the cycle of the year. We expect the special SSCs to only be convened, as I said, one to two times annually, and we are strongly recommending in-person meeting attendance, and we know this is a heavy lift, maybe it's a shorter agenda, but it's important, you know, when we have more complex agenda items, that you attend in-person when you can, and it's also appreciated.

If you can't attend in-person, we ask that you provide enough advancement that you're not going to be able to participate in-person to Ryan, and he will let our travel coordinator and other staff know that you have to participate virtually.

Just trying to keep this picture all together and high-level, and, especially as the Science Center is working on some of the changes to the stock assessment process, just, you know, a reminder that, you know, these materials that you are asked to review, and keep up with, they vary in volume, and, you know, some are much larger commitments than others, but the data and review workshops, as most of you all know, are typically in-person.

We don't have a whole lot of data and review workshops annually, but they are, you know, a couple of days long, typically, whereas the assessment webinars are virtual, but, again, these things could change. They could tighten up, and there may be changes in that process, as we move forward working with the center, and so, if you volunteer, you know, again, we expect you to participate, and, if you can't participate, we expect you to notify us.

This just explains like the number of webinars we anticipate with a data workshop under our, you know, current structure, what we know, like I mentioned, and, you know, how long we think those webinars, or in-person meetings, may be for our current process.

Now, and I don't know if there's any questions, but we're planning to launch the application tomorrow, May 9, and we're planning to leave it open until May 31, unless we need to extend it, and we do have a draft of the application that we can walk through, but I don't know if there's any feedback right now on any of these other changes that the committee had.

CHAIRMAN NANCE: Does any SSC member have any questions for Carrie on what was outlined, the changes in what is being proposed for the SSC and participation involved in the SSC? Dave, please. David.

DR. GRIFFITH: I just want to say that I'm happy that it's more interdisciplinary.

EXECUTIVE DIRECTOR SIMMONS: Great. Mr. Chair, if it's okay, I will have Jessica put up the application process.

CHAIRMAN NANCE: Okay. Jessica, yes.

EXECUTIVE DIRECTOR SIMMONS: Just a friendly reminder that, unfortunately, with the Google form we're using, you cannot upload your resume CV to this form, and you have to email it to us separately, and, also, your SOFI, and so your application is not complete until we have all of those things, and so I think it does send you a reminder, and we'll be checking that to make sure we remind folks to do that as well.

We need the basics, obviously, and so here's a slightly different way, I think, compared to the previous year, that we ask you to identify your interest and expertise, instead of kind of letting the council, and staff, kind of pick through the materials you provide, and so we're asking you to self-select that, so you can help us, you know, figure out, through this interdisciplinary committee, where you best fit in, and so we're asking you to give us what your first choice is, as far as what you would like to serve on, second choice, and third choice, or leave blank if no interest, and then the ranking or categories with what most closely matches your experience.

Then I think, through this application for other, you can also list something that you think may not be on this form, and so I think that will help focus the council and help you provide that information to us, and so, Mr. Chair, I will take any feedback.

CHAIRMAN NANCE: I do have one question. Go back up to the form, I guess, and does it say on the form who we email it to?

EXECUTIVE DIRECTOR SIMMONS: Yes, and I think it’s to Meetings. Can you go back to the top or the bottom?

MR. RINDONE: It’s ssc --

EXECUTIVE DIRECTOR SIMMONS: There you go, and we have special email box for it. There you go. Sorry about that.

CHAIRMAN NANCE: So you do this form online.

EXECUTIVE DIRECTOR SIMMONS: Yes, and we’ll send you the press release and the link to the form tomorrow, and you’ll have this information, and then email it to that inbox.

CHAIRMAN NANCE: So you do the form online, and then you fill out your SOFI, and your resume, and you send that both together.

EXECUTIVE DIRECTOR SIMMONS: Perfect, and, yes, you can.

CHAIRMAN NANCE: To the SSC application.

EXECUTIVE DIRECTOR SIMMONS: Yes.

CHAIRMAN NANCE: Perfect. Okay. Jim Tolan, please.

DR. TOLAN: Thank you, Mr. Chairman, and, if I missed this, I’m sorry, but, on the rankings, was the Reef Fish completely dissolved into the Standing, because I didn’t see the Reef Fish.

CHAIRMAN NANCE: Yes. Reef Fish, Ecosystem, and Socioeconomic were dissolved, and so we had -- With the Standing SSC, and those other three, we had twenty-four members, and now we’re looking at a combined of the Standing SSC with twenty-one members.

DR. TOLAN: Okay. Thank you so much.

CHAIRMAN NANCE: You're very welcome. Will, please, Will Patterson.

DR. PATTERSON: Thanks, Jim. So, for current SSC members who plan to reapply, and they've already filled out the 2023 SOFI -- You have that on file, and so we don't need to submit a second one, and is that true?

EXECUTIVE DIRECTOR SIMMONS: I apologize, but you have to complete this application and hit "submit", which I think I failed to say, and somebody pointed out, and then, in a separate email, send us a new SOFI and your resume, to the email that was listed on the Google form.

DR. PATTERSON: Thanks.

CHAIRMAN NANCE: So, even if you submitted one in January, we need to submit a new one for this application.

EXECUTIVE DIRECTOR SIMMONS: Yes. I'm sorry.

CHAIRMAN NANCE: Okay. Trevor.

MR. MONCRIEF: All right, and so this is probably outside the scope of the conversation, but was there any discussion about maybe dissolving, or not, having the Special Red Drum SSC anymore, and I think this topic has come up a few times in the last probably six or eight years, and it just seems like that one is just not really -- It's not really approachable, in the sense that that fishery is not going to reopen, and it's not really being considered heavily, and I just kind of wondered if that's even a priority even more on that level.

CHAIRMAN NANCE: I was hoping that you were going to apply for it. I think it's on there, and, if anybody applies or something, but we'll let the council decide whether it's necessary or not. Carrie.

EXECUTIVE DIRECTOR SIMMONS: I mean, Trevor, you bring up a great point, and, I mean, we have brought it up historically with the council, and the same with the advisory panel, but, at this time, they did not want to remove the option of having that Special Red Drum SSC, should they need it.

CHAIRMAN NANCE: Jim Tolan.

DR. TOLAN: Thank you, Mr. Chairman. I would reiterate what Trevor just said. Having spent a dozen or so years on the Special Red Drum, and just meeting a handful of times, and then rolling through the assessment for red drum under SEDAR 49, and it really never going anywhere, and, if you're looking to save some dollars, that would be the place to save it, but, since they don't meet very often, you probably won't save a whole lot of dollars anyway, but the utility of that particular special SSC, given that fishery is definitely not going anywhere anytime soon, on the federal level, it could hit the chopping block, and Carrie covered that it's a priority, and so thank you.

CHAIRMAN NANCE: Thank you, Jim. Any other questions from the SSC? Okay. Seeing none, we'll go ahead and move on to our last item, which is Public Comment. Do we have any individuals online that would like to offer public comment to this body before we adjourn? Mr. Zales. It's good to have you. We're glad you're still here. Bob, go ahead.

PUBLIC COMMENT

MR. ZALES: It's good to hear the discussion today, and I was glad to hear, this morning, the mention of involving stakeholders more in this process of managing our fisheries. Clearly that's a key component. I still am advocating to see fishers involved in anything that you all are looking at, to try to get -- I don't know how you would select them, and you may go to selecting key fishermen in the same process that you use, or the council uses anyway, in selecting SEDAR participants.

I would suggest that, in a lot of fisheries, that you try to select people with historical knowledge, people that have been in fisheries a long time. I've been involved for fifty-eight years, and, in many cases, I'm a newbie. There is other people out there with far more experience than the years that I have that are valuable in how fisheries are prosecuted, the importance of them, what's going on with them, and so on and so forth.

The discussion here on some of these key species to look at, to be assessed every two or three years, you definitely need to involve stakeholders in that, because any species that is under any kind of restrictive management, with closed seasons or tight bag limits or different things of this nature, should be considered part of that important part, and clearly red snapper, because red snapper is probably the most important fish in the United States that people talk about, and so that's one, and, in deference to Will Patterson's comments about amberjack, amberjack have been managed since Amendment 1 was put in place in 1990.

It has yet to respond to any kind of fishery management process that we have dealt with for over thirty years, and it has just continually gone downhill, and so clearly that is a fish, and a species -- Any species similar to that would need, in my mind, to be looked at at least every three years, if not sooner, to see the progress on that fishery, because we've done -- A lot of recommendations for amberjack came from stakeholders, and not from the management people, and apparently none of that has worked, because that fishery is still declining, and it's still going downhill, and so, you know, I don't know now if this has to do with climate issues or whatever, but clearly there's a problem there.

Some of the discussion earlier today, they were talking about the importance of working waterfronts, and we've harped on that now for a little bit, and working waterfronts are critical to the commercial and the for-hire charter, and even the private recreational, communities. If you've got no working waterfront, you've got no place to load and unload, and you've got no fishery, and so those are critical components that need to be looked at, and, other than that, that's probably about it for now. I appreciate all you all's work, and I look forward to the next meeting with you.

CHAIRMAN NANCE: Thank you, Bob. I appreciate your comments each time, and I take those to heart. Any comments from SSC members to Bob? We appreciate your attendance, and, seeing no other public comments, we'll go ahead and adjourn, and hopefully we're all back in July, and so thank you for a great meeting, and I appreciate all the input, and I thought we had a great meeting, and so talk to you soon.

(Whereupon, the meeting adjourned on May 8, 2024.)

\- - -